FEDERAL AVIATION ADMINISTRATION REAUTHORIZATION

(110–17)

HEARING

BEFORE THE

SUBCOMMITTEE ON AVIATION

OF THE

COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE HOUSE OF REPRESENTATIVES

ONE HUNDRED TENTH CONGRESS

FIRST SESSION

MARCH 14, 21, 22, 28, 2007

Printed for the use of the Committee on Transportation and Infrastructure

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U.S. House of Representatives
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Washington, DC 20515

John L. Mica
Ranking Republican Member

James W. Coon II, Republican Chief of Staff

March 12, 2007

SUMMARY OF SUBJECT MATTER

TO: Members, Subcommittee on Aviation

FROM: Staff, Subcommittee on Aviation

RE: March 2007 Federal Aviation Administration (FAA) Reauthorization hearings.

PURPOSE OF HEARING

In March 2007, the Subcommittee on Aviation will hold four hearings on the FAA's reauthorization proposal:

- At 10:00 a.m. on Wednesday, March 14, 2007: The Administration's FAA Reauthorization Proposal.
- At 10:00 a.m. on Wednesday, March 21, 2007: FAA's Financing Proposal.
- At 10:00 a.m. on Thursday, March 22, 2007: FAA Operational and Safety Programs.
- At 10:00 a.m. on Wednesday, March 28, 2007: FAA's Airport Improvement Program.

This memo highlights the major financing and programmatic aspects of the FAA's proposal, and will serve as the Summary of Subject Matter for all four reauthorization hearings. For more detailed information about the FAA's proposal or about the FAA's current financing and programmatic structure, please see the FAA's *Next Generation Air Transportation Financing Reform Act of 2007*, FAA's section-by-section analysis of its proposal and the Subcommittee's jurisdictional statement explaining the FAA's current financing and programmatic structure, as attached. Witness lists will be forwarded under separate cover.

The Subcommittee will hold a hearing on the Essential Air Service program, and any proposed changes to the program, in April, 2007.

I. Funding and Financing

The Administration's FAA reauthorization proposal, the *Next Generation Air Transportation Financing Reform Act of 2007*, is a three year authorization with an estimated cost of approximately $44.766 billion.

Most of the FAA's funding is currently derived from the Airport and Airway Trust Fund (commonly known as the "Aviation Trust Fund"). The Aviation Trust Fund holds the revenues from the various aviation excise taxes that are paid by aviation system users. The Aviation Trust Fund receipts totaled $10.6 billion ($11.1 billion including interest) in fiscal year (FY) 2006, with approximately $5.5 billion of this total derived from the 7.5 percent passenger ticket tax.

The FAA's proposal would make significant changes to the current Aviation Trust Fund tax structure. Specifically, the FAA proposes to eliminate a number of excise taxes, increase fuel taxes and decrease the International Arrival/Departure tax as follows:

Tax	Taxable Unit	2007	Proposal
Domestic Ticket Tax	Price of ticket	7.50%	**Eliminated**
Frequent Flyer Tax	Value of miles purchased	7.50%	**Eliminated**
Domestic Segment Tax	Per passenger per flight segment	$3.40	**Eliminated**
International Arrival/Departure Tax	Per passenger	$15.10	$6.39
Alaska/Hawaii Arrival/Departure Tax	Per passenger	$7.50	**Eliminated**
Cargo Shipments	Price paid for transportation by air	6.25%	**Eliminated**
Commercial Jet Fuel	Per Gallon	$0.043	$0.136
General Aviation Jet Fuel	Per Gallon	$0.218	$0.70
Aviation Gasoline	Per Gallon	$0.193	$0.70

Under the FAA's proposal, most of the FAA's revenue would come from new cost-based user fees. The FAA also proposes new certification and registration fees. These new fees would not be deposited into the Aviation Trust Fund, but instead would be deposited into two proposed new accounts[1] at the Treasury as offsetting collections.[2] The fee rates would be determined by FAA and driven primarily by FAA's cost requirements, with input from a proposed new governance board called the Air Transportation System Advisory Board. Fee expenditures would be subject to appropriation.

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[1] The proposal eliminates the current Operations account (primarily for personnel costs) and the Facilities and Equipment (F&E) account (primarily for capital) and creates the "Air Traffic Organization" and "Safety and Operations" accounts. Under the current account structure, the FAA's estimated F&E funding would be: FY 2008 - $2.462 billion; FY 2009 - $2.959 billion; FY 2010 – $3.115 billion. The FAA's estimated Operations funding would be: FY 2008 - $8.726; FY 2009 – $8.978; FY 2010 - $9.305 billion. The FAA's estimated total requirement for F&E funding in its new three year proposal is approximately $380 million less than what it requested for the first three years of its last reauthorization proposal – the *Centennial of Flight Aviation Authorization Act.*

[2] As offsetting collections, the fees would offset the cost of discretionary appropriations to the FAA.

In proposing a cost-based user fee, the FAA has cited its desire to better align its costs or services with its revenues. By doing so, the FAA believes it would operate in a more efficient and business-like manner. Additionally, the FAA states that its fees would be more equitable to airspace users because users would be charged based on the costs that they impose on the system. The FAA also cites the move to the Next Generation Air Transportation System (NGATS) as a reason to transition to a new financing structure.

The chart below describes the proposed authorized funding levels for FAA's Airport Improvement Program (AIP) and Research Engineering & Development (RE&D), and the FAA's estimated cost and funding requirements for the Air Traffic Organization (ATO) and Safety & Operations accounts:

(in $ millions)

PROGRAM	FY 2008	FY 2009	FY 2010	TOTAL
Air Traffic Organization	**9,308.0**	**10,016.0**	**10,469.0**	**29,793.0**
User Fees:	---	7,513.0	7,971.0	
Trust Fund:	7,916.0	1,130.0	1,126.0	
General Fund:	1,392.0	1,373.0	1,372.0	
Safety & Operations	**1,879.0**	**1,921.0**	**1,951.0**	**5,751.0**
User Fees:	---	544.0	569.0	
Trust Fund:	672.0	69.0	69.0	
Cert. & Licensing Fees:	---	116.0	120.0	
General Fund:	1,208.0	1,192.0	1,193.0	
Airport Improvement Program (100% Trust Fund)	**2,750.0**	**2,900.0**	**3,050.0**	**8,700.0**
Research, Engineering & Development	**140**	**191**	**191**	**522.0**
Trust Fund:	123.0	174.0	174.0	
General Fund:	17.0	17.0	17.0	
Total	14,077.0	15,028.0	15,661.0	44,766.0

a. Governance

The FAA's proposal would create a new 13-member Air Transportation System Advisory Board. This Board would include the FAA Administrator and a representative of the Department of Defense, three individuals representing the public interest, and eight representatives from the airport community, airlines, cargo airlines, general aviation, business aviation, and aviation manufacturing. In setting user fees and certification and registration fees, the FAA would be required to rely on the FAA's cost accounting and cost allocation systems. Prior to imposing or adjusting a fee, the FAA would also be required to consult with air carriers, including foreign carriers, and with other persons who are subject to paying fees under the auspices of the new Board.

b. Cost-Based User Fees

The FAA's proposal includes two new cost-based user fees: 1) an En Route and Oceanic fee; and 2) a Terminal fee that would be adjusted specifically for takeoffs and landings at large hub airports.[3] Military, other public use, and air ambulance aircraft would not pay these fees.

Further, aircraft paying general aviation fuel taxes are exempt from the En route and Oceanic fee and the Terminal fee, except if they takeoff or land at a large hub airport, in which case they would be subject only to the Terminal fee at the large hub airport.

Under the proposal, En Route and Oceanic fees would be charged for high altitude and oceanic flights, with the FAA basing these fees on distance traveled, or other methods consistent with treaties and international agreements.

Terminal fees would be charged for takeoffs and landings at airports with more than 100,000 passenger boardings per year. There are approximately 200 airports with over 100,000 passenger boardings per year. The proposal also permits the FAA to base its Terminal fee on aircraft weight. The Government Accountability Office (GAO) has questioned the connection between the weight of an aircraft and the cost it would impose on the system, stating:

> While there may be a relationship between the distance a plane travels in the [national airspace system] and the costs that it imposes, the introduction of the weight component into the formula weakens any such connection. For example, since heavier planes would be charged more than lighter planes, they would be required to contribute more for traveling the same distance in the system, even though they may not impose greater costs on the ATC system.[4]

FAA officials contend that a weight-based fee accounts for the fact that large aircraft require more spacing on departure and approach in the terminal area, and therefore cost the FAA more to handle. However, FAA officials acknowledge that it is challenging to quantify this issue, and that the FAA has initiated a study to quantify the cost implications of aircraft weight in the terminal area. In addition, FAA officials and the GAO point out that a weight-based fee is consistent with International Civil Aviation Organization (ICAO) guidance and international charging structures. FAA also notes that a fee that does not account for weight would negatively affect regional airlines and air taxis that operate smaller aircraft.

Under the proposal, the Terminal fee may be higher for aircraft that takeoff and land at a large hub airport. There are currently 30 large hub airports, which are defined as commercial service airports with at least 1 percent of annual U.S. passenger boardings. The Administrator may also vary this fee with the time of day or day of the week, or for a particular large hub airport if an aircraft

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[3] While FAA officials state that this fee is intended to pertain only to flights that actually takeoff from or land at a large hub airport, and is not specific to the terminal airspace surrounding a large hub airport, the proposed legislative language is unclear in this regard.

[4] GAO-06-973, *Aviation Finance: Observations on Potential FAA Funding Options*, p.26, September 2006.

operates in terminal airspace that is congested (as a sort of cost-based congestion fee) if such fees would help reduce delays.

The FAA has provided the following data to illustrate who would likely pay the proposed user fees:

- The FAA preliminarily estimates that there would be approximately 14 million billable flights each year.
- The top 101 companies (those with over 10,000 flights per year) would account for 87 percent of the billable flights. Of those, the top 33 companies (those with over 100,000 flights per year) would account for 73 percent of the billable flights. Less than 500 companies account for 95 percent of the billable flights. These companies include legacy, low cost and regional airlines, cargo airlines, and some fractional operators.
- An additional 2,500 air taxi operators, and another roughly 2,400 smaller commercial operators (primarily regional airlines with fewer than 10,000 flights per year) would be subject to the fees.
- There are approximately 18,000 general aviation users who takeoff or land at large hub airports. The FAA expects that many of these users may choose to use an alternative airport in the same metropolitan area where they would not be subject to user fees.

The FAA's proposal would require the establishment of procedures for the collection of user fees and would permit the FAA Administrator to establish reduced fees as an incentive for aircraft owners to equip with new technology. In addition, the proposal would also give the FAA broad authority to establish a reserve fund. The establishment of a reserve fund is similar to other international user fee models. The reserve could be tapped if fee revenue falls short of expected levels and additional funding is needed. While the proposal gives no specific dollar amount or percentage, FAA officials preliminarily estimate that a reserve of two months of costs (approximately 16.7 percent of the ATO's annual budget) might be necessary, but caution that additional analysis is needed.

Objections to the proposed user fees may be appealed to the Secretary of Transportation. The Secretary would be required to disapprove the proposed fees if the Secretary finds that they are not based on appropriate costs, do not fairly allocate costs among users, are unreasonably discriminatory to a particular category of users, or are not in accordance with the FAA's strategic business plan. The Secretary's decision would not be subject to judicial review.

c. Certification and Registration Fees

The FAA proposes to impose fees to pay for the costs of certification and registration activities, including: registering an aircraft ($130); replacing an aircraft registration ($45); issuing an original dealer's aircraft certificate ($130); issuing an additional aircraft certificate ($105); issuing or renewing a special registration number ($80, $50 respectively); recording a security interest ($130); recording a security interest in aircraft parts ($130); issuing or replacing an airman certificate ($50,

$25, respectively); issuing an airman medical certificate ($42); and for providing legal title opinions pertaining to aircraft transactions ($100).

The FAA is also requesting authority to propose additional fees for certain activities pertaining to the issuance of certificates to both foreign and domestic repair stations, flight and maintenance technical schools, training of designees, appointment of delegated organizations, and training of foreign aviation authorities. The FAA would determine the charges for these activities at a later date. The FAA's proposal would also give it the authority to establish additional, unspecified fees to cover the cost of other aviation regulation, certification and related services. The FAA's proposal would exempt it from the rulemaking requirements of title 5 of the U.S. Code in setting these fees.

d. Fuel Tax

The FAA's proposal would increase the tax on commercial aviation jet fuel from 4.3 cents per gallon to 13.6 cents per gallon. The commercial jet fuel tax would be deposited into the Aviation Trust Fund to pay for the users' share of AIP, RE&D and EAS. The proposed $6.39 (reduced from $15.10) International Arrival/Departure tax would also be deposited into the Aviation Trust Fund as a funding stream for AIP, RE&D and EAS.

The proposal would also raise the tax on general aviation jet fuel from 21.8 cents per gallon to 70.0 cents per gallon: 13.6 cents per gallon would be deposited into the Aviation Trust Fund to pay for the users' share of the AIP, RE&D and EAS programs and the remaining 56.4 cents per gallon would also be deposited into the Aviation Trust Fund for the ATO.

In addition, the FAA's proposal would raise the tax on aviation gasoline, used primarily for piston general aviation, from 19.3 cents per gallon to 70 cents per gallon: 13.6 cents per gallon would be deposited into the Aviation Trust Fund to pay for the users' share of the AIP, RE&D and Essential Air Service (EAS) programs and the remaining 56.4 cents per gallon would also be deposited into Aviation Trust Fund for the ATO.

Tax	Taxable Unit	2007	Proposal AIP/RED/EAS	Proposal ATO Costs	Proposal Total Fuel Tax
Commercial Jet Fuel	Per Gallon	**$0.043**	$0.136	User Fees	**$0.136**
General Aviation Jet Fuel	Per Gallon	**$0.218**	$0.136	$0.564	**$0.70**
Aviation Gasoline	Per Gallon	**$0.193**	$0.136	$0.564	**$0.70**

Under the proposal, the 13.6 cent per gallon portion of the fuel taxes that are dedicated to AIP and also RE&D and EAS and the $6.39 International Arrival/Departure tax would be regularly adjusted for inflation.

In addition, the 56.4 cent per gallon portion of the general aviation fuel taxes (for both general aviation jet fuel and aviation gasoline) that are dedicated to the ATO would be adjusted every two years based on the FAA's cost accounting and cost allocation systems.

e. Borrowing Authority

The FAA's proposal would authorize, during fiscal years 2013 through 2017, borrowing authority for the Secretary of Transportation through the Department of the Treasury to finance capital investments in the air traffic system to be owned and operated by the FAA. This borrowing authority would be capped at a maximum of $5 billion of principal debt, and all indebtedness issued under this authority must be repaid by the end of fiscal year 2017. The FAA would not be able to issue any obligations without first obtaining approval by the Office of Management and Budget (OMB) of the proposed investments to be financed.

f. Cost Allocation

The FAA has based its proposed new financing scheme on a new cost allocation methodology to determine what level of system costs are assignable to which aviation user groups. With its new cost allocation report, the FAA intends to establish a firm link between the costs incurred by the Agency for supplying air traffic services and fees paid by the users of those services. The FAA believes that the argument for this link is on much firmer ground than its previous attempts to link agency costs to taxes and fees. This is due to its relatively new cost accounting system, which for the first time is providing detailed cost information down to service delivery points (SDP, e.g. an air traffic control tower).

The FAA's new cost allocation report, which is based on FY 2005 data, differs from previous efforts by assigning costs only to that portion of the FAA's budget associated with ATO. Previous cost allocation studies have included other significant cost items, such as the AIP.

The FAA's cost allocation system, the Cost Assignment Methodology for Estimating Resource Allocation (CAMERA), assigns each user group into one of two principle user groups: 1) "high performance," which includes all fixed-wing turbine engine aircraft operations; and 2) "piston," which includes piston engine aircraft and helicopters. CAMERA then assigns FAA's costs into one of three tiers. The chart below depicts the results of the FAA's cost allocation study:

(in $ millions)

	FAA FY 2005 Cost Allocation Study Results		
	High Performance (% of Cost)	**Piston (% of Cost)**	**Total (% of Cost)**
Commercial	**$6,745 (73%)**	**$50 (0.5%)**	**$6,794 (73.5%)**
General Aviation	**$896 (9.7%)**	**$546 (5.9%)**	**$1,441 (15.6%)**
Public	**$433 (4.7%)**	**$11 (0.1%)**	**$445 (4.8%)**
Flt Svc Stations (Funded from the General Funds)			**$564 (6.1%)**
Total	**$8,074 (87.3%)**	**$607 (6.6%)**	**$9,245 (including $564 FSS)**

General aviation groups, who generally oppose the FAA's methodology, have raised questions regarding whether the FAA adequately takes into account price sensitivity and users' willingness/ability to pay. These groups argue that failure to take these factors into account when allocating costs and setting tax and fee rates could result in some users (particularly low-end piston general aviation users) being priced out of the market.

The Congressional Research Service (CRS) has noted that since the existing tax structure was created in 1970 there has been general acceptance of the concept that there is a public interest component to the operation of the national aviation system.[5] The term "public interest" has generally referred to that portion of the cost of the FAA's operation of the airway system that is appropriated from the Treasury's general fund. This is the amount that is supposed to equate to what certain public users (e.g. military, government users) and nonuser beneficiaries (also known as societal users)[6] of the aviation system might have contributed to the Aviation Trust Fund through the payment of taxes or fees, if they actually paid these taxes or fees. According to CRS, this has historically been one of the most contentious elements of the aviation funding debate. In the past, many aviation interest groups and Congressional authorizing committees have taken the position that the general fund contribution to the FAA's annual appropriation is too small to correspond to the existing and potential public benefits of the aviation system. Conversely, CRS states that the FAA, OMB, and other government agencies, as well as Congressional appropriations and budget committees, usually believe the general fund contribution is too large. In its 2007 cost allocation study, the FAA has chosen to assign costs to public users, but not to societal users.

II. Airport Improvement Program

According to the FAA's Operational Evolution Plan (OEP), new runways and runway extensions provide the most significant capacity increases. In addition, projections developed by the DOT, FAA, and the MITRE Corporation indicate that as early as 2013, 15 airports and 7 metropolitan areas will need additional capacity to meet expected demand. The FAA's National Plan of Integrated Airport Systems (NPIAS) states that during the next five years, there will be $41.2 billion of AIP-eligible infrastructure development, an annual average of $8.2 billion. The Airports Council International / North America (ACI-NA) Capital Needs Survey estimates total airport capital needs – including the cost of non-AIP-eligible projects – to be about $17.5 billion per year from 2007 through 2011.

The FAA's proposal provides $8.7 billion total for the AIP from FY 2008 to FY 2010. In total, this is approximately $1.8 billion less than the program received between FY 2005 and FY2007. FAA officials acknowledge that airport capital requirements are up. However, FAA officials also contend that even with lower AIP funding levels, the FAA's proposed programmatic changes to AIP and the Passenger Facility Charge (PFC), coupled with a PFC increase, would provide the FAA and airports with more capital and flexibility to target investments and meet airport

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[5] CRS Report (RL33698), *Reauthorization of the Federal Aviation Administration: Background and Issues for Congress*, p.19, January 29, 2007.

[6] In other words, benefits received by the public at large from the aviation system regardless of whether they fly or not.

capital needs, including planned runway and runway safety area improvements at critical OEP airports.

The FAA's proposal would reduce primary airport AIP entitlements for medium and large hub airports by 50 percent in FY 2008 and FY 2009 and would phase them out completely by FY 2010. FAA officials reason that because of high PFC revenues drawn from high passenger volume larger airports have better access to private capital markets. The FAA further points out that most of these airports are already turning back 50 to 75 percent of AIP entitlements under current law by charging a $3.00 -$4.50 PFCs respectively.[7] The proposal would also reduce the Federal AIP share for runway and taxiway reconstruction projects at large and medium hub airports from 75 percent to 50 percent. FAA officials state that all airports receiving AIP funds have an obligation to maintain their airport pavement.

In addition, the FAA's proposal would increase the current $4.50 cap on the PFC to $6.00. The FAA points out that the PFC cap has not been raised since 2000, and that inflation and construction cost increases have eroded the PFC's value. Airport groups have raised similar points, and have argued for raising the PFC cap to $7.50 and possibly indexing the cap to inflation or construction costs. In the past, airlines have tended to resist increasing the PFC, viewing it as an increased ticket tax.

FAA officials believe that the proposed PFC increase would offset capital funding forgone by its proposal to eliminate primary airport entitlements for medium and large hub airports. For FY 2007, the FAA estimates approximately $2.7 billion in PFC collections. The FAA estimates that raising the PFC cap to $6.00 would raise an additional $1.5 billion for airport capital improvements, approximately $1 billion of which the FAA believes would go to large airports.

In addition to raising the PFC cap, the proposal would expand the types of projects for which PFCs can be used. Under current law, PFC eligibility today tracks with AIP eligibility; however, there is somewhat broader eligibility for noise compatibility projects and "ground-side" projects, such as passenger terminals and ground access improvements. The FAA's proposal would expand PFC eligibility to encompass any airport capital project that is eligible to be funded with airport revenue, provided that the project is not anticompetitive. Under the proposed expanded eligibility, PFCs could be used to finance airline offices and operations areas in the terminal as well as structural work to support revenue producing concessions. Revenue producing parking garages would also be PFC eligible. These projects would not be eligible under current law.

The FAA's proposal would expand PFC eligibility for intermodal rail ground access projects. Under current law, PFCs may be used to fund these projects only if they are dedicated to 100 percent airport use. The FAA's proposal would apply the same usage standard currently in place for airport revenue funding of ground access projects – "direct and substantial" airport use. The FAA's proposal would also eliminate the requirement for airport ownership of the system.

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[7] Airports that have high passenger volume are in a position to make more money through PFC charges rather than accepting AIP money. Current law requires that an airport charging a $3.00 - $4.50 PFC return part of their AIP money or charge a lower PFC amount. They cannot both accept full AIP entitlement money and charge the maximum PFC amount.

The FAA's proposal would increase minimum annual discretionary AIP from $148 million to $520 million. The proposal would also restructure discretionary AIP set-aside programs:

- The current noise set-aside, which receives 35 percent of discretionary AIP, would be expanded to cover other environmental uses and redesignated as the "environmental" set-aside that would receive 8% of total AIP funding.

- As a result of phasing out primary airport AIP entitlements for medium and large hub airports, the FAA would eliminate the Small Airport Fund. However, the FAA would create a new discretionary AIP set-aside that would dedicate 20 percent of discretionary AIP to projects at small hub, nonhub, nonprimary commercial service, reliever, or general aviation airports.

- The military airport program (MAP) discretionary set-aside would be eliminated. The FAA states that the MAP set-aside is no longer needed given that MAP airports compete well for AIP funding. However, the special AIP eligibility rules that currently apply to these airports would be retained. There are currently 14 airports that participate in this program.

- The reliever airport set-aside would be eliminated. The FAA states that the airports that participate in this program have high activity and historically receive more discretionary funding than the approximately $5 million in the program. There are currently 18 airports that meet the criteria to participate in this program.

Under current law, if overall AIP funding levels fall below $3.2 billion, several significant changes in the AIP entitlement formula funding would be triggered. For example, if total AIP funding falls below $3.2 billion, primary airports would receive 50 percent of their normal apportionment, and the minimum primary airport entitlement would be reduced from $1 million to $650,000, the state apportionment would be calculated at a lower percentage of total AIP, and nonprimary AIP entitlements for general aviation airports would be eliminated. The FAA's proposal would eliminate this "$3.2 billion trigger."

The chart below illustrates current funding levels for AIP programs, and proposed funding levels for AIP programs with programmatic changes:

(in $ millions) **Current Law**

AIP Funding Category	FY 2007
Apportionments	
Primary Airports	857.7
Cargo Airports	119.1
Alaska Supplemental	21.3
Nonprimary Airports	409.0
State Apportionment	271.3
Small Airport Fund	
Small Hubs	66.7
Non-Hub Commercial Service	266.8
Non-primary	133.4
Discretionary	
Capacity/Safety/Security/Noise	365.9
Pure Discretionary	121.9
Noise Set-Asides (35% of Disc. AIP)	283.0
Military Airport Program Set-Asides	32.3
Reliever Set-Asides	5.3

(in $ millions) **FAA Proposal**

AIP Funding Category	FY 2008	FY 2009	FY 2010	FY 2010 $3.5 billion[8]
Apportionments				
Primary Airports	628.0	672.0	569.0	569.0
Large	81.0	86.0	0	0
Medium	49.0	52.0	0	0
Small	230.0	246.0	262.0	262.0
Non-Hub	269.0	288.0	307.0	307.0
Cargo Airports	81.0	91.0	103.0	118.0
Alaska Supplemental	19.0	20.0	21.0	21.0
Nonprimary Airports	309.0	365.0	425.0	431.0
State Apportionment	300.0	300.0	300.0	339.0
Discretionary				
Capacity/Safety/Security/Noise	390.0	390.0	475.0	682.0
Pure Discretionary	130.0	130.0	158.0	227.0
Environmental Set-asides (8% of total AIP)	211.0	223.0	235.0	271.0
Small/Non-Hub Discretionary (20% Disc. AIP)	136.0	162.0	217.0	295.0

The FAA's proposal would separate the state AIP apportionment from the nonprimary entitlement program and set the state apportionment at 10 percent of total AIP funding. The proposal also provides for a minimum state apportionment funding level of $300 million per year. If the overall level of AIP funding results in a state apportionment of below $300 million, the funds would be taken on a prorated basis from the nonprimary entitlement program to make up the difference.

The FAA proposes significant changes to the current nonprimary airport entitlement program. Undet current law, general aviation airports, commetcial service airports that boarded between 2,500 and 10,000 passengers annually, non-primary airports, and reliever airports receive entitlements (if AIP is at least $3.2 billion) based on one-fifth of their expected infrastructure requirements as published in the NPIAS, capped at $150,000 annually. There are approximately 3,100 nonprimary airports in the NPIAS. In FY 2006, there were approximately 2,700 non-primary airports that qualified for this entitlement.

[8] Since AIP funding levels in the FAA's proposal are substantially lower than current AIP funding levels, this column is intended to illustrate how the FAA's proposed new AIP formula might hypothetically work with the approximate FY 2007 $3.5 billion AIP funding level.

The FAA would modify the current nonprimary entitlement program by providing for tiered funding levels based on airport size and aviation activity. The entitlement would range from $400,000 per fiscal year for the largest general aviation airports to $100,000 for those airports with 10 to 49 based aircraft. Airports with less than 10 based aircraft would not be eligible for a guaranteed annual apportionment.

Nonprimary Entitlements

Current Law	FAA Proposal
➢ Over 2,400 nonprimary airports receive the $150,000 maximum nonprimary entitlement.	➢ 540 "General Aviation Advanced" airports (with more than 100 based aircraft) would receive a $400,000 per year entitlement.
➢ 280 nonprimary airports receive between $0 and $150,000.	➢ 375 "General Aviation Intermediate" airports (with 50 to 99 based aircraft or with 3 based jets) would receive a $200,000 per year entitlement.
	➢ 1,445 "General Aviation Basic" airports (with 10 to 49 based aircraft) would receive a $100,000 per year entitlement.
	➢ 750 "General Aviation Limited" (less than 10 aircraft) would not receive entitlements, but the federal share for state apportionment AIP and discretionary AIP would remain 95%.

In the past, the GAO has noted that smaller airports are particularly reliant on AIP grants, because AIP generally represents a larger percentage of capital funding for smaller airports than it does at larger airports. It is worth noting that under the FAA's proposed programmatic changes and requested funding levels, there is less total funding for programs traditionally and specifically associated with small airports when compared with the current programmatic structure and funding levels.[9] In fact, about 300 airports that currently receive nonprimary entitlement grants would no longer receive these grants under the FAA's proposal. In addition, the proposal would reduce the Federal AIP contribution to 90 percent from 95 percent for small airports (however, nonprimary airports that would no longer receive nonprimary entitlement funds would still receive 95 percent Federal contribution for discretionary and state apportionment AIP).

However, FAA officials assert that the proposal's tiered approach to nonprimary entitlements would channel larger grants to busier small airports (e.g., Teterboro, NJ; Van Nuys, CA; or Centennial, CO) to meet the demand of emerging markets such as very light jets, air taxis, and fractional ownership. The FAA estimates that the largest general aviation airports make up nearly 50 percent of the capital needs of the entire general aviation airport system.

[9] More specifically, comparing current funding for the Small Airport Fund, nonprimary entitlement and state apportionment programs with proposed funding for the small airport discretionary set-aside, nonprimary entitlement, and state apportionment programs.

The FAA is also proposing two pilot programs that would involve airports and airport-related funds in air traffic control modernization efforts:

- An Automatic Dependant Surveillance – Broadcast (ADS-B) (FAA's flagship program to transition to satellite-based surveillance) deployment pilot program that would broaden AIP eligibility to include installing ADS-B ground stations at no more than 10 airport locations.

- A Terminal Navaid Takeover Pilot Program in which 10 large airports would be authorized to charge a $7.00 PFC in exchange for taking over ground based terminal navigational and weather equipment at those airports.

III. Environmental Provisions

The FAA's proposal includes two new environmental programs. The first program, the environmental mitigation demonstration pilot program, would allow the FAA to fund six projects at public-use airports to take laboratory-proven environmental research concepts into the actual airport environment for demonstration. FAA would publish information on best practices based on project results. Funding would come from the noise set-aside of the AIP discretionary fund (redesignated as the "environmental" set aside). FAA would fund up to a maximum of $2.5 million per project.

The second program would require the FAA to enter into a cooperative agreement with the Partnership for Air Transportation Noise and Emissions Reduction Center of Excellence to form a research consortium for the development, maturing and certification of Continuous Lower Energy, Emissions, and Noise (CLEEN) engine and airframe technology. The consortium's work is to be carried out over the next decade and have performance objectives for aircraft fuel efficiency, nitrous oxide emissions from aircraft engines, aircraft noise, alternative fuels, and retrofit technologies. It would be funded through the FAA's NGATS program.

Other environmental provisions include:

- Making permanent the Airport Cooperative Research Program (ACRP). (§601) This provision is linked to another provision to increase AIP funding of the ACRP to $5 million per year for environmental research for the airport environment.

- Codifying current practice that State participants in the AIP State Block Grant Program (SBGP) (i.e., Illinois, Michigan, Missouri, North Carolina, Pennsylvania, Tennessee, Texas and Wisconsin) have the responsibility and authority to comply with environmental requirements for projects at non-commercial service airports within the SBGP, and that other Federal agencies must recognize State environmental review analyses for Federal approvals, licenses, or permits related to these projects.

- Broadening FAA's authority to accept airport or AIP funds from airport sponsors to fund additional FAA staff and/or contract support to help streamline environmental reviews for airport capacity projects to include special environmental studies for ongoing Federally funded airport projects, studies to support approved airport noise compatibility measures or

environmental mitigation commitments in an agency record of decision or a finding of no significant impact.

- Allowing airports to use AIP funds to conduct environmental review of airport-proposed, FAA approved flight procedures as well as allow the FAA to accept funds, including AIP/PFC funds from an airport sponsor to hire staff or obtain services to provide environmental reviews for new flight procedures that have been approved for airport noise compatibility planning purposes.

IV. Congestion Management

a. LaGuardia Airport

On August 29, 2006, the FAA issued a proposed rule to address congestion at LaGuardia Airport (LGA) in anticipation of the High Density Rule expiring in January 2007.[10] The proposed rule would cap operations at 75 per hour and would allocate operating authorizations (OA) to scheduled air carriers, which would have a 10-year expiration period ranging from 2010 to 2019. As the OAs expire (approximately 10% per year), they would be reallocated for a new 10-year period. FAA's proposed rule would also mandate that an average size aircraft be used to serve LGA. In addition, the FAA indicated in its proposed rule that it would seek legislative language to allow it to use market based mechanisms (such as auctions or congestion-based pricing) at LGA. Such a provision was included in the FAA's reauthorization proposal, as discussed below.

Under the FAA's reauthorization proposal, the Port Authority of New York and New Jersey (Port Authority) would be allowed to implement a market-based mechanism to allocate OA's at the airport, if the Secretary determines that using such a mechanism is appropriate and after the Secretary issues a rule to establish the terms and conditions of any selected mechanism. Any surplus revenue generated by the imposition of such mechanism would be placed in an escrow account for use on otherwise eligible airport related projects or any other project that the Secretary approves. If the Port Authority failed to implement an approved market-based mechanism within one year, the Secretary would reserve the right to do so under the pilot program described below.

b. Pilot program for market based mechanisms

The FAA's proposal would create a pilot program for market-based pricing mechanisms for domestic flights to address airport congestion at up to fifteen airports. Under the pilot program, either an affected airport or the FAA would be authorized to impose approved market-based mechanisms, such as auctions or congestion pricing. For delays affecting regional airspace, participating airports would be able to impose an approved market-based mechanism on aircraft operators directly. Surplus revenue resulting from the imposition of a market-based mechanism would be placed in escrow for use on airport-related projects or any other project the Secretary approves. For airport congestion that negatively affects the national airspace, the Secretary would

[10] *See* 71 Fed. Reg. 51360. On December 27, 2006, the FAA issued an order that temporarily limited flights at LGA to permit 75 scheduled and six unscheduled operations between 6 a.m. and 10 p.m. M-F, and 12 noon -10 p.m. on Sundays until such time as a permanent regulation is in place. (71 Fed. Reg. 77854).

be permitted to adopt a market-based mechanism directly, if the airport has not already done so. Any surplus revenue generated by a DOT-imposed market-based mechanism would be placed into a special Treasury account for regional or national capacity enhancing or delay reducing projects.

V. Other Provisions

a. Realignment and Consolidation of Aviation Facilities and Services.

The reauthorization proposal would allow the Secretary to establish a "Realignment and Consolidation of Aviation Facilities and Services Commission (Commission)" to conduct an independent review and analysis of FAA's recommendations for realignment of facilities or services (e.g., air traffic control towers). The Commission would be made up of five members appointed by the Secretary and would serve a three-year term.

The Commission would review the FAA's recommendations, seek public comment and, after completing its review, forward its recommendations to the President. If the President accepts the Commissions recommendations, the proposal would be transmitted to Congress. Congress would have 60 days from the transmission date to pass a joint resolution objecting to the total package of recommendations or the recommendations would be considered accepted and the Administrator would implement them. If the President does not send the Commission recommendations to Congress, the process would end.

b. War Risk Insurance

The Secretary is authorized to provide insurance or reinsurance to air carriers, and currently provides war-risk insurance for both foreign and domestic flights of U.S. air carriers. The FAA's proposal would extend this authority, which is set to expire on March 30, 2008, through March 30, 2013. In addition, the Secretary is authorized to limit the liability of airlines, aircraft manufacturers, and engine manufacturers for third party damages from an act of terrorism to $100 million and prohibits punitive damages for such occurrences. The liability limit does not apply to passengers but only to people and property on the ground. The FAA's reauthorization proposal would extend this third-party liability limitation, which is set to expire on September 30, 2007, to December 31, 2011.

Current law also requires the FAA to provide hull loss, passenger and third party liability war risk insurance to airlines that it insured on Nov. 25, 2002, from the first dollar of loss at capped premium rates (i.e., a total premium that is no more than double what the airlines were paying on June 19, 2002.) through September 30, 2007. The FAA reauthorization proposal would repeal the first dollar of loss coverage requirement and allow it to set deductible levels for such insurance. FAA states that commercial insurers would then be able to provide some war risk coverage for U.S. airlines. The FAA's goal is to move the airlines towards the private insurance market for war risk coverage.

HEARING ON THE ADMINISTRATION'S FEDERAL AVIATION ADMINISTRATION REAUTHORIZATION PROPOSAL

Wednesday, March 14, 2007

HOUSE OF REPRESENTATIVES,
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE,
SUBCOMMITTEE ON AVIATION
Washington, DC.

The Subcommittee met, pursuant to call, at 10:00 a.m., in Room 2167, Rayburn House Office Building, the Honorable Jerry F. Costello [Chairman of the Subcommittee] presiding.

Mr. COSTELLO. The Subcommittee will come to order.

The Subcommittee is meeting today to hear testimony on the President's fiscal year 2008, actually, the Federal Aviation Reauthorization Proposal submitted by the Administration and by the Administrator.

I would ask all Members, staff and everyone in the room to turn off their electronic devices or to put them on vibrate.

I will give an opening statement and call on the Ranking Member, Mr. Petri, to give his opening statement as well.

I welcome everyone to our first of a number of hearings on the FAA Reauthorization. In particular, I would like to welcome the FAA Administrator, Administrator Blakey, here today to present the Administration's FAA Reauthorization Proposal to the Subcommittee.

Following this hearing, the Subcommittee will give detailed consideration to specific aspects of the FAA reauthorization proposal in upcoming hearings in the month of March. On March 21st, we will examine the FAA's financing proposal. March 22nd, we will examine the FAA's Operational and Safety Programs, and March 28th, the FAA's Airport Improvement Program. The Subcommittee will look at the Essential Air Service Program and small community air service issues in a hearing in the month of April.

On February 14th, the FAA submitted its reauthorization proposal to the Congress. The FAA's proposal includes a new financing plan to transform the FAA's current excise tax financing system to a hybrid cost-based user fee system as well as major changes to the Airport Improvement Program. In addition, the reauthorization proposal includes provisions on the environment, airport congestion, war risk insurance as well as other items affecting the aviation community.

At the outset, I would like to make a few observations about the FAA's reauthorization proposal.

As I noted in our hearing on February 14th, when we received the President's budget proposal, the FAA's new proposal would hypothetically yield approximately $600 million less in fiscal year 2008 than maintaining the current tax structure and over $900 million less from fiscal year 2009 to fiscal year 2012. This is partially because the FAA's estimated cost requirements for its major capital programs are actually lower than what they were four years ago.

For example, the FAA's estimated total requirement for facilities and equipment in this new three year proposal is approximately $380 million less than what it requested for the first three years of its last reauthorization proposal, the Centennial of Flight Aviation Authorization Act. This is despite the fact that the FAA has cited the need to finance a major new air traffic control modernization initiative as reason for reforming the current tax structure.

At the same time, I have major reservations about implementing a user fee for which there does not appear to be a hard ceiling and for which FAA would have broad authority to raise fees to match whatever costs were incurred. Air traffic control modernization is a technologically intensive and financially high risk endeavor. In the past, the FAA has incurred major cost overruns in its modernization program. While the FAA believes that its user fee system would be more transparent, I am concerned that the airline passengers and the other air space users could end up paying hidden costs for future problems and delays with the FAA's modernization program.

Therefore, it is imperative that the FAA give Congress a straightforward assessment of its cost requirements for the Next Generation system and for Congress to consider whether to authorize its request.

In terms of capacity, airport runways may provide an even greater benefit than the air traffic modernization and, in fact, the FAA's operational evolution plan states that new runways and runway extensions provide the most significant capacity increases. However, the FAA has requested approximately $1.5 billion less for the AIP, the Airport Improvement Program, in its new three year proposal than what it requested for the first three years of its last reauthorization proposal. Given the fact that the FAA acknowledges that the airport capital requirements have increased, I believe that this funding request is extremely shortsighted.

The FAA's proposal to increase the cap on Passenger Facilities Charges, the PFCs, from $4.50 to $6.00 is worthy of consideration. The PFC cap has not been raised since 2000, and inflation and construction cost increases have eroded the PFC's values. However, I have some concerns with expanding the eligibility for PFC projects. Expanding PFC eligibility and the proposed cuts to the AIP could result in moving funding away from capacity-enhancing air side projects.

The FAA has also proposed to restructure the Non-Primary Entitlement Program into a tiered system of apportioning AIP entitlements so that the larger general aviation airports get more funding. The FAA believes that its proposal would meet the demands of emerging markets, such as very light jets, air taxis and fractional ownership which land primarily at general aviation airports.

We need to examine this proposal carefully to determine the impacts on these smaller general aviation airports.

I welcome and look forward to hearing the testimony of the Administrator, Administrator Blakey, this morning.

I will call on the Ranking Member of the Committee, but before I do, I would ask unanimous consent to allow two weeks for all Members to revise and extend their remarks and to permit the submission of additional statements and materials by Members and witnesses.

Hearing no objection, so ordered.

At this time, I would recognize the Ranking Member of the Committee, Mr. Petri, for any opening statement or remarks that he may have.

Mr. PETRI. Thank you very much, Mr. Chairman.

I would like to join you in welcoming the Administrator of the Federal Aviation Administration, Marion Blakey, to the witness stand and, at that same time, thank her for the years of strong leadership that she has provided to the organization.

I have some not too extensive remarks that I would like to include in the record.

I will just say that many of the concerns that you expressed, I think are shared by all Members of the Committee about certain aspects of this program, but the important thing is that we get on about the business of reauthorizing these programs so that we can facilitate the deployment of Next Gen. It is absolutely essential to accommodate the needed growth in aviation services. If we don't modernize and expand the capacity of the system, it will start constraining our economy and will have lots of ripple effects.

Plus, getting this system deployed will help provide a renewal of leadership for the world aviation community, for American aviation interests and a platform for them to compete around the world, and that is important as well.

This is very important business, and I am hoping that while there will be differences, that at the end of the day, we can agree on the importance of the task at hand and find reasonable accommodation for these differences so as to get the main job done.

With that, I yield back.

Mr. COSTELLO. I thank the Ranking Member and at this time would recognize the Ranking Member of the Full Committee for any opening statement or comments that he may have. Mr. Mica is recognized.

Mr. MICA. Thank you, Mr. Costello, and I want to thank you for convening this hearing this morning.

This is a very important topic. We are about six months and a few days away from the September expiration of our current authorization. Really, the basic fundamental question of the authorization process for FAA is how we fund the new system. Now I know I am beginning to sound like the lone stranger supporting the Administration's proposal, but I think people are going to have to sober up and see that we are not going to be able to fund what the Ranking Member of the Subcommittee said, Next Generation air traffic control system, without a method to fairly finance it.

The Administration has proposed a hybrid system. It involves several areas of raising revenue, some from general aviation, some

from user fees, some from the current tax that we have on passenger tickets. It is going to take all of the above plus the Administration's proposed increasing of the PFCs, which I also support in giving airports additional flexibility to utilize those funds.

I don't have one of the pictures here, but all you have got to do is look at the traffic in the air today, the air traffic in the day, and we have returned to congested skies. General aviation isn't going to be able to move the new generation of ultra light jets. They might just as well keep those parked in other general aviation if we don't find a way to fund this system and improve its operations because there will be total gridlock and total meltdown.

So it is a very serious subject. We have got to stop playing the games, get behind some meat and potato proposals to fund this.

The other thing too that the Administration has proposed and I have recommended, a lot of games are being played with FAA and trying to modernize it. I have great concern with the departure of Russell Chew, our COO, who brought some of the bureaucracy under control. He instituted a businesslike structure and plan for FAA which has been partially implemented. We have seen the difficulty in consolidating, modernizing, replacing human to human activity with high tech and data to data operations. But the BRAC-like provision that I recommend, that has been included by the Administration, I strongly advocate because we have got to do a better job both with technology and with funding this critical system to our future.

With that, those comments, I thank you for this very important beginning of finding a way to make all that happen.

Mr. COSTELLO. Thank you.

The Chair recognizes Mr. DeFazio.

The Chair recognizes Mr. Lampson for an opening statement.

Mr. LAMPSON. Thank you, Mr. Chairman.

I will submit my comments for the record but make just a very short statement to thank you and the Ranking Members for conducting this hearing and for Administrator Blakey to come over. We are anxious to hear her comments.

Aviation is one of the most important modes of transportation in the United States, and it is also an issue of great importance in my district in Houston where we have some serious issues regarding capacity. It is always important to be able to sit down and hear from key witnesses with regard to the Administration's proposal for the FAA reauthorization.

I look forward to hearing from Administrator Blakey concerning the new cost-based user fees that will be used to fund some FAA services as well as the discrepancy of congestion fees among major airports using the same facilities and air space in many instances.

I am anxious to hear about the crisis facing the FAA with regard to the retiring air traffic controllers. It is my understanding that FAA estimates that over 70 percent of its controller workforce will be eligible to retire in 10 years. It is vitally important that we have as many well qualified controllers as possible ready to replace these retiring workers so that in no way is the safety of passengers compromised.

Again, I look forward to hearing from the speakers, and I thank you, Mr. Chairman, for calling this meeting.

Mr. COSTELLO. Thank you.

The Chair recognizes Mr. Ehlers for an opening statement or remarks.

Mr. EHLERS. Thank you, Mr. Chairman. I appreciate this, and I appreciate the hearing.

I want to begin by publicly apologizing to the Administrator. At the last hearing we had, there was considerable frustration and anger among Members of the Committee about the huge increase in the gas tax. As everyone in the Congress knows, if we try to raise the gas tax on automobiles by one cent, there is an incredible reaction from the public, and the huge increase in the gas tax that was being discussed triggered a strong reaction. I see Mr. Boswell smiling. I think he was part of the reaction.

I was impolite enough to say that that proposal was dead on arrival. I apologize to the Administrator for implying somehow that everything she said was dead on arrival. It was only the tripling of the gas tax.

I do appreciate your work and the incredible amount of effort it takes to try to run the FAA and modernize it.

In terms of what is on the table today, I think the NextGen air traffic control system is the key factor in increasing safety and decreasing costs in the future, and I will be watching that very closely in the next few years because I have great interest in it.

Also, I am very interested in how ADS-B is going to impact on the air traffic control system. Will it, in fact, improve the situation, reduce costs of air traffic control or not? So I am eager to see what the developments are on that, what the long term plans are and what the timeframe is.

With that, and we have others who want to make comments, so I will yield back the remainder of my time, Mr. Chairman.

Mr. COSTELLO. I thank the gentleman.

The Chair recognizes, for an opening statement or comments, the gentlelady from California, Ms. Matsui.

Ms. MATSUI. Thank you, Mr. Chairman. Thank you and Ranking Member Petri for holding this important hearing and to Administrator Blakey for providing testimony.

It is the duty of this Committee to craft the best possible policy for the future of the Nation's aviation system. Air travel is more important than ever to America's commerce and our way of life.

In and around my district, I have a large commercial airport and the reliever report. I fly back and forth to Sacramento and to D.C. a lot, and so I am personally very dependent on the system.

It is clear that our aviation system faces tremendous challenges. We have an aging infrastructure that needs to be modernized, and we need to expand capacity to meet future demand. So we have to look at this situation strategically in the near, medium, and long term.

I know there are many different objections voiced about this proposal. For example, the airports have been very clear that they think the increase to a $6.00 PFC is not sufficient to meet their infrastructure demands. In Sacramento, we are constructing a new terminal, so this is something that really affects my constituents.

In general, there is going to be a lot of debate about how we allocate the burden of maintaining, modernizing and expanding the

aviation system. It is this Committee's job to make sure the allocation is fair and that it yields sufficient resources to support future demands. This is certainly not an easy task, but it is essential for the long term success of the Nation's aviation system and for its economy.

I appreciate the thought and effort that Administrator Blakey and her colleagues have put into this reauthorization proposal and look forward to working with all of you as we continue this debate this month. Thank you very much.

Mr. COSTELLO. The Chair recognizes Mr. Salazar for an opening statement or comments.

Mr. SALAZAR. Thank you, Mr. Chairman.

Administrator Blakey, thank you so much for being here today. I think I speak for most of my colleagues on the Committee when I say I look forward to working with you and your staff in the coming months on this very important issue. I appreciate that we will be having several hearings on various aspects of the Administration's FAA reauthorization proposal.

As I have indicated before, I am concerned about the specific issue of user fees. I am still concerned, and I associate my remarks with Mr. Mica's remarks about the meat and potatoes way of funding this reauthorization and the NGATS. I am still unconvinced that the current system of aviation excise taxes, which has provided a stable and ample trust fund, needs to be changed so drastically, and I am very concerned about its impact on general aviation.

We keep hearing about the cost of modernization and NGATS. While we agree that updating our aviation industry will require a substantial amount of money, CBO has already indicated that both the modernization and NGATS can be accomplished under the existing FAA financial structure.

In the coming weeks and months, we will be focusing on the aviation needs of rural communities. Often times, these small communities get overlooked and sidelined, and I want to ensure that the Administration's proposal adequately addresses the needs of such communities.

I believe that we are working toward the same goal, to ensure that the United States continues to have the safest and most efficient transportation system in the world, and the purpose of these hearings is to decide how to best get there.

I look forward to your testimony today, Ms. Blakey, and I am confident that we will address the issues I raised.

Thank you, Mr. Chairman, and I yield back.

Mr. COSTELLO. I thank the gentleman.

Mr. Boswell is recognized for an opening statement or brief remarks.

Mr. BOSWELL. Thank you, Mr. Chairman, and I appreciate again your having this continuing dialogue.

I guess I would join Mr. Ehlers, Ms. Blakey, in saying that I said, yes, almost internally as he said what he did the other day. I wasn't quite ready to use DOA, but we have got to talk. We have to talk.

I would say this: You have got your job to do. We respect your job, and you have to perceive it as you see it, and we respect that.

However, we do too, and I think you respect that. I believe that for the moment at least. You just nodded. I thank you. So we will endeavor to respect your position and talk as you see it, and hopefully you will appreciate our responsibility to do oversight and to stand strongly for that which we believe and seek your willingness to work with us for solutions.

I am not into games. I don't think any of us are. We must engage in solutions.

Of course, you know that many of us advocate for general aviation. We are not making any secret about that and for many reasons. Yes, we use it. We greatly appreciate the impact of general aviation on the National economy, jobs, manufacturing, moving people, moving people with tight schedules, moving priority goods, et cetera, et cetera, et cetera. I personally believe that GA is at the table and willing to pay their or our part through current resources.

Let us see if we can't find a solution. It is not we, they, you, us. It is a solution. That is what we need. I think you have got the wherewithal to come a little further than you have come so far, so we will just have to work on it together. But stand your ground. We will stand ours. But at the end of the day, if we have just argued and no solution, what have we accomplished?

General aviation is at the table. I hope you are talking to them and talking to them openly, and I seek that very much.

Thank you, Mr. Chairman. Let us carry on.

Mr. COSTELLO. I thank the gentleman.

The Chair recognizes Mr. Hayes for an opening statement or brief remarks.

Mr. HAYES. Thank you, Mr. Chairman.

Welcome, Ms. Blakey.

I would like to reflect what Chairman Boswell—he is Chairman on the Agriculture Committee—has already said, just briefly. This is a terrible imposition on a segment of the marketplace which will have incredible impact on that industry. We are all friends here.

I would like to follow up on what I said in an earlier hearing. I would like to have some way to sit down with some of the potential providers of air traffic control upgrades and look and see what they are saying.

But as I look, and you all have some wonderful numbers. There are some number crunchers out there that can give you numbers that will dazzle you, but they just don't, I think, accurately reflect. I am not that well prepared. We will talk about it in questions later, to go over that, but when you look at the percentage increase, the guy flying a 747, it is an 18 percent cut for a guy flying a Bonanza. It is a 275 percent increase.

Again, we welcome the debate and welcome your interest and activity and commitment to the job, but let us keep all the doors and dialogues open going forward so that we don't lose a vital and dynamic part of the U.S economy which is suppliers and everything else that are providing. We don't want the impact of the luxury tax that took place a few years ago. The airlines are critically important. We have given them billions of dollars in subsidies. Let us just be careful going forward that we don't do the wrong thing.

Again, thanks for being here.

Thanks, Mr. Chairman, for having the hearing.

Mr. COSTELLO. I thank the gentleman.

The Chair recognizes the gentleman from Wisconsin, Mr. Kagen, for an opening statement or brief remarks.

Mr. KAGEN. Thank you, Mr. Chairman. I am very pleased to be here today, and I want to thank Administrator Blakey for being here and joining us as well.

I would also like to thank Chairman Costello, Chairman Oberstar, Ranking Member Mica and my good friend and colleague from Wisconsin, Tom Petri, because by working together, these hearings on FAA will help us to reauthorize something that will be proud for everyone to stand by.

I believe that everyone here today will agree that by examining and understanding all the complexities surrounding this issue, we will ensure that the future trust fund will be successful, and it is immensely important to us all.

As our Nation's infrastructure continues to grow and to expand, the need to address the problems associated with such growth become apparent. Nowhere is this clearer than in our aviation infrastructure and operations. With the numbers of air passengers increasing every year, delays growing longer, not just for passengers but for everyone in this room and Members of this Congress, the air traffic congestion is increasing. Fuel prices are rising, and the air personnel shortages are obvious to everyone. They are becoming a reality.

I believe we must look at this as a real opportunity, a unique opportunity to create a better and more efficient technologically advanced system that will serve our citizens with the best service possible. I am particularly interested in hearing Administrator Blakey's thoughts on the Small Community Air Service Development Program which could greatly benefit my constituents in northeast Wisconsin and bring in economic development to our area.

During this hearing, it is my hope that we can start to work towards putting together reauthorization legislation that will successfully address the financial, the developmental and modernization demands to design an aviation system that will serve all of its users.

Thank you, Mr. Chairman. I yield back.

Mr. COSTELLO. I thank the gentleman.

At this time, the Chair recognizes the Administrator of the FAA, Administrator Blakey, for her statement, and we welcome you here today.

I want to let the Members know that we had a long conversation yesterday and talked about some of the issues that we will be addressing here today.

Administrator Blakey?

TESTIMONY OF THE HONORABLE MARION C. BLAKEY, ADMINISTRATOR, FEDERAL AVIATION ADMINISTRATION, U.S. DEPARTMENT OF TRANSPORTATION

Ms. BLAKEY. Good morning, Chairman Costello. It is a pleasure to appear before you and Congressman Petri and all the Members

of this dedicated Subcommittee. I appreciate your focus on FAA's move toward financial reform.

In my view, the future of this system and this bill are inextricably linked. As plainly as I can say it, without the funding provided for the Next Generation financed through the Next Generation Financing Reform Act of 2007, there will be no NextGen system in time to prevent gridlock in the skies. Without the program flexibility, financial stability and beneficial budget treatment that this bill brings, our plan for the Next Generation air transportation system is likely to limp along far behind the traffic.

The act provides for financing through fuel taxes and user fees. Significantly, the user fees will be treated as offsetting collections that ensure that aviation revenues are used for aviation purposes. The act allows for borrowing authority, an important tool in any financial tool box.

Without a firm foundation of financial stability, the year to year uncertainties of budgets and revenues will neutralize the impact of our having a long term plan. Instead, NextGen will be the solution to a problem that we anticipated and studied but failed to really address, a legacy of starts and stops, very much too little too late. It is my firm belief that our status quo financing structure cannot deliver the NextGen system we need when and where we need it.

Remember, this is a system that uses the latest satellite technology to expand capacity, reduce delays, lower unit cost, provide major environmental benefits and substantially improve safety. Satellite technology has revolutionized everything in America, from cars on the highway to GPS embedded in our toddlers' sneakers. Isn't it time that we brought it into aviation?

Make no mistake, NextGen is not about pie in the sky. We have a clear vision and a plan to execute it. Both were developed in partnership with stakeholders from across the spectrum of aviation, from pilots and airlines to the GA community at every level to mechanics to Wall Street and beyond. They agree. We agree. NextGen will get us where aviation needs to go. But we do need to act quickly if we hope to avoid the aviation system resembling the L.A. freeway on a hot Friday afternoon.

A cost-based system, such as we advocate, will be much more transparent and accountable for the FAA, the passengers and the users, and significantly, it will give Congress more insight into our costs, helping you conduct much more detailed and effective oversight.

Yes, changing our financing structure is hard. I acknowledge that. But if we fail to create a direct link between FAA costs and revenues, if we just circle the runway, waiting for the weather to clear, aviation users across the spectrum will suffer. To put it mildly, and I think many of you noted this here today, the system is in trouble. While it is the safest system in the world, it is grossly inefficient and everyone who flies it, knows it. It is built on a series of fixed way points from the days of flying the mail in the twenties and thirties. We have squeezed every ounce of capacity out of the current air traffic system.

Even so, in the future, congestion will rule the day. The undeniable fact is that we face a billion passengers by 2015. An ever increasing number of very light business jets is going to be fueling

that. Traffic levels will double, perhaps in some areas, even triple in the not too far distant future. We have to plan for this.

I am here today to say that the band-aid solutions of the past will not be enough. We can't keep trying to scale up an air traffic control system that is based largely on 1960s technology. We need to take bold action, and with taxes and user fees expiring in September, we have to get it right this first time. We really have to take action now. The next six months are pivotal. If we let this once in a lifetime opportunity pass, we will begin to watch world leadership slip through America's grasp, in aviation.

The challenges I just described aren't limited to our air space. The problems of crowded skies and airports are worldwide. Europe is already moving ahead with Sesar, their version of NextGen, and they have got the funding to do it.

My assessment, the rest of the world already knows how critical this is, but they aren't waiting around for the United States. They like our help and leadership, but they also know how to do it. We may have been the birthplace of aviation, but success at Kitty Hawk is not going to be enough to keep us out front now. Someone else's technologies and someone else's standards will pave the way if we don't.

While the rest of the world has their action plan in high gear, we risk getting bogged down in a debate over who is going to pick up the tab. Truth be told, right now, the passenger in the middle seat is footing the lion's share of the bill for operating the system. The folks back home, buying airline tickets, pay 95 percent of the cost, but they are imposing only 73 percent of the requirements. That is not right.

Imagine a restaurant that required you to pick up the tab for the people sitting at the next table. It is not as far fetched as it sounds because it is what happens in our skies every day. A seat on a commercial jet liner is the most heavily taxed spot in all of aviation.

General aviation represents 16 percent of the cost to operate the system, yet it currently only pays 3 percent. Everyday passengers shouldn't have to pick up the tab for a CEO flying across the Country in a private jet.

This year represents a rare opportunity to leave an important legacy for our children, but to successfully develop that NextGen system, we need a revenue stream that is tied to the actual cost of our operations. We need a revenue stream that is reliable and equitable where all users pay their fair share. The hybrid financing scheme that we have put on the table last month is balanced, it is fair and it delivers on all these counts. We can indeed alter the future of aviation by creating a NextGen system that keeps America, number one.

If we fail to act on the NextGen financing reform, we will be headed overseas to ask world leaders of aviation to help us catch up.

Thank you very much.

Mr. COSTELLO. I thank you.

I have a few questions, and then I will reserve some time and come back and have a few more later.

I wonder, Administrator Blakey, concerning the user fee proposal by the Administration, I think there is a lot of questions and confu-

sion as to how this system would operate. So I wonder if you would take the time to walk us through from an administrative standpoint, how the fees would be assessed, how they would be collected, how the system would work.

Ms. BLAKEY. Certainly. As you all may have observed from looking at our proposal, the taxes and fees expire in September of this year. We would take fiscal year 2008 to continue the current system of taxes and fees while we put together the administrative apparatus that is necessary to then begin setting the new system, turning the new system on for 2009.

What you would expect is this: The GA community continues to pay exactly as they do today. This has been their preference. So when we talk about increasing a fuel tax, it was their preference that they pay at the pump through a fuel tax, and that will continue just as it does now.

For those who will be paying user fees, and this is largely commercial aviation, they will be paying as they pay all of their other bills. For the most part, these are significant companies. They pay vouchers just like everyone else. There are only about 500 of them that we expect to be issuing on a monthly basis. So it is not a particularly complicated system. Remember that we charge overflight fees right now on a monthly basis to air carriers all over the world. We do it efficiently and well and no complaints.

But I would expect under the new system, that what we will do is put out a request for proposals and find out who can most efficiently do the billing, and we will issue a contract so it will not be an increase in bureaucracy for the FAA. Those fees, the charges for those fees would begin going out after the services are rendered, and we would expect payment within two months of when the service was rendered.

Mr. COSTELLO. You know you have heard from Members of the Subcommittee concerning how user fees would impact general aviation for the recreational person or for the person who does not fly commercially or does not charter. How do you see the user fees impacting that type of person or that sector of the people who will be affected by the user fees?

Ms. BLAKEY. I don't see them affected at all. That is one of the great myths in all of this. There was a great fear on the part of general aviation pilots that they would suddenly be charged user fees, and for two years, there were magazine articles and in the press, there were questions about how a user fee would affect general aviation.

The only circumstance in which the recreation flyer would pay any form of fee, and this is something that is discretionary under our proposal. All of this has not been determined that it will actually occur this way, but it would be if the recreational flyer decided to fly into one of the 30 most congested airports in the Country. There, we would expect that we would be charging a terminal fee.

But let me give you an example of what we are talking about in fees because, again, I think this is something that is looming much larger than is in any way, shape or form likely. If you are talking, for example, about a small plane like a Cessna 182 flying into a large hub, the fee for landing there would be $3.86 if you use the kind of weight measure that is used around the world. Let me re-

peat that, $3.86. Now whoever flew that plane is going to pay a lot more than that to park in the parking garage.

But I can go up. A Beech Bonanza would pay $5.07. Now, is this an onerous fee to fly into the most congested airports in America?

Even going into the jets, a Cessna Citation, now here, we are over $10 million in aircraft so presumably there is some wherewithal there, but you are talking $15.93. Again, I don't think we have got a parking garage in Washington where you are going to be able to park for 24 hours for that.

So I ask you, does this look to you like this is an onerous burden? I think when people look at the actual facts, they will realize that general aviation, 99 percent of the time, the recreational flyers pay no user fees, and if they should want to fly into O'Hare, those are the kinds of fees we are talking about.

Mr. COSTELLO. I have several other questions, but I will go to other Members now and come back later to ask my questions.

At this time, the Chair recognizes the Ranking Member.

Mr. PETRI. I think many of the Members will have questions.

I wonder if you could outline for us, the best you can, the projected cost, additional cost of what is expected to be deployed of the new system during the reauthorization period before us. Do you have an idea of what we are talking about, what we are going to be buying during those five years and what it would cost?

Ms. BLAKEY. Absolutely, absolutely. In fact, I think we have a very detailed plan for the NextGen system for the next five years. You will look in the out years in the budget, and you will see there that the Administration is proposing a total of $4.6 billion additional over five years for deployment of next year. Now that is very significantly for ADS-B which I have heard a number of the pilots here already speak about.

ADS-B is the backbone of the new system. It is an absolutely critical technology that is becoming deployed worldwide. We are not the only Country moving toward it. It is because it provides great precision in terms of surveillance, knowing exactly where aircraft are, and giving pilots and controllers the same picture on a screen of where they are in relation to all the traffic around. It updates every second versus the best of our radar, the very best, is every six seconds. So you can see the potential in that kind of precision as you go down the road for all sorts of efficiencies and safety that is involved.

We will put a lot of money into ADS-B during that period. We also will be putting money into what is called SWIM, and this is essentially the internet for aviation. This is the ability to move data and to provide from a number of key databases for both security, defense as well as critical information for us, a network of information that can be called on.

There are a number of other demonstration programs in there as well. Data link, the concept that you do not want to continue to rely solely on voice communication, one controller talking to one pilot, but rather use data as we do in every other form of life, email, if you will, to communicate so that you can do so much, much more efficiently.

There is tremendous safety in all of this as well. One of the big errors that you have in aviation now is what are called hear back,

read back errors, when a pilot does not hear correctly what the controller said or vice versa. The precision of data, having it right there in front of you in black and white, is huge.

So that is the kind of investment. That is what we are looking for over the next five years. As we move into the out years, there are spikes. Some of the investments get higher because, as you would appreciate, when you are moving into full deployment on all of this, it gets to be increased in the years, in the early teens, if you will. Then as you go down toward 2025, the investments begin to decline. We are projecting for infrastructure for the entire NextGen, a range of between $15 to $22 billion out to 2025.

Mr. PETRI. Could you describe at all the impact of a delay in the reauthorization on this? Would it be possible to begin contracting and deploying this system? You are already probably studying and doing some pieces of it even as we speak.

Are there ways we could, if the reauthorization should, heaven forbid, be delayed for some reason, accommodate the needed financing and steps that would be required to nonetheless begin with this new system?

Ms. BLAKEY. One of the most important aspects of the new system is it provides certainty. It provides predictability, stability in the financing, so that all who are out there contracting, bidding and providing, know what to count on. That has been one of the most enormous problems in the FAA's capital investments up until this point, the ups and downs in the funding streams that have often put contracts at risks, have sometimes caused them to stop, change course. As that went on, they were prolonged. The costs went up, and on it went.

We don't want to see that happen with this. The stakes are too high to get in front of the congestion, and frankly the costs will go up if we do it that way.

Now if we miss the 30th of September as a date, what is likely to happen? I can't tell you. We only have two months left in the trust fund to operate the FAA. We are having to let a major ADS-B contract this summer. We have all of these airport projects that you all referenced that are critical to stay on track. If the Congress lets the taxes and fees lapse, there will be no money for any of that.

If, on the other hand, Congress decides to do what was done with the Highway Bill, and I know a number of the Members of this Committee remember the agony that you all went through on that, that is a series of short term extensions. That doesn't work in aviation. These projects are too big. Once you start saying, well, we are going to authorize for two months, three months, construction on runways doesn't work that way. People can't operate without having the knowledge that they are going to be able to get through a construction season and through a critical phase of a project.

We have dollar figures, and they are pretty staggering, and I would be happy to provide the Committee, based on the scenario that might be likely. So if you all would like to discuss it further, if you think that is becoming a likelihood, but I would certainly beg you, please, do not miss the deadline. This is very critical.

Mr. COSTELLO. The Chair recognizes Mr. DeFazio.

Mr. DEFAZIO. Thank you, Mr. Chairman.

Madam Administrator, great to see you here again. You received such a warm reception last time. I bet you were looking forward to coming back. You are doing a great job of defending the indefensible so far, but I do have a few questions.

Since this is a supposed to be cost-based system, there is a certain percentage contributed by the general fund which I have always felt was inadequate. As I look at the Administration's projections, you apparently project you will continue at approximately that percentage into the future or that amount of contribution which would become a smaller percentage into the future, is that correct?

Ms. BLAKEY. It is about 19 percent.

Mr. DEFAZIO. Right, but I think the numbers for the general fund are fairly stable and we are expecting costs to increase, so it would become a smaller percent.

Ms. BLAKEY. That is probably true.

Mr. DEFAZIO. But then I look at another portion that really puzzles me about your user fee. Now that is paid for by taxpayers in the United States, correct?

Ms. BLAKEY. And let me know one thing about the general fund. As you see for the first time, what we are doing is putting certain kinds of costs that the general fund should cover, categories of costs, which we think is a good and fair thing to do because we see them either supporting the smallest of GA in a way that GA cannot support for their safety functions, that we believe it is appropriate.

Mr. DEFAZIO. No, and I saw that, and those things are all eminently justifiable. I would say that given the role aviation plays in our National economy, that you could easily justify a larger contribution, but we won't debate that here. That is probably not your choice to make with this Administration.

Here is a concern since this is supposed to assess the costs where they lie. We have an international arrival and departure tax. A very large proportion of people arriving and departing are foreign citizens. Foreign citizens do not pay taxes in the United States. Yet, you are proposing to reduce their contribution by 60 percent which would be about $1.1 billion in 2008 and up to $1.6 billion in 2012. Yet, at the same time, we are levying taxes on the people of the United States and asking them to contribute to aviation, but now we are saying foreigners should contribute less. I am curious why we would walk away from $1.1 billion up to $1.6 billion in part paid for by foreign travelers.

Ms. BLAKEY. Well, as you can appreciate, there are several ways that people pay under this system. We felt a hybrid system was the most flexible way to accommodate people. They will pay user fees, and that is where that money is made up.

Mr. DEFAZIO. No, these are not fees paid by airlines. These are paid by individual citizens of other nations when they arrive or depart the United States. I know the industry likes to think that every fee paid by everybody is paid by them. It isn't. It is paid by people who arrive on their planes, and they are now going to contribute $1.6 billion less toward the system in 2012.

Since we are trying to do something which is impossible, and that is assess where the costs lay, I am just puzzled because I doubt that any foreign country is going to dramatically drop their

arrival and departure tax. It is a big source of revenue for a lot of countries, but the U.S. would unilaterally drop ours. It just seems to me a very puzzling thing, and I am not certain why we are doing that.

Let me go to another conjecture we make. I did have the misfortunate of studying economics as a young man. You reach a certain point where you have to add capacity at a margin, but before that margin, you don't have to add capacity.

In your statement, where you talk about two identical aircraft flying from Boston to Miami, you are saying one is full of passengers and the other is half full, and then you are talking about that or you talk about flying two planes and how that adds cost. If someone flew two planes, that adds cost to the system. Well, actually it doesn't. The air traffic controller is there. It may add to their workload, but until you reach the point where you have to add another air traffic controller, they aren't increasing cost to the system because the air traffic controller is there.

That is part of what underlays your supposition here which is that there isn't an underlying cost to the system to be maintained, that actually every increment counts. Now we are going to move to this extraordinary billing system, and I just have got to say, how much do you expect this billing system is going to cost? How much per unit?

There is going to be, I can't remember in here how many billable activities. It was many millions of billable activities on an annual basis. How much do we expect the overhead is going to be for the private entity which is going to administer the billing system?

Ms. BLAKEY. It is tiny.

Mr. DEFAZIO. It is tiny? It will be tiny? I mean if you look at the insurance industry in America, their overhead is 26 to 28 percent. Medicare's is 2 to 3 percent.

You are saying, well, we are going to put this out to the private sector. We are going to bid this out. We are going to outsource it. It will be so much more efficient. Well, if they follow the insurance model, we will actually lose a quarter of what we are raising to costs for those folks. If we follow the Medicare model, the Government model, we would lose 2 to 3 percent.

Ms. BLAKEY. I assume what you are talking about is the entire administrative cost of running those programs. If it is costing our insurance system $27, 27 percent to issue a bill, that accounts for a lot of what is wrong with our insurance system. I can guarantee you in aviation, that is not the case.

Mr. DEFAZIO. No, their overhead, but the point is have you done an analysis?

I mean, first off, I think the billing system is going to be impossible, and it is going to be a mess. Secondly, have you done a study to show that it can be done cheaper by the private sector or is that just an ideological assumption by this Administration who wants to outsource everything?

Ms. BLAKEY. There is no ideology in this. It is a question of efficiency. I do not have any preference where it is done.

Mr. DEFAZIO. Have you assessed then? Have you run two models? Here is the Government model; here is the private sector

model. Have you gone out to some private sector folks and say, what would you bid for this?

Ms. BLAKEY. Yes, we are doing that now.

Mr. DEFAZIO. And you compared to the public sector?

Ms. BLAKEY. We are doing that now.

Mr. DEFAZIO. Okay.

Ms. BLAKEY. I will be happy to show you the study as soon as it is done. We have undertaken that.

Mr. DEFAZIO. Right, okay.

Ms. BLAKEY. Believe me, whatever is the most efficient. But you have to remember, we are already billing right now for our overflight fees, and it is minuscule. This is the assumption that somehow it costs a lot of money to put an invoice.

Mr. DEFAZIO. But how many million operations is that per year versus what you are going to bill under the new system?

Ms. BLAKEY. You know I can get some calculations.

Mr. DEFAZIO. Right.

Ms. BLAKEY. But the top 110 companies that are involved in commercial aviation are going to be paying 87 percent of this. You can't tell me it is that difficult to bill that.

Mr. DEFAZIO. But still, it is millions of operations, Madam Secretary.

My time is expired, Mr. Chairman. Thank you, Mr. Chairman.

Mr. COSTELLO. You are quite welcome.

The Chair recognizes Mr. Mica.

Mr. MICA. Thank you, Mr. Costello.

I just got some interesting news. It says the U.K. has signaled that it is likely to approve the Open Skies Aviation Pact between the E.U. and the United States which to me is very good news, something I have worked for. There are some special interests that have tried to keep this from happening, who unfortunately maybe thwarted. For the interest of the Members of the Committee, if you don't have international service now, its biggest promise is to bring into our world, 27 countries all at once, both for expansion of aviation and passenger service. The consumer will benefit. So I think it holds some great promises.

Now one of the things that might stand in our way is even the capacity to deal with this new tremendous increase in air traffic on both sides of the Atlantic. Wouldn't you agree that, first, this is a very positive step, but secondly, if we are going to play in this global market, see jobs increase and aviation expand on both sides of the Atlantic, that we would have to have a system to deal with that?

Ms. BLAKEY. Absolutely, absolutely, and the skies around JFK as well as Heathrow are going to have to have the advantage of these new technologies which Britain has committed to.

Mr. MICA. Right. A little bit was talked about who pays for this system, and I have spent some time looking at the European system, the Canadian system. It is my understanding that those are pretty much paid for by the users. There is not much of a general federal contribution in any of those instances. Is that your knowledge?

Ms. BLAKEY. Yes, as a general matter.

Mr. MICA. Right now, it is about 19 or 20 percent that the average citizen pays, and I think what you are proposing is a little bit fairer. I would like to see the whole thing paid by the users, not some poor guy in Iowa or North Carolina or Hawaii who never gets on an airplane and doesn't have the benefit of a $15 million jet with maybe six seats or a $750 plane ticket. But he, right now, is underwriting, to the tune of 20 percent, the system and the services, is that correct?

Ms. BLAKEY. That is correct.

Mr. MICA. Okay. It does cost us about $14 billion, and we take about $2 billion out of the general treasury, is that the ballpark?

Ms. BLAKEY. Yes.

Mr. MICA. You have tried to put together a fair system so everybody pays based on use. That is your basic criteria.

Ms. BLAKEY. Equity was one.

Mr. MICA. I see you have advocated some increases for general aviation based on, I guess it is their fuel tax, 21 and 19 going to 54—I am sorry—56.4. Your calculations determine that that is based on their actual cost to operate in the system.

Ms. BLAKEY. It is. The way this works is this, that when we look at general aviation across the board. This includes high end as well as the recreational flyer. They impose about 16 percent of the cost on the system. We then took a look at what we thought very legitimately the general fund could support.

Congressman Mica, I hear your concern on that, but our position was that the general fund could pick up a number of costs that benefit GA like the flight service stations, which are an important measure of safety there, and low activity towers where the towers really don't have a cost benefit but they are important again to the GA community. So we took those off, and that dropped then the percentage down to about 11 percent of the costs that have to be covered.

Out of that 11 percent, the way the weight of the fuel tax will go is the GA community is only picking up 1 percent for the recreational flyer. The 10 percent is picked up by the turbine pilot, by the turbine aircraft, which is, of course, for the most part, your business aircraft, your high end GA.

Mr. MICA. Okay. One final question, my time is about to expire, but I made this radar screen up for you. This is a mock-up. It is a Mica radar screen. Each of these dots indicate either a commercial jet, a general aviation jet or general aviation aircraft. Now, of course, a lot of general aviation doesn't get into this range of this radar screen. Maybe some flying lower, whatever, close to the ground. But for the most part, what is the difference in your cost of service and can you identify or can you tell me which is which of my dots?

Ms. BLAKEY. Well, not at this distance, and I am squinting.

[Laughter.]

Mr. MICA. They are all the same. These are perfectly round symmetrical dots, all equal.

Ms. BLAKEY. Yes, yes. We can pull up N numbers, and we know exactly who each one of those dots would be if it were a real radar screen, and the cost to provide air traffic control is essentially the same to all the dots.

Mr. MICA. Thank you. You have answered my questions.

Just for the record, I didn't have time. You mentioned flight service stations, and you know the problem we have had with consolidation. At some point, you might want to talk to folks about that and the BRAC provision.

Thank you.

Mr. COSTELLO. The Chair recognizes the gentleman from Missouri, Mr. Carnahan.

Mr. CARNAHAN. Thank you, Mr. Chairman, and thank you, Ranking Member, for this ambitious schedule to get through this authorization.

To Administrator Blakey, thank you for being back and for your work on this proposal. I consider this a starting point, but there is obviously a lot of concern about many of the provisions in this proposal.

I want to express my concern particularly about the general aviation fees. My State, while it has several urban hubs, we have a lot of rural area in between. General aviation is vital to those individual recreational flyers as well as small business. So I think it has got to be addressed in a more fair and even way.

You mentioned the CEOs flying the corporate jets. That is certainly one segment of general aviation, but I think we have a whole lot of other folks flying the smaller planes. We have got to be careful on the burden we put on them.

I also want to follow up on the prior questioning about the privatization of the billing system that has been proposed. I understand you are doing a study about that. I, too, would very much like to see that comparison. To be frank, the Administration does not have a very good track record on privatization in general. So I have that concern.

In particular, I would like to ask would the privatization proposals that you are discussing allow these billing operations to be outsourced, say, to India or somewhere outside the United States?

Ms. BLAKEY. Well, I will tell you. We have looked at the issue of how you send the bills out and get the receipts in as a purely administrative function, a very small one, which we don't come to this with the conviction that it should be private or public or some in between organization. I think our view was we would like to just do it with the best, most efficient system through good analysis, and we are using an outside accounting firm and their expertise to look at this, to tell us what might make the most sense. But we don't have conviction that it has to be private any more than we do that it needs to be public or one of the non-profit organizations that serve aviation. For example, a lot of this is done outside the United States by the International Air Transport Association which is a non-profit.

So we don't know. I certainly don't have, and if Congress has some views that there should be certain kinds of parameters or constraints on that. I think our intent would be to consult with the stakeholder community and you all, look at the best method to do it and see.

No one has taken any great interest to this point in how we collect the fees from foreign airlines, which we do on a monthly basis,

but there may be some things to learn there. It is going very efficiently, and it is being run in house. We are doing that ourselves.

Mr. CARNAHAN. Thank you. I am going to jump on to another question.

The other thing I would like to touch on before my time is up, we talked at the prior hearing about my concern with the high rate of retirement among active controllers and their treatment. I want to ask you to address the issue. Under the NextGen proposal that was released, it details a need to hire 15,000 new controllers over the next 10 years while simultaneously FAA is actively planning the NextGen system which will rely heavily on satellite and network-based air traffic control. How does your plan to hire these new controllers mesh with the need to move to increasingly more technology-driven systems and do you anticipate that air traffic controller positions will be eliminated through this process?

Ms. BLAKEY. No, I will tell you. The two plans mesh very closely because obviously when you are planning 10 years out as we are with our controller hiring plan, you want to take advantage of all of the NextGen systems that will be coming into place. Remember that we have known that this group of controllers was going to be retiring at approximately the rate they are for the last 20 years. It was a group of people that were hired at one point 20 years ago following the PATCO strike, and they must retire by age 56.

So this is something we have long planned for, and the plan we have is really moving along with great precision and working well. We are bringing in new controllers. We have got our academy classes filled. We are committed this year to hiring 1,386 controllers which exactly meets our end of the year totals for traffic.

The 15,000 that you mentioned for the 10 years out, we are not seeing a need to diminish the need for controllers. In fact, as you see, we are increasing the number of controllers because there will be more traffic. We see that more traffic means they will be able to take advantage of this new technology which will make their monitoring and managing traffic and looking at anomalies and working on the issues of traffic flow. So it will change their jobs. Frankly, their jobs will be less stressful.

I would love to share with you a study that was just done by MITRE, looking at the application of NextGen technologies in a simulation with controllers doing the traffic that we are anticipating in 2014 without it and then what their workload is like if they have the advantage of this technology. It is like night and day, and they will have a tremendous advantage and a great deal more information, a lot more automation and the ability, as I say, to manage a broader range of traffic without that constant pressure of talking to every single aircraft. It is, frankly, a great improvement in the job and a big boost for safety.

Mr. CARNAHAN. Thank you. I would be very interested in seeing that.

Ms. BLAKEY. But there will be more controllers, not less controllers.

Mr. CARNAHAN. I would be very interested in seeing the study. Thank you.

Ms. BLAKEY. Sure.

Mr. COSTELLO. I thank the gentleman.

The Chair recognizes Mr. LaTourette.

Mr. LATOURETTE. Thank you very much, Mr. Chairman.

Administrator, welcome. I have just a couple of observations. Picking up on what Mr. Mica was mentioning earlier with more and more governments going to cost-based user fee systems, I think that you and your team should be commended for putting forward the proposal that you have. Even though we may not agree on all the pieces, I think it is important that we have this dialogue.

I also want to commend you and your team for the cost allocation study, and I think it does give us a clear picture of who has been bearing the bulk of the costs of who has been using the system. No matter what the outcome of this tax-based system versus user fee discussion that we are going to be having over the next couple of months, I do find the information that you put together to be valuable.

There are some pieces of the proposal, though, that cause me some concerns. While I don't expect you to have all the answers today, maybe you could tell me what the thought process was. First, congestion fees, I get congestion fees. I think that is an important piece of the plan, but I am wondering why they are assessed by airport. It seems to me that it doesn't matter whether you are a big plane or little plane if you are going to New York, Chicago or San Francisco, I think you should pay a congestion fee. But why do we pick one airport in New York, for instance, when others are served by the same TRACON?

Following some of the answers you have given to people already on this and Mr. Mica's radar screen which I really couldn't see from where I was seated, what does it matter if that dot is going to the airport at White Plains versus JFK or LaGuardia? Why is the congestion fee based by airport as opposed to TRACON?

Ms. BLAKEY. Well, of course, there is a certain amount of history in this that goes back to existing legislation. Our current statutes actually allow for congestion fees by airport under certain very restrictive circumstances. So it is, in a way, an elaboration on that.

There is also, in terms of the specific airport that I believe you are referring to and that is LaGuardia, a history here that shows that there really is no way that we currently area aware of to expand the footprint of LaGuardia and bring in more aircraft. When the cap was lifted—as you know, that was back in 2000—it was a fire sale on everyone rushing in there. Really, not only LaGuardia gridlocked, but it really put the whole system into vast delays.

So the issue of how do you best allot the capacity at LaGuardia has been a subject of long debate. The proposal that we have does give the port authority the ability to step into this. But at the same time, we are looking at incentivizing GA to land at other airports through this because if you put a congestion fee on LaGuardia, if you are GA and you can use another airport anywhere such as Teterboro, there are incentives for that for start. We hope that it will have those effects.

We would be very happy to come up, though, and talk to you, Congressman LaTourette, at some length about this because there have been a number of theories about it. As you know, this bill also allows for auction-based allocations, et cetera of the existing slots. So there is a lot to it, to be honest with you.

Mr. LATOURETTE. I get that. I would appreciate a visit, I think, because what I am having trouble getting my head around if we are moving to a system where you are going to pay for how much of the system you use, it seems to me that the user that lands at Teterboro is using the same business in the system as the guy that lands at LaGuardia, but I understand what you say about slots at LaGuardia. Maybe we can have a conversation about that.

The other thing that concerns me is the PFCs. I think all the airports would love to see the increased PFCs that you have outlined in your proposal. What seems to be missing, though, at least from my first review, is input from the users of the airports in terms of having the ability to have a PFC project altering discussion with the people that run the airport. I am wondering if you see it the same way and whether that is intentional or you think that we should have the users and the commercial airlines and the people that actually use the airport have more say as to how these PFC charges are going to be used at those airports.

Ms. BLAKEY. Let me understand. By users, do you mean the passengers, the groups in the community that are using the terminal and facility?

Mr. LATOURETTE. As well as the commercial air carriers.

Ms. BLAKEY. You know I think the best run airports in this Country do that and do it well, and if they don't, it is to their peril because they often encounter real community resistance. So I think that is a very smart thing to do.

The proposal is intended to encourage real collaboration and dialogue between the airlines, the user community, et cetera. Now whether we have completely covered that as well as we should, I would be happy to look at that again because I am very much behind the spirit of what you are saying, although we also want to take some of the Federal restrictions and the Federal requirements to be a little less heavy-handed with all of this because as we watch PFCs over the years, for the most part, the requests have been very reasonable, without opposition. All the filings and paperwork, we probably could do a good bit less of that and still have a very good system.

Mr. LATOURETTE. Thank you very much.

Thank you, Mr. Chairman.

Mr. COSTELLO. The Chair recognizes Mr. Hall for any questions he may have.

Mr. HALL. Thank you, Mr. Chairman.

Thank you, Administrator. Thank you for coming back again. It is good to see you again.

I want to say I am happy to see the continuous descent approach at the end of the lovely packet that you had prepared for us. I am wondering how far out. Is that going to extend the descent out to an earlier point from what it is currently for most flights?

Obviously, if you are rolling downhill in your car, you are using less fuel, and it is the same principle. Could it be a matter of extending that out to the greatest safe distance from the airport?

Ms. BLAKEY. Yes. I mean the concept behind CDA is that you have a glide path that you set up as the most efficient, and it does start higher. So it may be further out, of course, but it also would be higher. One of the things that we are observing on the airports

where CDA is being used, such as in Louisville, is that you have a 30 percent reduction in noise below 6,000 feet which is great for the communities there as well as a 34 percent reduction in emissions because of the less fuel burned. But the glide path looks more like this kind of slide, if you will, going in.

Mr. HALL. Right, that is good news. Thank you.

I wanted to ask about the President's proposal to move from excise taxes to fees, one that, well, may put even more budgetary constraints, from what I see, on the FAA operations. All airports could use more funding, but I am particularly concerned about small and growing airports that are already scrapping for capital improvement funding.

At its height, your proposal for AIP just cracks the $3 billion mark and only provides $8.7 billion overall. I was wondering how this proposal can fund capital improvements to small and mid sized airports like those in my district if it provides almost $2 billion less over the next three years than it did over the last three years.

Ms. BLAKEY. I think you really have to look at the proposal as a whole, the programmatic changes, the changes we are suggesting in allocations as well as the dollar figures because it was our view that the very large airports do very well in generating their own funding through bonding sources and through PFCs. If we give them the authority to raise the PFC to $6.00, we can take them off our discretionary funding which then frees up a lot of money for the smaller airports.

We also felt that all small airports are not created equal, and the way we have been treating them up until recently in this category of the smaller GA airports is everyone gets $150,000 regardless of need and regardless of size. Your Teterboro and your tiniest GA were getting the same thing. That doesn't make sense either. So we have created a four tier system, so that you can pump more money and keep significant projects at those airports going, whereas at the smaller ones, you have less.

Frankly, at the very small ones, we have taken them off of that minimal funding, and they need to come in to us for specific safety projects which then we can fund from discretionary funds. One of the problems about the way we were funding the smallest is they were getting a little bit of money, but it wouldn't cover the cost of a project which maybe they have a project once every six to ten years, but then they want it funded then. So it is important for us to be able to give them what they need when they need it, and I think that is the other structure we are looking at.

But PFCs, frankly, enable that AIP money to go a lot further.

Mr. HALL. Thank you.

Another question, you mentioned a couple times in answers to other Members' questions about different studies, one on, for instance, the effect on NextGen on controllers' work conditions and stress level. You said you would love to share that study with us. There was another question back here, I believe from Mr. Carnahan on another topic, and you said you had another study that you would love to share with us. I was wondering if you could share both of those studies with us, please.

Ms. BLAKEY. I would be happy to.

Mr. HALL. Before we have to take action on this.

Ms. BLAKEY. I would be delighted.

Mr. HALL. Has a contract request for proposals for the system been sent out? I see that the contract is to be awarded this summer which isn't that far away. So I was just wondering what the timeframe was and who we expect to be applying for it.

Ms. BLAKEY. We now know. We have gone through a whole process, as Government procurement requires, in issuing the requirements and having the bidders come in and offer their initial proposals. Now we are at the stage of having three major consortia which represent a number of companies in each case, who are proposing their solution and their proposed contract to us, and we are evaluating those at this point. We will expect in July to make the selection.

One of the things that I think is significant here is these are performance-based contracts. What we are doing is putting out the requirements that must be met and looking to them for the kinds of innovation, cost efficiencies, added value that they may be able to bring when you apply real creativity and the experience of companies, many of whom candidly have worked in the defense sector and other sectors. So they bring a lot to this in terms of the thinking of how to get the most out of the Government dollar in providing this service.

I am looking forward to those evaluations, and we expect it to be complete in July.

Mr. HALL. Mr. Chairman, my time is expired, but I just wanted to remark that I, for one, could use more specifics. There are a lot of generalities in here and a lot of acronyms.

We heard it was a satellite-based system the last time around. Now it appears that we are using the existing GPS satellite system, and we are not going to be launching any new satellites specifically for NextGen, is that the case?

Ms. BLAKEY. Well, I will tell you.

Mr. HALL. Those kinds of technical things are missing.

Ms. BLAKEY. Sure.

Mr. HALL. I feel they are missing from the information that I have seen so far, and I would like to have a little bit more depth in terms of the physical and scientific nature of the program.

Ms. BLAKEY. I would be delighted. One just small comment on that, yes, we are relying on the U.S. GPS system which there is a plan to update and increase its capacity very significantly that the Air Force has, and we have a role to play in that as well. So we would be happy to discuss that with you.

I believe it is this Thursday, and I am looking back at staff, that we have a briefing planned on NextGen up here for Members and staff. What time? We will get the details. It is Thursday, and we would love for you all to take advantage of it.

I will tell you, in fact, we really want to give you all a chance to touch and feel this whole thing because you can. I mean this is reality. We are bringing up the ADS-B equipment and displays of how it works and all of that. So if you possibly can come by and see it, I think you would find it very interesting.

Mr. COSTELLO. The Chair recognizes Mr. Ehlers.

Mr. EHLERS. Thank you, Mr. Chairman.

Just to follow up on your previous comment, I encourage all Members to participate. I look forward to that. I hope, as you go through this project, we could have those regular sessions here. I recall last year we hadn't heard anything, so I requested a presentation and your staff came up and gave a very good, a very technical presentation, and I found that extremely helpful. Hopefully, we will have many more in the future, and I hope other Members will participate.

Relating to that question, although your financing here is, of course, based on your expected cost, how well do you think you have pinned this down?

There has been a history, not so much under your administration but under previous ones, where we had major changes coming along, and the cost estimates were far lower than the actual cost. Are you comfortable with the cost projections for the systems that you are proposing?

Ms. BLAKEY. Yes, in fact, I am very confident of them. One of the things that we have worked the hardest on is to bring our capital programs in line with the way you monitor programs, best practices across business and Government. Last year, our major capital programs ended on schedule and on budget, 97 percent. Right now, we are 100 percent on schedule and on budget, and we intend to keep it that way. This is doable. It requires discipline.

I can tell you that we are working very hard, and at this point, I have no reason to think that rigor that we are applying there will dissipate. But it also depends, I will tell you candidly. We have to have stable funding for the capital investments. Otherwise when you start shortchanging them and pulling back on those contracts, then the costs go up and the schedule lags.

The operating costs for the FAA, again, I think are very predictable. As you know, we have very detailed plans. It does mean we have to control our labor costs. Labor are the single largest cost by far, almost 75 percent of our operating costs. So we have to stay on track in having reasonable, sustainable operating costs from the standpoint of our personnel. I simply stress that because in the past, that has been a wild card.

Mr. EHLERS. Yes, I understand that. I am more worried about the NextGen system. Whenever you have research going on and you haven't finalized, it is very easy for costs to occur.

Ms. BLAKEY. That is right.

Mr. EHLERS. Let me also just try to clarify something on your proposal for fees. One thing that I think is very good, you break out the AIP, RE&D and EAS costs and apply them equally across the spectrum of planes, and I think that is a step forward.

On the proposal for the air traffic control costs, the general aviation jet fuel is the same per gallon as the aviation gasoline, the piston engine gasoline, the 100LL. That is where I worry about equity because just to take my own example, and I don't mind paying for it. We have to pay to maintain the system.

I am flying. I am taking lessons, flying out of a small airport, no tower. I go off and practice. I fly across country, et cetera, no use of the air traffic control system. That is typical of most general aviation flyers. I think it is very important to encourage that because with a reduction of the number of pilots in the Armed Forces,

I think general aviation is going to be the feedstock for the pilots of the airlines of the future.

I wonder how you can justify the 56.4 cent increase in aviation fuel across the board for general aviation when a good share of general aviation does not use the air traffic control system. I recognize many do, but there are a lot of, particularly the new recreational pilots of light sport airplanes do not make use of air traffic control and, to my knowledge, don't plan to make use of it. How can you achieve greater equity there, recognizing those pilots who fly regularly on business purposes and use air traffic control and those who are simply recreational pilots who tend not to make any use of air traffic control?

I would appreciate your response to that.

Ms. BLAKEY. Well, I think what we are seeing is this, that there is a dramatic difference in the recreational flyer, usually, who is flying as you are suggesting, in terms of the amount of fuel they use. In other words, you are talking about very light planes. You are not usually talking about a lot of hours flown. I realize some people commute back and forth to their district, and that does add up to a lot of hours over time. But when you look at the GA community, the recreational flyers on the whole, they are flying the planes, and many of these planes, remember, are shared among a number of people and are flown on average about 100 hours a year.

When you start looking at the cost over a year of that kind of flying of our proposal, we are talking about around $500. I guess you could debate as to whether that is affordable or not, but when we look at it as a percentage of the overall operating costs of owning and operating a plane, it is still less than 5 percent of the overall costs.

I realize no one wants to pay additional taxes. I mean that is a given. I don't either. But it is small, and we were very conscious of the fact that because fuel usage is relatively little for small piston planes, the actual hit on the wallet is so monumental. Those would be my thoughts about it.

Mr. EHLERS. It is bigger than you might think but also you are charging for service that they don't use.

Ms. BLAKEY. Could I mention one thing about service they don't use, though, because I appreciate that? We, of course, do encourage everyone to file with our flight service stations. We certainly also remember that we do a lot of monitoring of planes up there, even if they are flying a VFR, and we certainly provide help and support if there become problems in the system. So all of that is there right now.

But what we also think is that GA pilots are going to be moving increasingly to the WAAS approaches, to use of GPS and ultimately to the use of ADS-B. Let me remind you that ADS-B for the general aviation pilot, and these are small pilots in Alaska, has reduced the accident rate in Alaska between 40 and 50 percent. Now how much is one's life worth? That is huge.

The ability to see aircraft around you, to have those sorts of services in the cockpit, we believe that the GA community is going to want to take advantage of that soon and well, and that definitely means you are a part of the system and you are using the services. We are going to be encouraging that, but the way you are going

to be paying is still on what I consider and just laid out is a pretty modest basis.

Those are the big, big advantages, the overall safety and the capacity benefits, because Congressman Ehlers when you decide that you do want to fly into Teterboro or you want to fly into a more congested airport, you will be able to get in because you will be equipped and we will be providing the service. I don't think GA wants to be closed out of a lot of the air space because they truly are marginal in every way.

Mr. EHLERS. I doubt if the FAA will ever want me to fly into Teterboro.

[Laughter.]

Mr. EHLERS. I yield back.

Mr. COSTELLO. The Chair recognizes Mr. Lipinski.

Mr. LIPINSKI. Thank you, Mr. Chairman.

It is always good to see you, Administrator Blakey.

A couple questions, starting first with the concerns over the air traffic controllers and the talk about maybe a 70 percent reduction of air traffic controllers because of a 70 percent turnover, that is. How does this reauthorization address that situation in needing to hire more air traffic controllers in the future to take care of the turnover to make sure we have safe skies?

Ms. BLAKEY. Well, it provides us a stable, predictable revenue stream that guarantees that we will not have difficulties knowing that we have operating costs covered. It is a cost-based system. So the cost of our controller, their salaries, benefits and all the equipment they rely on is built into the costs. That is a big advantage.

The 70 percent turnover between now and 2015, we are expecting that. We have been planning for it because it is built into the age they were when they were hired and when they retire.

Mr. LIPINSKI. The funding will be there to replace air traffic controllers then?

Ms. BLAKEY. On this system, it will be.

Mr. LIPINSKI. Another issue, in the proposal, you want to increase, expand the program for airport privatization from the current 5 up to 15. A question more specifically on what impact privatization is because so much Federal funding goes for airport capital improvements right now, airports that are privatized, would they still be eligible for AIP funding? Would the Federal Government be funding the private airports?

There still would be Federal money going into these privately run, for profits of whomever has the lease on them, those airports then.

Ms. BLAKEY. For the benefit of the flying community and all of that, yes.

Mr. LIPINSKI. I am sure that is something that we will be talking about more in the future on that.

One other issue I wanted to ask you about, the proposal to expand the PFC eligibility to encompass any airport capital projects that are eligible to be funded with airport revenue. I am just wondering what types of projects that you cannot right now use AIP funding for, could an airport use that for under this proposal? How does it expand?

Ms. BLAKEY. The caveat we have is it could be used for a variety of things as long as they are anti-competitive, meaning putting one carrier that serves that airport at a disadvantage versus another.

But it would allow for improvements in the terminals. It would allow for new hangars. It would allow for improvements on the fuel farms as well as building new fuel farms. All of those kinds of things are areas where the airport would be able to use funding, we think, very legitimately and on a broader basis.

Those would be just thoughts and examples. I could probably go on, as they say.

Mr. LIPINSKI. All right, I yield back the balance of my time. Thank you very much.

Mr. COSTELLO. The Chair recognizes Mr. Hayes.

Mr. HAYES. Thank you, Mr. Chairman.

Ms. Blakey, I am going to change gears just a minute and give you a chance to catch your breath. Thank you for speaking up about age 65 for pilots, moving the age limit up. We are working here on H.R. 1125 to help you implement that. With ICAO standards now being 65, we would love to see that implemented, a tremendous cost savings to the Government by keeping those pilots active to 65. Any suggestions you may have—you don't have to do that today—would be very helpful.

Again, thank you for being here. As I have listened around the room to the comments today, there seems to be a general lack of support for the overall plan. Mr. Mica seems to have been sipping the Kool-Aid a little bit, but we are going to try to get him some antidote.

Just listening, and this is very, very important, and you have handled the issue and the process with dignity and professionalism. There just seems to be a huge emphasis on, at this point, a very costly solution, and that is appropriate, but it seems to me we need to back up a little bit and spend a little bit more time on the problem. We have got a solution that has been massaged with all these numbers.

You used an example, and my friend, Leonard, is in the $5 category. If I understand the process correctly, he comes from Iowa to Dulles in a Commanche, and you said he is only going to pay $5.00 in this new system, but the way I do the math, by the time he gets home, the new fees are going to cost $285, not just the $5 fee. It already is going to cost him $80 to land at Dulles anyway, not counting the ramp fee. It is just a tremendously disproportionate share.

I look at some of the figures. Airline traffic and competition have done incredible things for commerce and the industry. Airlines are carrying more and more people to more and more places, and that is a good thing. The guy in the middle seat, that is typically me on a Friday afternoon, can fly to Los Angeles to the East Cost for $300. You talk about the unusual value. That is an incredible value, and the airlines are doing a good job competing among themselves. That is where the money is coming from.

The system we have got is not that bad. Again, let us focus some more on the problem, make sure to define it going forward. As I said earlier, 16 percent decrease for the 747 from Tokyo to Los Angeles and 271 percent—I am being a little bit loose with the

math—for Leonard and I to come from Iowa and back in the Commanche.

Again, it doesn't solve the problem, but it does force people out of the market. General aviation is a guy in Norwood, North Carolina, making tires. He is a guy in Iowa or wherever, making other components that are important.

GPS, pilots now, I got Sam. Sam is a stick and rudder guy. That is the way everybody used to train. Now we have got systems operators. The cost of GPS to the pilot and other technological aids has gone down dramatically, so I think that kind of savings is available.

Just to kind of wrap up and not have the red light, as we go forward, again I welcome the dialogue and hopefully again we will make sure that this part of the aviation industry, we call it general aviation.

But a corporate CEO, and they seem to be bearing the brunt of the criticism here, it is a cost item to them. They know how much it costs. The airplane has an initial cost which a lot of these figures are based on, but it doesn't figure in depreciation expense, bottom line to them. So I don't think the system can compare whatever the start-up cost is simply on its face. It is what they are going to use. If they stop buying those aircraft, whatever the level may be, we have hurt the economy overall.

Do you think that general aviation is potentially going to be harmed by this if we don't do our job of making sure that we allocate costs accurately and properly?

Ms. BLAKEY. No, I don't.

Mr. HAYES. Okay.

Ms. BLAKEY. I would not have proposed it if we did. You have to remember that general aviation manufacturing is on an enormous boom, 35 percent increase in terms of sales and deliveries this year. That is huge.

Again, the costs to the little guy are very small, but when you look at where we are seeing a huge increase in traffic and real cost to the system, it is in congested air space. It is at congested airports. It is up and down the East Coast. It is when folks want to fly in their jets down to the Super Bowl, and they all want to be there in front of the 320 with a full load.

Those are real costs and real problems in this system. This is not a question of a solution looking for a problem. That problem is there.

What I would suggest is because all of you have the vast majority of your constituents are the guy in 22B, the guy who is flying coach. Right now, he is paying more than 22 percent more than he needs to for the cost of our air traffic control system and all the infrastructure. We are asking for basic equity here. That is important. It really isn't fair to say, oh, well, the airlines are able to offer some cheaper fares these days, so let us don't worry about the fact that the passenger is paying too much of the bill.

You know this is a 10 year bill. This is the time to try to get it right. We do believe that it is certainly possible for everyone to step up to the requirements here and to try to be both fair and then put in place a system that is stable and we can all count on it.

Now, Congressman Hayes, I have said at the outset and all the way through, I don't pretend we have a perfect bill. I didn't say we got it all right. As I listen to the comments, both here and otherwise, people have specific things they don't like. I do understand that. But it is not that people are rejecting the bill out of hand, and may I suggest it is the only proposal out there. Change is hard, and people always find something at the beginning that they don't want to support, that they don't like, but let us be fair and give it a fair shake because the principles behind this, I think, deserve real attention.

Mr. HAYES. Absolutely, thank you very much.

Mr. COSTELLO. I thank the gentleman.

We are going to have some recorded votes very shortly, so I would ask you, if you would, to stay within the allotted time and to be as brief as possible and ask the Administrator to be as brief as possible with her answers.

At this time, the Chair recognizes the gentlelady from Texas, Ms. Johnson.

Ms. JOHNSON. Thank you, Mr. Chairman.

My questions have been answered, so I pass.

Mr. COSTELLO. I thank the gentlelady.

The Chair recognizes Ms. Fallin.

Ms. FALLIN. Thank you, Mr. Chairman.

Thank you once again for coming to our Committee. We have been seeing a lot of you. We appreciate all your explanation of the different issues.

I was listening as you were talking about the reauthorization and the funding coming forth, and you talked about the ups and downs and the contracting and not having the stability and the funding and the people involved in the system needing to know about timing of the funding itself and about projects and short term extensions and the different contracts and that they don't work well and it is not good for those who are receiving the contracts, not knowing the timing of things. So I had a question for you.

As you know, in Oklahoma City, we have the FAA Mike Monroney Center which trains the controllers, and we have had a lot of discussion about the controllers who are retiring and the need to get new controllers online, air traffic controllers. It is my understanding that in Oklahoma on our contract with the Mike Monroney Center, that the University of Oklahoma has a contract with the FAA training center and has had that since 1981 to help train the air traffic controllers. Since that time, they have trained over 25,000 air traffic controllers at that facility.

They had a five year contract which expired January 31st of 2006. So it is way past due on its expiration which is 14 months ago. Since that time, they have been getting short term extensions, a six month extension, a two month extension, a one month extension, and now it is all set to expire on July 31st of 2007 which is coming up in a couple of months.

In listening to you talking about how hard it is with the ups and downs of the contracting and the extensions and no stability within the system and then also the discussion we have had about the air

traffic controllers and how important it is that we bring more online and have them trained because of the retirement age.

Can you give me any advice on what you think might happen with the training that is currently going on at different facilities and what we can expect with the contracts of those? Maybe you are telling us that it is going to be affected by the reauthorization bill.

Ms. BLAKEY. Congresswoman Fallin, I will tell you this. I will start by saying I will get back to you with the specifics on that contract. What you are describing sounds correct, but I don't have the latest on it.

I can tell you broadly that what we have been trying to do is to improve training. We do a great job in Oklahoma City, and we are very proud of it. But like everything else, as time goes on, we want to begin using more simulators. We want to use more simulators in our facilities that are right there for controllers to use. We also want to take advantage of a number of the colleges and universities around the Country that would like to join our CTI program. As you know, those graduates are very successful, and when they get to the academy, they can expedite their training at the academy because they are very good and well trained and often come with college degrees. All of that has gone to the idea of developing a plan for our training for the next 10 years, and that is one of the reasons why we have not committed to a long term contract because we are trying to incorporate all those factors.

I am very proud to say that if you look at the controller staffing plan, we just issued about a week ago, you will see that the amount of time it takes to fully train and certify a controller is diminishing. It used to be three to five years. Now for en route, we are able to get it down to right at three, a little less, and we are also decreasing the amount of time it take to fully train and certify a terminal controller. So it shows that these approaches and new technologies are all paying off.

Ms. FALLIN. Mr. Chairman, if I may just finish, what I am hearing back from my folks at home is that when they have a two month extension or shorter periods of time, that it is hard to keep the workforce. It is hard to keep the people who are involved in the system, and they get frustrated, and they leave which hurts the quality of the system, of the training that we are delivering because they never know from one month to the next, if it is still going to be there. So people leave and come and go, and it is hard to keep that consistency of quality of service of the training.

Ms. BLAKEY. Let me look into it. I know we have a full pipeline of enrollees at the academy for all our classes, so we certainly want it stable.

Ms. FALLIN. Thank you so much.

Ms. BLAKEY. Sure, I would be happy to.

Mr. COSTELLO. The Chair recognizes Mr. Boswell.

Mr. BOSWELL. Thank you, Mr. Chairman.

In the interest of time, I have two or three things. I will just try to be brief on those.

Ms. Blakey, I am concerned, back to what Mr. DeFazio said, that we all, all Americans participate in the safety and the economy and everything else of aviation. So I am curious why you propose reducing the general fund when we all benefit.

Secondly, would you clarify the effect of the new funding on Part 135 On Demand Air Charter Industry?

Currently, they have to get a refund from the IRS. Will they pay 70 and get refund at 56.4? Will that be the way it works?

If this should move forward—if this should move forward and the trust fund, what would be your consideration of using the method that 135 operators pay strictly through the general aviation fuel tax? Would you comment on that?

Lastly, have you given much thought, you probably have, about the envisage or factor of the equipment costs that will be faced by general aviation to a lot of people like myself and Mr. Hayes and Mr. Graves and others, the impact on the industry that will have?

Could you address those, please?

Ms. BLAKEY. I hope I have kept up with all of it. The general fund contribution, I certainly agree that there is great public good in the aviation system for the broad taxpayer. We have retained the general fund contribution at about where it has been for the last several years, so we have not diminished it. We have kept it stable.

I think the long term problem is one that this Congress has recognized and been a party to as well as this Administration, and that is that there are huge competing interests for the discretionary part of the budget—health care, education, et cetera. As time has gone on, that has squeezed the ability of taxpayers to fund more of aviation. That is just the reality, but it has certainly proven true historically, and it is pretty hard to see that changing under current budget circumstances with the pressures on the Federal budget.

Referring to your question about Part 135, I believe what you are referring to is the question of when they are flying paying passengers and therefore would be required to reimburse because they would be charged differently under those circumstances. I would like to get you a written answer on that because it is a little technical, and I do need to give you the precision on that, if I might.

Mr. BOSWELL. Okay, I appreciate that.

Ms. BLAKEY. I can do that.

Did that cover it or did I miss one?

Mr. BOSWELL. Yes, the safety factor, I think is something that Mr. DeFazio was talking about. In the sense that I would guess that I can think of more than a few people that would probably avoid using the system and try to figure out how they could do some alternative to get to where they want to go without paying the fees. I am concerned about the safety factor which I know you are very concerned about. We all are. Do you have some reasonable assurance that that won't be compromised?

Ms. BLAKEY. Well, again, this gets back to what was an earlier assumption that is not true of our bill. There are no fees that general aviation is going to paying. There is no ability to say, you know, I don't want to pay a fee, because there is no fee. Flight service stations, which are the primary way that we help general aviation—weather, filing flight plans, all of that—are free. They are funded by the general fund.

The only way that general aviation is paying a fee is if they fly into of 30 of the most congested airports which, for the most part,

is your corporate high end aviation, not your recreational flyer flying into O'Hare.

Mr. BOSWELL. I understand. Because of time, Mr. Ehlers, oh, he is gone. If he goes into Teterboro, I want him to take Mr. Hayes with him. I don't even want to go. So, okay, thank you very much.

Mr. COSTELLO. I thank the gentleman.

The Chair recognizes Mr. Poe.

Mr. POE. Thank you, Mr. Chairman.

I have a couple of questions, of course. The area I represent is the Houston area. The Intercontinental Airport is real close, and then I have Beaumont Airport.

My questions basically are about the air traffic controllers. I meet with those guys a lot, and one thing that concerns me is that they all seem like they could qualify to be AARP members or senior members in AARP. I am concerned about our workforce and replenishing them with what I think are very qualified individuals at this time.

Consolidation of TRACON facilities, specifically, the Beaumont facility being consolidated probably with Intercontinental Airport, a simple question, will that mean the loss of air traffic controller jobs?

Ms. BLAKEY. All right, on the consolidation of Beaumont with the Houston TRACON, it certainly will not anticipate loss of jobs. One of the things that we are trying to do is to have the best possible technology. I will have to get back with you on specifics, but I believe that Houston uses the STARS system. Am I correct about that?

Mr. POE. Yes, ma'am.

Ms. BLAKEY. Of course, STARS offers tremendous advantages in terms of its precision and reliability, 16 different sensors and radars, and that is what then becomes available to Beaumont by doing that. The anticipation is that you get better technology. That is the key thing. We have been, so far, able to accommodate these consolidations without much disruption to the workforce or diminishment in numbers of people. Again, traffic is going up down there.

Mr. POE. Well, that is really my question. Will the consolidation, whether it is in Beaumont, in Houston or other parts of the Country, will that mean a general overall loss of air traffic controller jobs or will they stay the same or will they increase?

Ms. BLAKEY. As a general matter, it does not impact air traffic controller jobs, but let me look at the specifics there, and then I can get back to you and tell you with greater precision. I don't honestly remember what kind of timeframe it is on and all of the specifics that are involved.

But what we find as a broad matter is, because traffic is increasing, there are good jobs for all of these controllers. It may not be exactly the same job they were doing five years ago, but there are good jobs. I mean after all, we are hiring at a fast pace, so we certainly are not trying to, in any way, diminish controllers and the jobs they have right now.

Mr. POE. The second question has to do with the $5 billion loan part of the proposal. What is that money going to be used for?

Ms. BLAKEY. It is a good question. It is in the second half of the 10 year period of the bill, and it is borrowing authority for some of these capital investments that, like any major capital program, often involve big investment spikes. Rather than trying to pay for them in a one year basis on a cash and carry basis, it allows the ability to smooth out that capital cost and yet get the benefits of these programs up front, the technology sooner than you would if you had to pay for it every year.

I mean no one pays for any capital investment in the private sector and in our personal lives, obviously, pay for your house all up front. Corporations don't. We believe we need that tool here as well, and the spikes are coming in the second five years.

Mr. POE. Will there any input from Congress on how that money is going to be spent?

Ms. BLAKEY. Absolutely, you all will have to approve all of those programs with all of the money that is attached.

Mr. POE. Overall, in your opinion, what position or policy or manner in which that $5 billion is going to be spent?

I mean just give me some ideas. I mean $5 billion here, $5 billion there. To Congress, it doesn't mean much, it seems, but it is a lot of money, and I am just asking you where you think generally that money is going, if you could be specific.

Ms. BLAKEY. Well, I think it will be going to some of the big investment costs that we see out there. Some of the things that we need to do go to the ability to network all of these systems. When I was talking about SWIM, there is another system also that goes to being able to hook up all of our security and surveillance, et cetera. That can be quite expensive. ADS-B, in the out years, gets to be quite expensive. And so, those are some of the things that we would anticipate putting the $5 billion against if we need to.

Now, if we don't need to, that is another call, and that is certainly something that we would be discussing with the Congress well up front as well as with the stakeholder community well up front. Does it make sense to go fast and therefore need to incur that kind of borrowing or can we do it on a more gradual basis so you need to borrow?

Mr. POE. That would be three, okay. Just to follow-up, I look forward to an answer to my earlier question about the consolidation specifically with Beaumont and Intercontinental Airport, what that will mean on air traffic controllers' positions. Thank you.

Ms. BLAKEY. I am sorry, I didn't know the specifics. I will get them for you.

Mr. COSTELLO. I thank the gentleman.

At this time, the Chair recognizes the distinguished Chairman of the Full Committee, Mr. Oberstar.

Mr. OBERSTAR. Thank you, Mr. Chairman.

These are very, very important hearings, the launch hearings as we being our process of reauthorization of FAA for the next three years. It is evident how important these hearings are, given the number of Members who have turned out for the hearing this morning and the questions asked.

Madam Administrator, you have immersed yourself in this subject matter, and I applaud you for that. You have mastered the issues, and you speak from a fount of knowledge and from the

heart and not from prepared statements, prepared guidance. That is refreshing as we hold these hearings.

I see that the bells have rung for a vote.

I have very serious reservations about the overall proposal from the funding aspect of the overall proposal. It will be a major shift in policy from the ticket tax user fee approach to some other sort of fee that I used to call a cash register in the sky. As you leave from one airport, you pay a fee. You are handed off, you pay a fee. You go some place else, you pay another fee.

You have 13 safety and certification activities from which to collect fees. Better, not you, I don't mean to personalize this. The FAA proposal has 13 safety and certification activities for which fees, but yet there is no evidence of a cost accounting procedure in place for it.

Many of the questions that I have are the New York-New Jersey airport operations and the proposal to allow the Port Authority to use "market-based mechanisms to control congestion." How are they going to do that?

I have had this discussion over 20 years with the congested airports and, at various times, it was suggested spreading out operations over the period of the day. Instead of having the three major banks, now it is four major banks. Now it is getting to be five. Airlines, on the one hand, offer a more economical ticket price to travelers to fly somewhere between 9:00 a.m. and noon or somewhere between noon and 4:00 or after 9:00 at night. Can airports offer lower landing fees to encourage airport use at those times? Is that what you have in mind?

Ms. BLAKEY. Well, I will tell you. You know this is complex, and there are a number of ways of doing it. Part of it, of course, is you determine in doing it, how elastic is the demand because I think that is a big part of the question. It could be done that way. Yes, you are right. There are several different approaches in terms of how to do it. Auctions are another way. So there is some very creative, innovative thinking about this.

But since this is something that we would work with the Port Authority of New York and New Jersey on what they thought would be most effective there. I would say that this is something that still is very to be determined. This is carving new ground, and I understand that it hasn't been easy to come up with these approaches.

Mr. OBERSTAR. Not really carving out new ground because if you remember a few years ago, before you were Administrator, we had very serious congestion problems at airports all across the Country. Aviation was exploding in growth until September 11th. We did a look at Dallas Fort Worth. They had 57 departures at 7:00 a.m. Well, the airlines know 57 aircraft can't take off at the same time. They are deluding their passengers, and the FAA was part of the delusion. We pointed this out in the course of Committee hearings. That doesn't make sense. Do something.

Eventually, FAA, airports, airlines, all got together and figured out how we can spread those operations out over a period of time. In the end, it comes down the passengers. If they said, we want to leave at 7:00 a.m. because we have to get to our business meet-

ing or so and so, and they are not willing to travel at some other time. So they are paying that premium.

What thinking has gone into, either on the airport side or the FAA side, making a significant enough incentive to air travelers and to airlines that they will move from those big bank periods of the day and relieve congestion?

Ms. BLAKEY. Well, I will tell you. We spent the better part of two years, looking at these kinds of models and the way this could work. We actually did some mock auctions, et cetera. All of this was theoretical. We were looking at this to see how it could work, et cetera. I would be delighted to have us come up and brief you on that because I think that there was some interesting results from this. Several of the airlines did participate in this, so you had some real world results.

The one thing, though, that I would point to that is specific in our bill and is very real world is we have some language in the bill that is complementary to an NPRM that is now out on the streets, focusing specifically on LaGuardia. So within the port authority's domain on LaGuardia as an airport, we have an NPRM there to deal with the question of the current cap on slots and how this should be allocated. I would be delighted to have us come up and talk with you specifically about that because I think that does need attention.

Mr. OBERSTAR. I would be very delighted to have that conversation with Mr. Costello and our colleagues on the Republican side as we are all in this together. If there are some lessons to be learned, maybe they can also be applied to Heathrow in conjunction with our current U.S.-E.U. negotiations.

Second, very quickly, the FAA proposal would raise the Passenger Facility Charge to $6.00. Do you have any limitations on that increase or on the incremental increase?

I am not trying to trap you. What I am getting at, and I think you know my feelings on the subject, is 23 percent over the past 17 years. Isn't it? Yes, since I was Chair and we authorized the PFC. It was 1990, in this room, Sam Skinner was Secretary.

Ms. BLAKEY. Right.

Mr. OBERSTAR. Twenty-three percent has gone into airside capacity improvements only. That is a disappointment to me. Now there are a great many airport terminal needs that have been addressed with the PFC, but I don't think passengers ought to be paying additional an Passenger Facility Charge if it is just going to go to help the airport create more malls where they can go and shop because schedules are so bad and they have got so much free time between flights that they can spend millions of dollars at airport shopping malls.

If there is going to be an increase, and that is by no means decided, in a PFC, then I want to see some movement in the direction of making sure that the original purpose was to create capacity on the air side of airports and help airports do a few other things such as make transportation in the airport vicinity on airport grounds more compatible with operations. Just a quick comment and then I will have to close.

Ms. BLAKEY. Certainly, capacity enhancements have been enormous. We think they have been very successful, but we would like to work with you on any concerns you might have about the issue.

Mr. OBERSTAR. Aren't you troubled by only 23 percent of the money going into capacity?

Ms. BLAKEY. I think that enhancing the financial independence and stability of these airports is what a lot of these other improvements are. Hangars, the fuel farms, getting into terminal improvements, all that make the airport more stable, independent and successful.

Mr. OBERSTAR. That is right. That is a good hedge answer. Thank you.

Mr. COSTELLO. That concludes our hearing.

I thank the Administrator for being here. We look forward to seeing you again in the coming weeks as we get into specific areas of the reauthorization.

The Subcommittee stands adjourned.

[Whereupon, at 12:07 p.m., the Subcommittee was adjourned.]

OPENING STATEMENT OF
THE HONORABLE RUSS CARNAHAN (M0-3)
AVIATION SUBCOMMITTEE
TRANSPORTATION AND INFRASTRUCTURE COMMITTEE
U.S. HOUSE OF REPRESENTATIVES

Hearing on
FAA Reauthorization Proposal

Wednesday, March 14, 2007, 10:00 AM
2167 Rayburn House Office Building

Chairman Costello and Ranking Member Petri, thank you for holding this important hearing on the FAA's proposed Reauthorization plan. This subcommittee will be busy in the months ahead, and I commend the Chairman and Ranking Member for setting an ambitious schedule. In addition, I would like to welcome Administrator Blakey to this hearing and express my appreciation for her presence.

The FAA has submitted its Reauthorization proposal in the form of The Next Generation Air Transportation System Financing Reform Act. It is clear that a restructuring of the FAA is necessary to manage the increasing burdens which will be placed upon our aviation system in the years ahead, but I am dismayed by many of the provisions in this proposal.

The commercial airlines have shouldered a heavy portion of financing the Aviation Trust Fund, and I support a restructuring of the tax system. However, this proposal goes too far in shifting that burden to General Aviation. This bill would increase the gasoline tax for General Aviation piston aircraft by 350%. I would like to remind my colleagues that this increase will not unduly affect rich executives who fly corporate jets and can afford an

increase in the fuel tax, but will place a heavy burden on our constituents who fly piston aircraft for recreational or small business purposes. Any result of FAA Reauthorization that discourages the sustainability and growth of General Aviation is simply unacceptable.

I would also like to express my dismay with the proposal to phase out entitlement funds for large and medium airports through the Airport Improvement Program. Lambert St. Louis Airport, just outside my district, has greatly benefited from AIP funds. To be frank, even an increase in the Passenger Facility Charge will not replace the entitlement funds that are important to Lambert's re-birth.

This proposal serves as the beginning of our conversation. Though I do not agree with many of its provisions, I would like to commend the FAA for offering it and look forward to working with Chairman Costello and Ranking Member Petri to produce a bill that best serves our aviation system.

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STATEMENT OF THE
THE HONORABLE JERRY F. COSTELLO
SUBCOMMITTEE ON AVIATION
HEARING ON
THE FEDERAL AVIATION ADMINISTRATION'S REAUTHORIZATION PROPOSAL
MARCH 14, 2007

- I want to welcome everyone to the first of our hearings on the Federal Aviation Administration (FAA) reauthorization. In particular, I would like to welcome back the Administrator of the FAA, Marion Blakey, to present the Administration's FAA Reauthorization Proposal to the Subcommittee.

- Following this hearing, the Subcommittee will give detailed consideration to certain aspects of the FAA Reauthorization Proposal in its upcoming March hearings:

  March 21, 2007: FAA's Financing Proposal.
  March 22, 2007: FAA's Operational and Safety Programs.
  March 28, 2007: FAA's Airport Improvement Program.

- The Subcommittee will consider the Essential Air Service Program and Small Community Air Service issues in an upcoming April hearing.

- On February 14, the FAA submitted its Reauthorization Proposal to Congress. The FAA's proposal includes a new financing scheme to transform the FAA's current excise tax financing system to a hybrid cost-based user fee system, as well as major changes to the Airport Improvement Program. In addition, the Reauthorization Proposal includes provisions on the environment, airport congestion, war risk insurance, as well as other items affecting the aviation community.

- At the outset, I would like to make a few observations about the FAA's Reauthorization Proposal. As I noted at the February 14th hearing, the FAA's new proposal would hypothetically yield approximately $600 million <u>less</u> in FY 2008 than maintaining the current tax structure and over $900 million <u>less</u> from FY2009 to FY2012. This is partially because the FAA's estimated cost requirements for its major capital programs are actually <u>lower</u> than what they were four years ago. For example, the

FAA's estimated total requirement for facilities and equipment in this new three year proposal is approximately $380 million less than what it requested for the first three years of its last reauthorization proposal – the *Centennial of Flight Aviation Authorization Act.* This is despite the fact that the FAA has cited the need to finance a major new air traffic control modernization initiative as a reason for reforming the current tax structure.

- At the same time, I have grave reservations about implementing a user fee for which there does not appear to be a hard ceiling, and for which FAA would have broad authority to raise fees to match whatever costs are incurred.

- Air traffic control modernization is a technologically intensive and financially high-risk endeavor. In the past, the FAA has incurred major cost overruns in its modernization program. While FAA believes that its user fee system would be more transparent, I am concerned that airline passengers and other airspace users could end up paying hidden costs for any future problems and delays with the FAA's modernization program.

- Therefore, it is imperative that FAA give Congress a straightforward assessment of its cost requirements for the Next Generation system.

- In terms of capacity, airport runways may provide an even greater benefit than air traffic modernization. In fact, the FAA's Operational Evolution Plan (OEP) states that new runways and runway extensions provide the most significant capacity increases. However, the FAA has requested approximately $1.5 billion less for the Airport Improvement Program (AIP) in its new three year proposal than what it requested for the first three years of its last reauthorization proposal. Given the fact that FAA acknowledges that airport capital requirements have increased, I believe that this funding request is extremely short sighted.

- The FAA's proposal to increase the cap on passenger facility charges (PFCs) from $4.50 to $6.00 is worthy of consideration. The PFC cap has not been raised since 2000, and inflation and construction cost increases may have eroded the PFC's value. However, I have some concerns with

expanding eligibility for PFC projects. Expanding PFC eligibility and the proposed cuts to AIP could result in moving funding away from capacity-enhancing airside projects.

- The FAA has also proposed to restructure the nonprimary entitlement program into a tiered system of apportioning AIP entitlements so that larger general aviation airports get more funding. The FAA believes that its proposal would meet the demands of emerging markets, such as very light jets, air taxis and fractional ownerships, which land primarily at general aviation airports. We need to examine this proposal carefully to determine the impacts on smaller general aviation airports.

- With that, I want to again welcome the FAA today and I look forward to the testimony.

Congress of the United States
Washington, DC 20515

Opening Statement for the Honorable Eddie Bernice Johnson
House Subcommittee on Aviation
The Administration's Federal Aviation Administration Reauthorization Proposal
Wednesday, March 14, 2007 – 2167 RHOB

Thank you Mr. Chairman.

I want to thank you and Ranking Member Petri for holding this important and timely hearing this morning.

Your early consideration of the reauthorization of the Federal Aviation Administration is commendable.

The challenges before us are real and we're going to have to take a hard look at what we can do to prevent a looming gridlock of our nation's aviation infrastructure.

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By 2015, one billion passengers will board planes domestically each year; whether the system can handle that depends on how money is invested in aviation infrastructure today.

The Administration appears firmly convinced that a complete overhaul of the current indirect system of taxation financing is warranted. I am not that convinced.

H.R. 1356, the Next Generation Air Transportation System Financing Reform Act of 2007, proposes a mix use of user fees, excise taxes, and general funds, to pay for the FAA's ATO related activities.

Based on my reading of the bill, FAA's safety activities would be funded primarily from general funds, but the measure would also allow the FAA to collect user fees for registration and certification activities.

The measure does not set new user fee rates for ATO services; enunciates a framework for how fees can be set; and quite possibly the most controversial amongst all the of policy provisions— the establishes a so called "advisory board" to assist the Administrator in setting fee levels and mechanisms.

The Bush Administration contends that their approach gets the nation where it needs to be with regards to avoiding gridlock. However, there are many within the aviation community that hold contrary views and feel the existing trust fund structure is adequate.

Mr. Chairman, although we are early into the FAA Reauthorization debate, again, I am not convinced that H.R. 1356 gets us where we want to be.

As I close, I want to thank Administrator Blakely for coming before us to testify this morning.

I look forward to hearing from her as to why she thinks the Administration's current FAA Reauthorization Proposal is best suited to support the Next Generation Air Transportation System.

Thank you Mr. Chairman, and I yield back the balance of my time.

FOR THE RECORD

REP. RICK LARSEN STATEMENT –
AVIATION SUBCOMMITTEE HEARING
THE ADMINISTRATION'S FAA REAUTHORIZATION PROPOSAL
MARCH 14, 2007

Thank you, Chairman Costello, for holding this hearing today and for scheduling four hearings this month on the reauthorization of the FAA.

This subject deserves attention and the Administration's proposal warrants serious scrutiny.

I have met with many aviation stakeholders in my district – from GA pilots to airport operators – and they all shared the same message of concern over this proposal. The GA community is asking why they face a 300% increase in their gas tax. Airport operators told me the current revenue generating system works well and they are leery of any change. As the airports in my district are predominantly GA airports, they are very worried that these increased taxes will kill general aviation and their support industries. There is also concern that these small planes will decide to skirt the ATC system altogether and fly VFR in order to avoid the higher taxes they can't afford to pay.

As I evaluate the proposal, one glaring concern is the lack of funding it will generate. This new user fee structure would produce 600 million fewer dollars in fiscal year 2008 than the current tax structure. And it would leave us with 800 to 900 million dollars less from FY 2009 to FY 2012.

This leaves me more than a little confused. If the estimates are correct that we'll need one billion dollars more a year to make the move to Next Gen, on top of what it takes to operate our current system, how does this proposal get us to the Next Generation Air Transportation System?

I look forward to hearing the testimony of Administrator Blakey this morning and an open and rigorous debate.

Thank you.

Statement of John L. Mica
The Administration's Federal Aviation Administration Reauthorization Proposal"
March 14, 2007

For the record

I would like to welcome Administrator Blakey here this morning. We are very happy to have you here to address the Aviation Subcommittee. Administrator Blakey, your introduction to and explanation of the Administration's Federal Aviation Administration (FAA) Reauthorization Proposal will kick off a very busy few months for the Subcommittee.

This morning's hearing, as well all know, is the first in a series of hearings to focus on FAA Reauthorization. Given that the fees and taxes that fund the FAA will expire on September 30, 2007, this is a high-priority legislative project for the Transportation and Infrastructure Committee.

By now, we are all well aware that the Administration has proposed to transform the FAA's current excise tax financing system to a hybrid system

with fuel taxes for general aviation and a cost-based, user fee system for commercial aviation users.

In the lively discussions over just how we fund the Nation's air traffic control system (ATC) and the must needed transformation to the Next Generation ATC (NextGen), we must not overlook that other critically important FAA safety and airport improvement funding programs are also due to be reauthorized this year.

The FAA reauthorization bill is our chance to address the financing and programmatic needs of the aviation system. It is critical to sustaining our current system and preparing for future capacity needs.

Besides the FAA financing proposal, there are many other provisions included in the FAA's draft Reauthorization bill that deserve our close consideration.

First, the FAA's reauthorization proposal includes changes to the Airport Improvement Program (AIP) formulas and the passenger facility charge program (PFC), including raising the PFC cap. I support raising the PFC cap, but we need to understand whether these changes would actually free up additional AIP funds for small and medium airports.

Second, while America's aviation system has been safer now than at any time in our history, we must make sure that there is adequate funding for the FAA's critical safety oversight responsibilities, including, funding for safety inspector and air traffic controller staffing. This is particularly true given the wave of retirements facing the FAA in the next 5-10 years.

Third, we must ensure that the FAA's facility and equipment needs are met. FAA facilities are aging and in need of repair or replacement. Additionally, the FAA must maintain the current air traffic control

system while overseeing the gradual and safe transformation to the Next Generation system.

Finally, the FAA's draft bill includes a BRAC-like provision, which I earlier recommended, that would provide a new process for removing politics from the decisions to realign or consolidate FAA facilities and services.

I believe such a process, similar to the Base Realignment and Closure (BRAC) process for the Pentagon, is essential to the FAA's ability to manage the system. The FAA needs to be able to shut down redundant facilities and other infrastructure rendered obsolete by the air traffic control modernization. The provision in the FAA's proposal is designed to ensure safety while insulating future FAA facility closure decisions from political influence.

Again, I look forward to hearing from Administrator Blakey and to working with my

colleagues on both sides of the aisle to achieve the best FAA Reauthorization legislation.

I have every confidence that this Subcommittee and the full Transportation and Infrastructure Committee will engage in an open dialogue with all interested parties.

Administrator Blakey, I look forward to your testimony today and thank you for your participation in this important hearing.

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Statement of Rep. Harry Mitchell
House Transportation and Infrastructure Committee
Subcommittee on Aviation
3/14/07

--Thank you Mr. Chairman.

--Since this is the first of several hearings our subcommittee will be holding on the Federal Aviation Administration's (FAA) reauthorization proposal, I want to take a moment to identify a number of issues of concern to me.

--First and foremost, I am concerned about safety.

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--According to the FAA, over the next 10 years, 70 percent of its air traffic controllers will become eligible to retire.

--We need to make sure the FAA has the resources it needs to recruit, train and maintain controllers to replace these retirees, and keep the flying public safe.

--I am also very concerned about reports of passengers being trapped on grounded planes for extended periods of time without access to

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food, water. In some cases passengers have been held in such conditions for more than seven hours .

--In my view this is not just a matter of comfort and convenience. It is a matter of safety, and needs to be addressed.

--In addition to safety, which, of course, is the top priority, I am concerned about efficiency. Last month, the Washington Post reported some sobering statistics.

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--According to paper:

> **"Airlines' on-time performance dropped for the fifth year in a row in 2006, with one in four flights arriving late or not at all, according to data released yesterday by the Bureau of Transportation Statistics."**
>
> **" The airlines also mishandled a massive amount of luggage -- 4 million bags, or 6.7 for every 1,000 passengers, the industry's worst rate since 1990."**

--I know we can do better.

--On a similar note, I am concerned about airport maintenance and growth.

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--The FAA proposes a $1.8 billion cut to the Airport Improvement Program, which funds capital improvements at commercial airports. This program funds everything from runway and taxiway improvements to noise abatement projects.

--Noise abatement is critically important to the communities that surround Sky Harbor Airport…an airport which serves as a hub for Tempe based U.S. Airways. Sky Harbor has requested more than $10 million for noise

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abatement projects in FY-08, and a drastic cut to the Airport Improvement Program could put this funding at risk.

--I will be listening carefully as these hearings proceed to learn how the FAA's proposal addresses these concerns.

--Thank you, Mr. Chairman. I yield back the balance of my time.

OPENING STATEMENT OF
THE HONORABLE JAMES L. OBERSTAR
SUBCOMMITTEE ON AVIATION
THE ADMINISTRATION'S FEDERAL AVIATION ADMINISTRATION
REAUTHORIZATION PROPOSAL
MARCH 14, 2007

I want to thank Chairman Costello and Ranking Member Petri for calling today's hearing on *The Administration's Federal Aviation Administration Reauthorization Proposal.* I understand that this is the first in a series of hearings on the FAA reauthorization proposal, which was submitted on February 14, 2007. This hearing offers the FAA Administrator, Marion Blakey, an opportunity to come before this Committee and clearly lay out the Administration's aviation goals.

I cannot help but reflect on where we were four years ago when we started similar hearings to reauthorize the FAA. The United States was beginning to recover from September 11th, our major airlines were experiencing billions of dollars in losses and tens of thousands of layoffs, and we were concerned about the possibility of war with Iraq. Though we had a full list of extenuating circumstances, I still requested that we examine and fund airport infrastructure, air traffic control modernization, environmental innovation, and safety. Today, the United States has largely completed a difficult recovery from the events of September 11th and most of the major airlines are back on track. But the fundamental needs of aeronautics in the U.S. remain the

same; infrastructure, air traffic system modernization, environmental innovation, and safety.

While I welcome the opportunity to learn more about the FAA proposal, I would like to make some broad observations. First, the Administration cites the need to pay for Next Generation Air Transportation System (NextGen) as its rationale for aggressively promoting a radical new tax and financing structure for the FAA. However, data provided in the Administration's FY 2008 budget request indicates that the new proposal would hypothetically yield approximately $600 million less in FY 2008 than maintaining the current tax structure and over $900 million less from FY 2009 to FY 2012. This is partially because the FAA's estimated cost requirements for its major capital programs are actually lower than they were four years ago. For example, the FAA's estimated total requirement for facilities and equipment in this new three year proposal is roughly $380 million less than what is requested for the first three years of its last reauthorization proposal – *the Centennial of Flight Aviation Authorization Act.*

At the same time, I question the wisdom of giving FAA the authority to link its proposed new user fee rate directly to its costs, and more specifically, to costs incurred in a new air traffic control modernization effort. In the past, the FAA has incurred major cost overruns in its modernization program, and we must have robust

Congressional oversight as we move towards developing and implementing the NextGen system. I believe that linking a new user fee rate to the FAA's modernization program could reduce incentives for the program to be carried out efficiently. The pressure for efficiency will be much less if FAA can require airline passengers and system users to bear the burden of any cost overruns or delays in the modernization program. Instead, I believe that this Administration should have to come to Congress and seek additional funding if there are cost overruns or delays.

The Airport Improvement Program (AIP) program has been a major source of funding for airport planning and development for critical safety and capacity projects. The FAA estimates that during the next five years, there will be $41.2 billion in AIP-eligible infrastructure development (an annual average of $8.2 billion). I am especially disappointed that the Administration's proposal provides $1.5 billion less for AIP in its new three year proposal than what it requested for the first three years of the last reauthorization.

In addition, FAA proposes to increase the cap on passenger facility charges (PFCs) from $4.50 to $6.00. The PFC cap has not been raised since 2000; inflation and construction cost increases may have eroded the PFCs value. I support revising the PFC limit for capacity-enhancing airside projects but I have concerns with expanding eligibility for other PFC projects.

Moreover, the importance of well-funded U.S. research to reduce aircraft noise and emissions also cannot be overstated. We must act now to preserve vital research programs as we move forward towards new global aviation noise and emissions standards. Only in this way can we be sure that our commercial aviation industry continues to thrive, but not at the expense of surrounding communities. I look forward to learning more about the Administration's proposal for environmental programs.

Thank you again, Mr. Chairman, for holding this hearing. I look forward to hearing from our FAA witness.

STATEMENT OF

REP. THOMAS E. PETRI, Ranking Member

SUBCOMMITTEE ON AVIATION

HEARING ON

The President's

FAA Reauthorization Proposal

March 14, 2007, 10:00am, 2167 RHOB

Good morning. I am pleased to welcome Administrator Blakey to the Subcommittee as we kickoff a series of five hearings focusing on the Administration's proposal for the reauthorization of the FAA.

The proposal before us represents several years of hard work by the FAA, and is a good starting point for Congress to begin consideration of the reauthorization issues.

To date, there has been lively discussion within aviation circles on the FAA's proposal to shift from the current excise tax financing system to a hybrid system with fuel taxes for general aviation and a cost-based, user fee system for commercial aviation users. Both today's hearing and next week's financing hearing are great forums at which the interested stakeholders can, and should, discuss this important issue.

Regardless of which funding mechanism is agreed to in the end, modernization of our Air Traffic Control system will be of critical importance over the next ten to twenty years. With that in mind, we must focus on what needs to be done during this reauthorization period. In doing this, we must be mindful of the future, as well. Today's decisions on NextGen will shape tomorrow's National Airspace System (NAS). Without timely and substantive action toward modernization, our future National Airspace System will be clogged. If left unaddressed, the projected increased demand will result in delayed and cancelled flights. Under such a scenario, the US economy would suffer to the tune of $30 billion annually. We cannot allow that to happen.

With the expiration of both the financing and programmatic structures looming this September, we are in a unique position to consider reforming how the entire National Airspace System is operated. As ever, "safety" must be our watchword. I look forward to examining, in depth, all potential financing and programmatic reforms, including the Administration's proposal, as we consider the way forward.

I want to thank Administrator Blakey for appearing before us today to discuss the Administration's proposal. With that, I yield back the balance of my time.

Remarks of U.S. Rep. Nick J. Rahall, II
Aviation Subcommittee Hearing: FAA Reauthorization Proposal
T&I Committee
March 14, 2007

Mr. Chairman—

Thank you for calling today's hearing on the Federal Aviation Administration's reauthorization proposal. I also thank Administrator Blakey for testifying before this committee today. Your work is much appreciated, and I look forward to working with you in the future.

Administrator Blakey, the decisions we make on this FAA reauthorization, are going to effect us for decades to come. Many similar decisions faced us when we deregulated in the early 1980's, and that Congress, of whom many still serve on this panel, chose to preserve our rural communities access to air service.

Airports are an engine of economic growth in a rural region, they offer jobs, access, and mobility in some areas where driving is not feasible. I know, Madam Administrator, that hailing from Mississippi you have seen this first hand.

I can tell you that when the policy is formulated, we will again look towards preserving that critical link in our small and rural communities. There are, however, several areas which upon review of the reauthorization plan, are of great concern to me.

First, overall, the FAA is marketing this package with a very, "pie in the sky" view. FAA talks about wanting to modernize, but the plan offers less money for infrastructure and airports. FAA also talks stresses the increased traffic and congestion in the airways over the life of this reauthorization and that safety is the primary objective of the FAA, but the operations and maintenance account will be losing out financially in this proposal.

Madam Administrator, in addition to the financial aspect of this reauthorization, I am concerned with the undercurrent of discontent within our human resources employed by the FAA. The air traffic controllers and the systems specialists are all looking to the FAA to make sure their safety

and security are in mind, while they look after the safety and security of our fleet and passengers.

The working environment that has been created as a result of the imposed work order has not helped the comity of the working environment in which these individuals work. The increasing numbers of retirements and resignations are evidence of that, and have the potential to destabilize the system itself. I urge you to return to the negotiating table and work out these differences as soon as possible.

Mr. Chairman, it seems as though throughout DOT, and this FAA reauthorization proposal is much of the same, there has been a significant policy shift away from rural America and its needs and it is my hope that as Congress proceeds with reviewing the reauthorization proposal, that the needs of this large constituency are not lost to the chopping block. Thank you for your consistent leadership in this area.

STATEMENT OF MARION C. BLAKEY, ADMINISTRATOR, FEDERAL AVIATION ADMINISTRATION, BEFORE THE HOUSE TRANSPORTATION AND INFRASTRUCTURE COMMITTEE, SUBCOMMITTEE ON AVIATION, ON THE FAA'S REAUTHORIZATION PROPOSAL, THE "NEXT GENERATION AIR TRANSPORTATION SYSTEM FINANCING REFORM ACT OF 2007," ON MARCH 14, 2007.

Chairman Costello, Representative Petri, Members of the Subcommittee:

I am happy to appear before you today to provide an overview of the Administration's proposal to reform the funding structure for, and reauthorize the programs of the Federal Aviation Administration (FAA). Because we view this proposal as the foundation for the future, we entitled it the "*Next Generation Air Transportation System Financing Reform Act of 2007.*" I want to thank Chairman Oberstar, Mr. Mica, Chairman Costello, and Mr. Petri for introducing our proposal, H.R. 1356, by request, and I also want to thank the Committee for holding a series of early hearings on reauthorization. They will certainly provide us with an opportunity to fully explore the important issues facing aviation today and, hopefully, lead to the development of consensus solutions. The simultaneous expirations at the end of September of the funding authorization for the FAA's current programs as well as the ten-year term for existing taxes that fund the Airport and Airway Trust Fund (Trust Fund) present us all with a unique opportunity to make a better system possible. Moreover, ten years ago, the last funding debate resulted in a lapse of the taxes. At that time, the uncommitted balance of the Aviation Trust Fund was sufficient to sustain continued funding of the aviation accounts without disruption to the system. Today, the Trust Fund balance cannot support such a lapse, and thus such a lapse would have potentially significant consequences. We all understand the importance of this industry, just as we are all committed to its success. It is because of our shared values and goals for aviation that I am confident that hard work and dedication will result in a new and better system for funding the FAA by September 30th.

When I was here last month to testify on our fiscal 2008 budget, Secretary Peters had sent our proposal to Congress that day. Even though during that hearing we touched on some of the major elements of the bill, I am grateful for the opportunity to return and discuss

our proposal in greater depth. While our proposal has generated some spirited debate already, I think we can all agree that we share two fundamental goals for reauthorization: first, that we continue to keep our air transportation as safe as we possibly can, and, second, that we have the ability to grow the system to meet our nation's future air transportation needs. The Administration's proposal leads us towards these goals by supporting the transformation of our air transportation system, responding to a changing aviation industry, and creating a rational funding system that ties revenues to costs.

The Administration's proposal supports the transformation to the Next Generation Air Transportation System (NextGen). Without this transformation, the current system is simply incapable of accommodating future demand. As we look out into the future, we see a system that will need to grow to accommodate the demands of our stakeholders and the flying public. These issues will be front and center at our annual Aviation Forecast Conference, which begins tomorrow. Passenger demand has returned to pre-9/11 levels and we project that the system must be ready to serve over 1 billion passengers annually by 2015, and continuing growth through 2025. It will be difficult to meet this challenge under the current system, where the needs of NextGen must compete with other funding priorities in the appropriations process. The Administration's proposal meets this challenge by largely funding NextGen investments through user-supported offsetting collections.

The current financing mechanisms, both in terms of taxes and spending, are not tied to FAA's cost to deliver services, and therefore are not scalable to meet these growing demands. This can be illustrated by example. Consider two identical aircraft, flying the same route from Boston to Miami, one full of passengers, and the other only half–full. Although both planes impose the same air traffic control costs on the system, the full plane will contribute far more to the funding of the air traffic control system. As another example, consider an airline that is replacing a large aircraft flying between two cities, with two smaller aircraft flying the same number of people between those cities. This change in service will impose twice as much cost on the air traffic control system, but under the current system, there is no incentive for the airline to consider those additional

costs in its decision. Finally, the greatest flaw in the current system becomes apparent when one considers that while a corporate jet consumes the same air traffic control services as a commercial airline, because the corporate jet has no passengers, under the current financing system, it contributes far less to the funding of air traffic control services than ticketed passengers flying on the commercial airline. The following table highlights this issue for a number of illustrative flights from the Los Angeles area to the San Francisco area:

Operator Type	Aircraft Type	# of Passengers	Estimated Current Taxes
Airline	Boeing 777	203	$2,000
Airline	Boeing 757	138	$1,334
Airline	Airbus 319	86	$837
Airline	Bombardier CRJ-200	33	$331
Air Taxi	Learjet 35	5	$116
Corporate Jet	Citation II	N/A	$58
GA Piston	Bonanza 36	N/A	$7

Under the current tax structure, it is clear that taxes paid by different user categories do not generally reflect the costs those users impose on the system. Commercial airline passengers currently pay over 95 percent of the Trust Fund taxes, but our cost allocation shows that the aircraft carrying them account for approximately 73 percent of air traffic costs. In many cases, "high end" turbine (jet and turboprop) general aviation (GA) flights are consuming similar FAA and airspace resources as the commercial operators, but paying only a fraction of what commercial operators pay through the passenger taxes. For example, as the table above shows, a corporate jet flying from Los Angeles to San Francisco today pays only 17% of what a 50-seat regional jet pays, and less than 5% of what a Boeing 757 pays. In other words, commercial operators and everyday passengers are subsidizing use of the system by corporate jets. I do not believe this is equitable.

Because of the fundamental disconnect between the existing tax structure and the FAA's workload, we strongly believe that the FAA needs to move to a different, more rational funding mechanism. The Administration's proposal creates a transparent financing system where aviation users pay for FAA services through user fees and fuel taxes, so that all users pay their fair share of air traffic control services. Most commercial aviation

operators would pay for their fair share of the costs of air traffic control services through user fees, while general aviation users and some commercial users would pay for these services through a cost-calibrated fuel tax. This linkage between what users pay and what FAA invests in will be critical to facilitate our transition to the NextGen modernization the air traffic control system.

I want to be clear that the primary purpose of this proposal is not about collecting more money for the FAA, it is about creating a more rational, equitable, and stable system that provides appropriate incentives to airspace users to efficiently use increasingly congested airspace, to the FAA to control costs. However, by adopting new discretionary user fees and authorizing borrowing, the Administration's proposal does allow the FAA the flexibility to meet the financing challenges of NextGen and facilitates modernization of the aviation system on an assured and predictable basis.

The new system will facilitate more reliable, more predictable, and less congested air travel for the traveling public. The FAA will continue to have strong congressional and public oversight, and our proposal adds additional oversight through a newly created Air Transportation System Advisory Board to play a role in key agency financial decisions and provide strong incentives for the FAA to control costs and meet the demand for services efficiently. The financing proposal is the product of both significant consultation with the public, including our aviation stakeholders, as well as a detailed analysis of the current financing system and various alternatives. We have attempted to balance the diverse views that our stakeholders have expressed with the need for a stable, equitable, and cost-based funding structure. Our recommended solution builds on the work of numerous bi-partisan commissions from the past two decades, including the National Civil Aviation Review Commission that Congress created and that former Secretary Mineta chaired approximately ten years ago.

Let me describe in greater detail how our proposal would fund the different parts of the FAA.

Proposed Funding for the Air Traffic Organization (ATO)

The cost of ATO's services will primarily be funded by those operating in the system. The manner of contribution will vary depending on the type of operation. Turbine commercial flights would primarily pay user fees; general aviation and all piston-powered flights would primarily pay fuel taxes; and the General Fund would finance the costs of services provided to public users and other programs that are in the general public interest.

User fees would apply to turbine commercial flights, including those by U.S. and foreign airlines, passenger and freight carriers, domestic and international flights, charter operators, and regional airlines. They would cover all flights by jet aircraft that are considered commercial under the current tax code, including air taxis and flights operated under fractional ownership. Collecting user fees for air traffic services is an internationally accepted practice in widespread use around the world, and would be consistent with the recommendations of at least seven bi-partisan commissions that have studied this issue over the last two decades. These fees would be based on data derived from the agency's cost accounting and cost allocation systems—including the operations, maintenance, and overhead expenses for the services provided, the facilities and equipment used in such services, and the projected costs for the period during which the services are provided. Existing U.S. overflight fees would be integrated into these new user fees. While the proposal gives the FAA and its users latitude in how the fees would be structured, these fees would clearly tie FAA revenues much more closely to the actual cost of the services provided. We anticipate that approximately three-fourths of the Air Traffic Organization's budget would come from these user fees.

The fees would be dedicated to air traffic control and related services and would be subject to oversight through the annual budget and appropriations process and treated as discretionary offsetting collections for budget purposes. Congressional appropriators would receive credit for these collections and would make them available for expenditure through annual appropriations action. The user fee spending would be fully offset by the user fee collections. It would rise or fall based on FAA's costs and would not compete

with any other discretionary budget priorities (as spending Trust Fund revenues do today).

The general aviation (GA) community and piston commercial operations would contribute their allocated share of air traffic control costs primarily via a fuel tax. We have considered stakeholder feedback from this community and accept the argument that the efficiency and simplicity of the fuel tax mechanism merit its continued use as the primary mechanism for GA's contribution to FAA funding. We identified the costs associated with these users and then set the fuel tax rates to recover those costs. We anticipate that just over 10 percent of the ATO's budget would come from these taxes, which would continue to be deposited in the Trust Fund and be subject to appropriation. The bill proposes periodically recalibrating the portion of the GA fuel tax dedicated to funding ATO based on updates to FAA's cost allocation study.

In addition to the fuel tax, GA and piston commercial flights may be subject to a terminal user fee when they arrive or depart at one of a limited number of large hub airports. In general, these airports are the most congested terminal facilities in the aviation system, and all users at congested facilities contribute to congestion for other users. Given that large hub airports are in metropolitan areas that have alternative airports, which would not be subject to this fee, we believe it is appropriate to apply fees to all users of the most congested airports.

The costs associated with air traffic control service for military and other public users, as well as other functions and services deemed to be in the general public interest would be funded from the General Fund appropriation, as discussed below.

Proposed Funding for Aviation Safety

The funding proposal includes modest user fees to pay for the costs of 25 activities in the areas of certification and registration. These include issuance of certain certificates, appointment and training of designees, registration of aircraft and airmen, airmen medical certificates, and training provided to other aviation authorities. All of these activities are

specific services that FAA provides for individual businesses; other federal, state and local government agencies charge for similar services, as do many international aviation authorities. They are FAA products and services that have value to those who receive them, and that are initiated by customer action. In fact, FAA currently charges fees for many of these services; however, the current fees are set significantly below the cost of providing the service—and below the price of other comparable services. For example, the $5 it currently costs to register an airplane would not go very far toward registering a car in most states. The legislation specifies the amount to be charged for 12 specific services. Thirteen other activities are identified for which fees will be collected, but do not have the unit charge specified as FAA's cost accounting system is still being implemented with respect to regulation and certification activities. As with the ATO fees, the charges for these activities will be determined based on the available data derived from the agency's cost accounting and cost allocation systems and revenue from the fees would be treated as offsetting collections. Based on the historical cost of these activities, DOT anticipates that approximately 10 percent of FAA's Aviation Safety budget will come from user fees.

Regardless of the type of product or amount of fee determined for that product, FAA will always make fee decisions considering safety first. We are also mindful of the significant international leadership role of both the FAA and the U.S. industry, and the fact that benefits from many aviation safety functions (such as ongoing surveillance) are widely dispersed to the traveling and non-traveling public. No fee structure will compromise the FAA's statutory safety responsibilities or the U.S. aviation community's ability to remain the world's principal system innovator. As a result, we are proposing that the vast majority of FAA's aviation safety responsibilities remain funded from the General Fund.

General Fund Proposal

The Administration derived its General Fund proposal by evaluating specific activities to determine whether they are in the general public interest and have a compelling case for a General Fund appropriation. The dollar figures in the reauthorization proposal are based on the following activities and services:

- *Air traffic costs allocated to public users* (military, other government aircraft, and air ambulances), because providing air traffic control services to these flights as serving the public good;
- *Flight service stations*, because charging user fees for these services would encourage general aviation pilots to fly "outside the system," which would have a negative safety impact;
- *Low activity towers*, because they help provide safe access to the aviation system to numerous small communities and are a critical part of the national aviation infrastructure; the primary users of these terminals (piston aircraft) likely cannot bear the cost of funding them, even though many of these towers are contract towers, which are the FAA's most cost-efficient facilities;
- *Safety regulation and oversight* that are not recovered by user fees, because these regulatory functions benefit the general public by contributing to a safe and reliable air transportation system;
- *Commercial Space Transportation*, because, given the early and volatile state of the industry, it would be virtually impossible to develop a schedule of fees that would generate significant revenue without unduly burdening the industry and placing U.S. companies at a competitive disadvantage compared to heavily subsidized firms from other countries; and
- *The portion of Research, Engineering and Development* (RE&D), sponsored by FAA's Aviation Safety organization, related to aging aircraft and aircraft catastrophic failure prevention (approximately $17 million of the RE&D budget[1]), because this research supports FAA's "public good" regulatory functions.

Transition and Elimination of Other Aviation Excise Taxes

The Administration proposes that the changes to the aviation financing system take effect at the start of fiscal year 2009, in order to provide the FAA with sufficient time to establish user fees and implement a billing and collection system. Our proposal therefore

[1] The remainder of RE&D would be funded from the Airport and Airway Trust Fund, and is included in the universal fuel tax rate discussed below under "Proposed Funding for AIP, RE&D and EAS".

extends the current excise taxes for one year to ensure that the FAA has sufficient funding in FY 2008.

As of FY 2009, the existing domestic ticket tax (including the tax on mileage awards), domestic segment tax, cargo waybill tax, and Alaska/Hawaii departure tax would expire under our proposal. The proposed user fees, adjusted fuel taxes, and the adjusted international arrival and departure tax would replace these taxes. This represents a significant simplification of the aviation excise tax system.

FAA Governance

A review of air traffic service providers around the world shows that one of the common changes accompanying the introduction of user fees is adoption of a "user pays, user says" policy – according users a significant role in decisions relating to the setting of fees and the use of moneys collected.

Therefore, our proposal creates an Air Transportation System Advisory Board, comprised of user representatives and public interest members appointed by the Secretary, which would have a significant role in the decisions of the agency. Although the FAA Administrator and the Secretary retain ultimate responsibility for the safety and operation of the National Airspace System and thus have the final decision authority, the Board would provide advice and recommendations on the creation and adoption of user fees, and would propose modifications to them on a periodic basis. Under our proposal, if the Board does not approve the establishment or modification of a fee, the Administrator can only implement it after publishing a written determination in the Federal Register. This Board would also review and make recommendations with respect to major capital infrastructure decisions and modernization projects, the agency's strategic plan, and the development and adoption of ATO's operational performance metrics. Finally, the Board would review and provide advice on FAA's safety programs, budget, and cost accounting system. Of course, as the FAA is a government agency, Congress will always have the ultimate oversight authority.

The FAA Administrator and a representative from the Department of Defense would be Board members, along with members representing airports, air carriers, general aviation, business aviation, aviation manufacturing, and the public interest. The Management Advisory Council and Air Traffic Services Committee would be discontinued with the creation of this new Board.

Proposed Funding for AIP, RE&D and EAS

The Subcommittee has scheduled a separate hearing on the airport-related portion of reauthorization for later this month, at which time we will provide detailed testimony on those aspects of our proposal. For the moment, we would briefly note the funding aspects of our proposal. Airports are a key part of the system, and that includes small primary and general aviation airports that rely on AIP funding to help meet their capital needs. We have proposed changes to Federal funding programs that will stabilize and enhance these funding sources for airports. Our proposal ensures that smaller airports that cannot generate sufficient funding on their own can rely on their entitlement funds to complete strategic projects. These airports play an important role in the national aviation system.

We propose to continue financing the AIP program through taxes. The proposed taxes are administratively simple and build on existing collection mechanisms. Specifically, our bill would fund the AIP program via a set of simplified excise taxes, consisting of a flat, universal fuel tax for domestic commercial and all GA flights and an international passenger head tax for international commercial passenger flights. This universal fuel tax would be in addition to the proposed GA ATO fuel taxes for GA users and piston commercial users. Like the ATO taxes, these taxes would be deposited into the Airport and Airway Trust Fund and be subject to Congressional appropriation. The proposed taxes are expected to generate receipts sufficient to cover the proposed authorization levels for AIP, the Essential Air Service (EAS) program, and the Trust Fund's portion of RE&D. If the enacted authorization levels are different from the proposed levels, the tax rates proposed could be adjusted accordingly. The bill also proposes indexing both the AIP portion of the fuel tax and the international passenger tax to keep pace with inflation.

The universal fuel tax and international passenger tax would also be the funding sources for all of EAS and most of RE&D. As in the case of AIP, it is appropriate for users to fund most research and development because it ultimately benefits them, but it is challenging to allocate research costs to specific users. Similarly, EAS has a long history of being funded by users through overflight fees; however, it is not part of air traffic control costs, and similar to AIP, is largely a grant program to assist small communities that cannot support service on their own. Therefore, the Administration has included EAS and RE&D funding requirements in the proposed universal fuel tax and international passenger tax rates. However, AIP is the primary driver of the tax rates.

NextGen – Funding of Major Capital Projects

As I stated at the outset, one of the drivers of our proposed changes to how the FAA is funded is to the challenge of funding NextGen. Implementing NextGen will be a unique transition from the technology of 50 years ago to the technologies of tomorrow and it will require a substantial investment of capital. Financing this investment is something I have very strong views about. Business as usual is not an option. As noted above, the new discretionary user fees we propose will enable us to fund several important NextGen investments. However, to avoid spikes in the user fee levels our proposal would also authorize us to borrow through the Secretary of the Treasury beginning in FY 2013, with debt service recovered from users of the system by FY 2017. This authority would contribute to a more business like funding structure, leverage limited resources, and further accelerate the transition to NextGen by better aligning payment for a project with the benefits that project generates and providing greater flexibility to take advantage of capital investment opportunities as technology changes.

Examples of FAA projects that may be appropriate for debt financing include safety-critical and mission-essential software and systems that controllers and traffic flow managers will use to support trajectory based operations in the NextGen system, enhancements to the global positioning system (GPS) technology related to civil aviation,

surveillance technology for homeland security and defense, and potential facility consolidation. This authority would be targeted, as noted, for a limited time period (FY 2013 to FY2017) and would be capped at $5 billion. We think this innovative authority will give us what we need when we need it.

Congestion Charges at Certain Capacity-Constrained Airports

While our bill will provide us the tools to be prepared for the future, we must also manage our current system safely and efficiently. To that end, I wish to briefly note two provisions in our bill that would authorize the use of market-based mechanisms (e.g., auctions or congestion pricing) to control congestion and delay at capacity-constrained airports. While FAA's policy is to expand capacity to meet demand, physical expansion is not feasible at certain airports, most notably at New York's LaGuardia Airport. Therefore, specifically with regard to LaGuardia, our bill would give the Secretary and the FAA statutory authority to authorize the Port Authority of New York and New Jersey (Port Authority) to use market-based mechanisms at the airport. The language generally complements rulemaking FAA is currently undertaking with respect to LaGuardia to replace the expired High Density Rule (HDR). If the Port Authority implements a market-based mechanism and such mechanism produces annual revenue in excess of associated administrative costs, the Port Authority would have to deposit the excess revenue in an escrow account. It could then use those funds on otherwise eligible airport related projects or any other project that the Secretary finds is in the public interest. If the Port Authority fails to implement a market-based mechanism at LaGuardia within one year of the Secretary's determination, the Secretary would have authority to implement such a mechanism at the airport.

Similarly, the second provision establishes a pilot program allowing for broader evaluation of market-based mechanisms. The Secretary could approve the participation of up to 15 airports in the program. For airports experiencing congestion that results in delays affecting the regional airspace, participating airports could implement a market-based mechanism, for domestic flights, to the extent necessary to achieve a target reduction in congestion and operating delays. The amount of the fee would be set by the

airport operator. Any surplus revenue that results would be placed in an escrow account to be used only for airport related projects or any other project the Secretary finds is in the public interest with priority given to projects at the airport where the fees were collected. The program would also provide for participation of airports experiencing congestion that results in more widespread delays.

Environmental Stewardship and Streamlining

Part of our NextGen vision is to provide environmental protection that allows for sustained growth in our aviation system. Our proposal includes provisions to enhance the FAA's ability to work cooperatively with our partners to preserve the environment by developing technologies, operational procedures, and best practices to minimize the impact of aviation. Our goal is an aviation future that is quieter, cleaner, and more energy efficient. Key environmental stewardship provisions include:

- A research consortium for the development, maturing, and certification of lower energy, emissions, and noise engine and airframe technology over the next ten years;
- A permanent Airport Cooperative Research Program for research and development specifically related to the airport environment; and
- An environmental mitigation demonstration pilot program to demonstrate the noise, air quality, or water quality benefits of promising research concepts at airports.

We have also proposed environmental streamlining provisions that are intended to improve the administration of current programs without affecting environmental quality in such areas as the state block grant program and the air tour management program.

Realignment and Consolidation of Aviation Facilities and Services

As we plan to transform our air transportation system, we must also transform ourselves as an agency—a provider of services to the aviation community. Our bill includes a proposal that would create a specific process for the comprehensive study and analysis of how we could realign and consolidate our services and facilities to help us reduce capital,

operating, maintenance, and administrative costs on an agency-wide basis with no adverse effect on safety. In addition to our current authority, this provision would provide a critical tool that the FAA could use to operate in a more business-like fashion. Any realignments or consolidations recommended by the Administrator under to this section would only be implemented after a thorough review by a newly created Commission of experts, and the opportunity for the public, and ultimately, Congress, to examine the recommendations.

Extension of Aviation Insurance Program

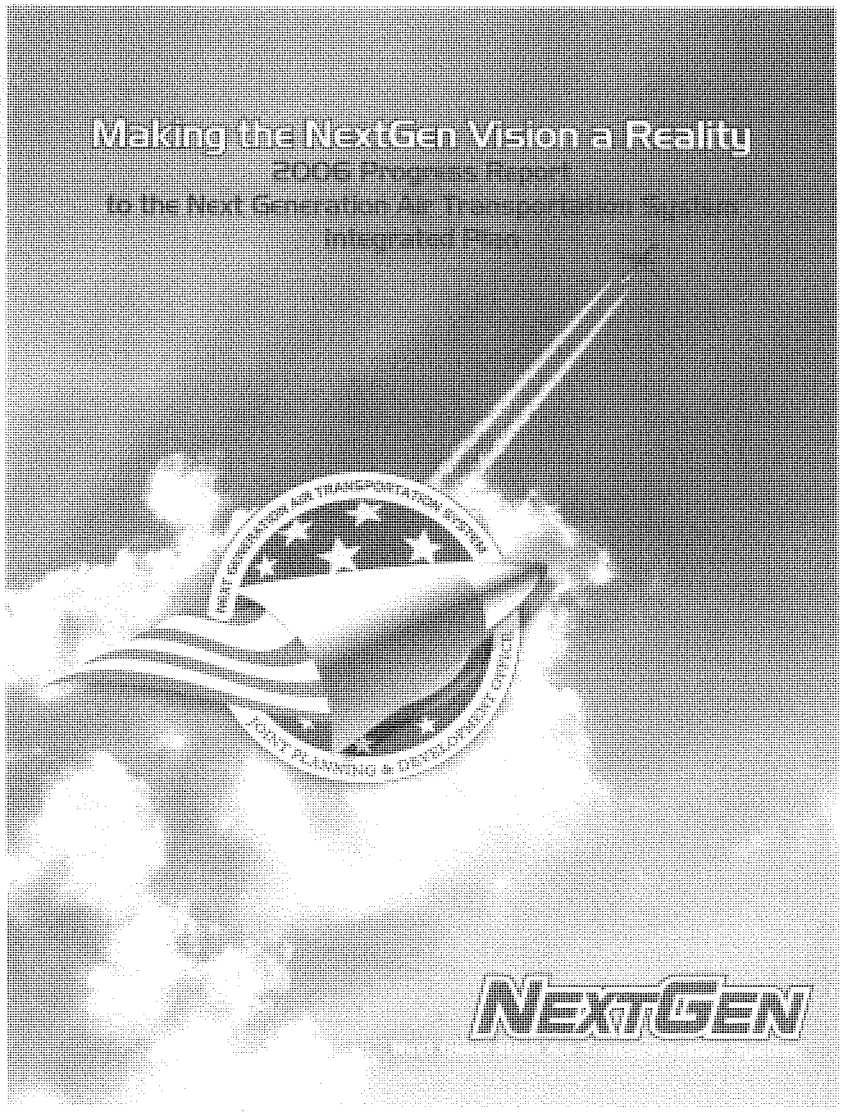
Finally, I wish to mention our proposal for the FAA's aviation insurance program. This is a program that has been very important in recent years to the continued operations of the industry, but which, we feel needs some adjustments. Our bill would extend the Secretary's overall authority to provide aviation insurance, now set to expire on March 30, 2008, to March 30, 2013. It also removes current requirements for the program to provide first dollar coverage, thus permitting deductibles and the opportunity for commercial coverage of those deductibles. Current law allows the Secretary to limit an airline's third-party liability to $100 million and also prohibits punitive damages against an airline, aircraft or engine manufacturer, as well as the Government for any cause resulting from a terrorist event. This authority to limit liability is also extended by this section.

Conclusion

Mr. Chairman, I want to conclude by emphasizing that I know we all share the same basic goals for an industry that we all care about deeply. We want a safe system that can meet future demand - one that is cost effective and efficient and that meet the needs of the flying public. We all appreciate the importance of this industry, not only to those of us lucky enough to be a part of it, but to every American. While I anticipate and look forward to a frank and wide-ranging discussion of this proposal and others that I am sure will be put on the table, I cannot overstate my personal commitment to the need for a funding system that better ties FAA's costs to its revenues and its revenues to its

spending. Changing how we fund and operate our system will be hard, but maintaining the *status quo* will not get us what we all want: a more efficient, modern aviation system.

This concludes my prepared statement. I will be happy to answer your questions at this time.


Making the NextGen Vision a Reality
2006 Progress Report
to the Next Generation Air Transportation System
Integrated Plan
NextGen

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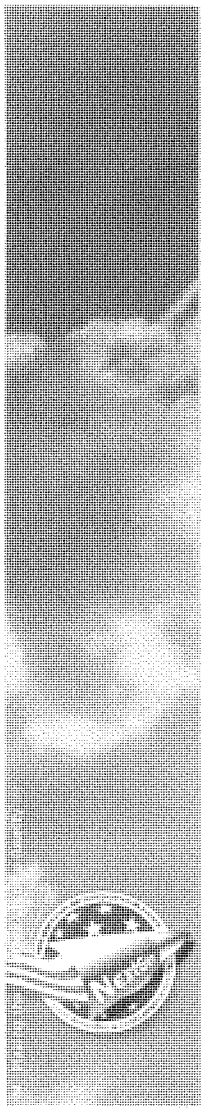


Executive Summary

Our work on the Next Generation Air Transportation System (NextGen), continues to be an exciting and challenging undertaking. NextGen is unprecedented in scope and duration. It is visionary in character, but at the same time focuses on a very real and current concern, namely the future of our nation's air transportation system.

We know that demand for aviation services is growing and that the time is not far off when it will be difficult to successfully manage air traffic demand with the current system. That is why Congress, through Vision 100 in 2003, endorsed the concept of the Next Generation Air Transportation System (NextGen) and directed the formation of the Joint Planning and Development Office (JPDO) to facilitate this process. NextGen is about a long-term transformation of our nation's air transportation system. This is a transformation based on meaningful integration and collaboration between all NextGen partners, including the private sector. It focuses on leveraging new technologies, such as satellite-based navigation, surveillance, and networking. We are setting the stage for the development of an air transportation system that will be safe, scalable to growing demand, and responsive to evolving business models.

It is a new approach to the way we view the future of the system, and it demands a new level of collaboration, planning, and vision.

The most important products in development for NextGen are the definitional tools and documents that explain what the system is, what its capabilities are, and how they all fit together. Having these kinds of planning tools is essential for an initiative of this of scope. With that in mind, the JPDO is working with all of its government partners and the private sector in developing the Concept of Operations and the Enterprise Architecture.

The Concept of Operations explains how the system will work and what it will look like. This is important in developing the structure, policy, procedures, and the changes in the function that will be needed to make the system a reality. The Enterprise Architecture is much like a set of blueprints. It defines the key capabilities of NextGen, how they fit together, the timing of their implementation, and how they affect the various members of the aviation community. The Enterprise Architecture will serve as a guide in developing our future needs for research and capital investment. An important part of this process is mapping how programmatic changes and investments track to Operational Improvements. In other

words, what progress are we making? We have developed an Operational Improvement Roadmap to explain how the various improvements fit together and how they link to the long term NextGen vision.

NextGen requires an intense and deliberate process of planning, execution, and integration. Using the Concept of Operations and the Enterprise Architecture as a guide, we are working closely with the Office of Management and Budget (OMB) and the NextGen government partners. This includes coordinating agency and departmental research programs, capital budgets, and our long-term planning. Accomplishing this objective, particularly for a plan with such a broad scope, is a challenge, but successful implementation is essential to the economic viability of aviation and our national security.

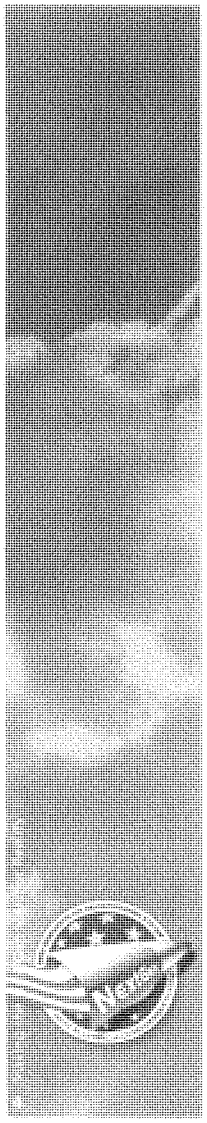
NextGen implementation has already begun. Right now, two critical foundational technologies are being implemented. Automatic Dependent Surveillance Broadcast (ADS-B) is an essential element in developing our satellite-based surveillance capabilities. ADS-B is different from traditional ground-based surveillance and control systems. With ADS-B the controller, the pilot, and other aircraft see the same information at the same time. Another critical initiative is System Wide Information Management (SWIM). This networking-based initiative is an essential part of developing NextGen's Network-Enabled Operations (NEO). In an Internet-like fashion it will link information of all kinds (position, weather, restricted airspace notices, etc.) to all relevant users in the system. Both of these programs have been funded by the FAA.

The FAA plays an essential role in the development and fielding of NextGen. To make this implementation possible, and to ensure that shorter-term changes to the National Airspace System are made in a timely and coordinated fashion, the agency has established the Operational Evolution Partnership (OEP). The OEP has developed, and is implementing, an evolving partnership plan to ensure continuity between what is and what is to come.

Furthermore, in the coming year, the JPDO and its partners will sponsor a series of operational demonstrations. These demonstrations will allow us to analyze the performance of NextGen capabilities in a real world environment. This will include tests of oceanic trajectory-based operations, performance-based services, required navigation performance in high density environments, and advanced networking capabilities in an air traffic environment.

These are the first steps of implementation. By making these investments, we set the stage for realizing benefits in the near-term, through enhanced system capacity and efficiency.

NextGen is an exciting and challenging initiative. It requires a new level of commitment and vision on the part of all our partners to develop the aviation system of the future and to continue to make our air transportation system the engine of economic growth it has been for the past half century.



Introduction

When the U.S. Congress chartered the development and launch of a Next Generation Air Transportation System[1], it did so in recognition of what has been a substantial increase in aviation activity. The numbers now show that during peak periods of operation as many as 5,000 general aviation, business, and commercial airplanes will be in the air. Currently, the system handles 750 million enplanements each year. We expect this number to reach one billion by 2015.

Forecasts indicate a significant increase in demand, ranging from a factor of two to three by 2025. The system is already straining in some areas, and the current system design will not provide the relief required. Unless new technology, development of key infrastructure, and improved procedures are put into place now, particularly given that system capacity will reach its maximum by 2015, the ability of aviation to continue to play its traditionally dynamic role in our economy will be substantially diminished.

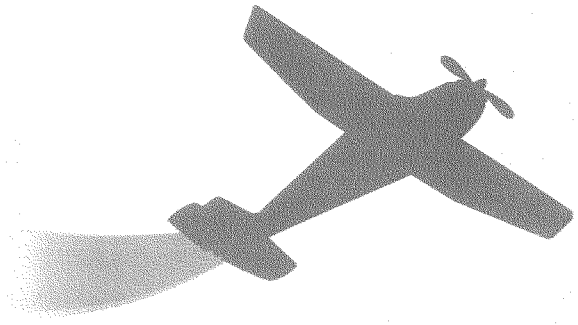
The FAA previously tried to modernize the existing system. **Next-Gen does not modernize the existing system – it completely transforms it.** And it does so with cooperation across government and industry. Future demand on our current capabilities will require a completely new system.

The JPDO brings together the resources and momentum of the Departments of Transportation, Homeland Security, Defense, and Commerce, as well as NASA, the FAA, and the White House Office of Science and Technology Policy. Working in tandem with aviation groups, airport sponsors, state aviation organizations, manufacturers and the aerospace industry, the JPDO formulates a single vision that will effectively address America's needs for safety, capacity, and security in aviation.

[1] VISION 100 – Century of Aviation Reauthorization Act (P.L. 108-176).

As explained in the recent National Aeronautics Research and Development Policy, "Meeting projected demand for increased passenger travel and cargo shipments over the next 25 to 50 years will require considerable increases in the capacity of the air transportation system. . . The Federal Government, through the JPDO and in accordance with Public Law 108-176, has defined a vision for the Next Generation Air Transportation System (NGATS) that will guide system-wide transformation to meet these needs."[2]

NextGen is a blueprint for aviation; a system that uses modern technology and state-of-the-art procedures to handle increases in the volume of air traffic. In an industry that currently generates 5.4 percent of America's GDP, and over 9 percent when this is expanded to include aviation related industries, as well as $640 billion in revenues and 11 million jobs, it is a blueprint that can ill afford to miss the mark. This project is already well under way. What follows is a report about where it stands.



[2] "National Aeronautics Research and Development Policy," Executive Office of the President, National Science and Technology Council, Dec, 2006.

The Joint Planning and Development Office: *From Planning to Implementation*

The development of NextGen continues to be an exciting challenge. It covers an unusually long period of time, involves multiple government agencies, and by its very nature, requires a strong alliance with the private sector. This means that if the JPDO is to be successful it must have sound and collaborative relationships with its government and private sector partners.

In 2006, we consolidated our technical and business planning activities to improve consideration of constraints, alternatives, and trade-offs. **Our emphasis in this work is to move from the planning phases of NextGen into implementation.** This is a long-term and highly integrated process, one that involves a close working relationship between the JPDO and its Executive Branch partners. These are the Departments of Transportation, Homeland Security, Defense, and Commerce, as well as NASA, the FAA, and the White House Office of Science and Technology Policy. Working in close collaboration with the JPDO, they will take the lead in implementing NextGen's initiatives and programs.

NextGen Plan — Key Documents

The following figure identifies the documents that comprise the NextGen plan and defines their purpose.

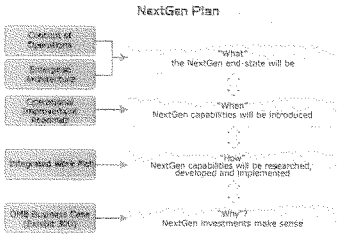


Figure 1 - NextGen Documents

Concept of Operations and Enterprise Architecture — *What is the NextGen Vision?*

During 2006, the JPDO working with its stakeholders, developed a draft of the Enterprise Architecture. A "curb-to-curb" version will be published mid-2007. As the consolidated "picture" of the future, the Architecture defines the key capabilities of NextGen, how they fit together, the timing of

their implementation, and how they impact the various members of the aviation community. It comprehensively defines the four core principles and eight key capabilities of the 2025 NextGen as described in the 2005 Progress Report.

Information concerning the NextGen Concept of Operations can be found at: *http://www.jpdo.aero/2006-progress-report/concept.html*

The first draft of the Concept of Operations was another major milestone in 2006. It describes how the future system will work operationally, including the roles of humans and technology. Considering the scope of NextGen and the time period it covers, the development of an agreed upon Concept of Operations and Enterprise Architecture represents a substantial step forward. It is also a testament to how both the private sector and the government can collaborate, cooperate, and coordinate in producing a plan to transform the airspace system.

Operational Improvement Roadmap — *When NextGen will be introduced*

Information concerning the NextGen Enterprise Architecture can be found at: *http://www.jpdo.aero/2006-progress-report/enterprise-architecture.html*

In parallel with the Concept of Operations and Enterprise Architecture, we have also built a roadmap for achieving the operational improvements that are a part of NextGen. In other words, we have started showing how and when different pieces of the system will fall into place. The Roadmap highlights a transition to the end state and underscores the substantial benefits along the way. The first version of the Roadmap was completed in the spring of 2006 and will be updated on a regular basis.

Integrated Work Plan — *How capabilities will be developed*

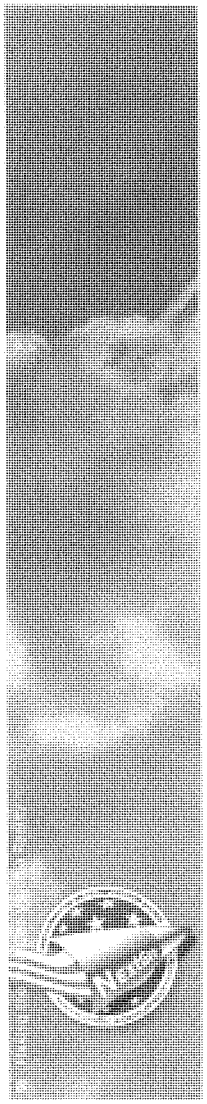
We are also drafting an Integrated Work Plan that includes the many activities required to achieve the operational improvements in the Roadmap. The Integrated Work Plan provides a central planning capability for all our Integrated Product Teams. Like the Roadmap itself, the Plan will be refined and synchronized against the Enterprise Architecture. The Integrated Work Plan will provide critical information for FY09 budget and program planning.

OMB Business Case (Exhibit 300)

To support the FY09 budget process, JPDO will be creating an Exhibit 300, or Business Case, for NextGen. We anticipate this will be the vehicle for officially capturing the costs, benefits, and risks of programs supporting NextGen.

Agency Budget Guidance

This year, for the first time, and to support the FY08 budget process, we issued comprehensive budget guidance to partner agencies. The guidance laid out both research and implementation activities critical to NextGen. We then worked with partner agencies to incorporate many of these activities into budget requests.



NextGen — *What will it cost?*

The objective of NextGen is to increase the capacity, safety, and efficiency of the air transportation system. To meet the anticipated growth and complexity of the future operating environment, the JPDO is working with its partner agencies to ensure investment in key technologies and initiatives. While increasing future capacity and safety, these initiatives should also lead to long-term operational savings.

The First Five Years

Over the next five years, we estimate that FAA's NextGen investment portfolio, key investments that will enable the transition to NextGen, will require $4.6 billion. That is $4.3 billion in the Air Traffic Organization Capital appropriation and $300 million in Research, Engineering, and Development.

Of the $4.3 billion, an estimated $1.3 billion would be directed to ongoing programs that directly support NextGen. An estimated $3 billion is for efforts that will be rolled out over the next five years.

We are working to refine these estimates, particularly with our users, as we implement new cost-based financing mechanisms. These are presented in the FAA's reauthorization proposal. We believe that the magnitude of the estimated NextGen investments require a robust dialogue about system financing. The goal should be a financing structure that adequately supports the transformation to NextGen.

Other JPDO Partner Agencies

The JPDO is also developing preliminary estimates of the future requirements of the other contributing agencies to NextGen. In FY08, they are investing a total of about $300 million in NextGen, primarily in research and development.

Longer-Term Costs

Based on the current five year picture, we can anticipate major FAA investment areas for the period from FY13 through FY17. Total federal requirements for the first ten years (FY08 through FY17) range from $8 billion to $10 billion. Estimates for the end state, or through 2025, range from $15 billion to $22 billion.

Outside Estimates

MITRE has developed a preliminary estimate for the cost of equipping aircraft with NextGen avionics. It concludes that a wide range of costs are possible, depending on the bundling of avionics and the alignment of equipage schedules. The most probable range of total avionics costs to system users is $14 billion to $20 billion. This range reflects uncertainty about equipage costs for individual aircraft, the number of very light jets that will operate in high-performance airspace, and the amount of out-of-service time required for installation.

Getting Industry Input

In order to set the groundwork for both our cost and benefit development activities, we hosted three investment analysis workshops this year. Each workshop focused on certain core stakeholder groups. There were cost/benefit workshops for air carriers, general aviation, and airports. Each of these created a forum for considering NextGen's operational benefits to industry and the most cost-effective means of achieving them.

For example, since one of the most important inputs for our cost/benefit estimates is equipage, the workshops provided critical industry input. During our air carrier workshop, we gained insights into the kinds of incentives, as well as the types of equipage schedules, that would encourage air carriers to participate. Similarly, the general aviation and airports workshops provided information on cost drivers which we will consider in refining NextGen implementation plans. Most importantly, the workshops opened a dialogue that will be invaluable as we analyze long-term plans.

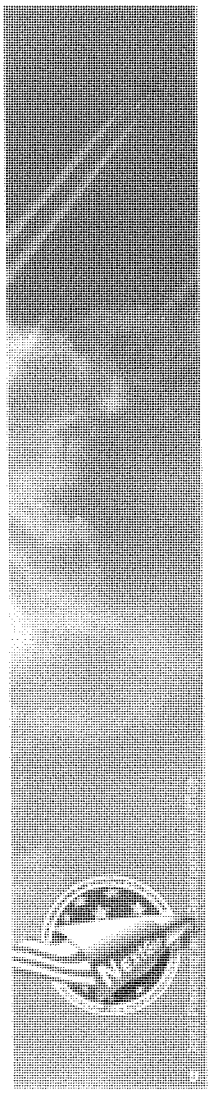
Comparison with Work in Europe

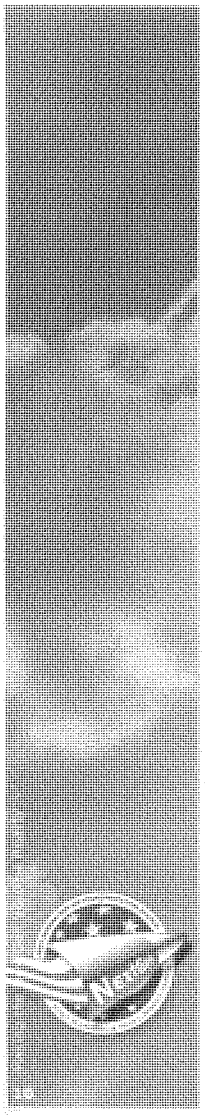
Recently our European counterparts released a preliminary cost estimate for the Single European Sky Air Traffic Management Research (SESAR) initiative. SESAR is a system that, while smaller in scope and size, has similar air traffic management goals to those of NextGen. They consider different system scenarios and, accordingly, a range of total costs from $25 billion to $37 billion (U.S.) through 2020. They further estimate that 60 percent of those costs will be associated with avionics and 40 percent with ground infrastructure.

SESAR, like NextGen, has a lot of work remaining to refine assumptions and better define the system. Further, it is important to note that European aviation does not share the same characteristics as U.S. aviation. There is, for example, a much larger general aviation presence in the U.S. than in Europe. And while SESAR focuses on air traffic management, NextGen takes what is called a "curb-to-curb" approach, including not only air traffic control, but also airports, airport operations, security, and passenger management. Nevertheless, in making this comparison, it is helpful to find that our aggregate estimates are generally comparable.

Future Cost Estimating Work

The JPDO sees its work in estimating costs as an ongoing process. As we work with the industry, and further refine our estimates, we will gain additional insight into the business, management, and technical issues and alternatives that will go into the long-term process of implementing the NextGen process. Throughout this effort, our cost estimates will continue to evolve.





Evolving Nature of the Industry

The estimates assume a world similar to today's in which the FAA is the primary provider of air traffic services and infrastructure. While that assumption is likely to remain valid for the near-term, we anticipate that as we develop our estimates and extend them into the future, we will encourage other alternatives. By seeking appropriate opportunities to foster competition and achieve an optimal mix of public and private participation, we anticipate that benefits can be maximized and some costs can be reduced.

Making Ideas Real: *Research, Demonstrations, and Risk Reduction*

In 2006, the JPDO presented research needs for the coming years and defined the first set of demonstrations and infrastructure development aimed at reducing risk and achieving near-term benefits. This first set of demonstrations exploits existing infrastructure, makes use of established working relationships among partner agencies, and will support mid-term NextGen objectives.

Research Focus — *Developing Critical Capabilities*

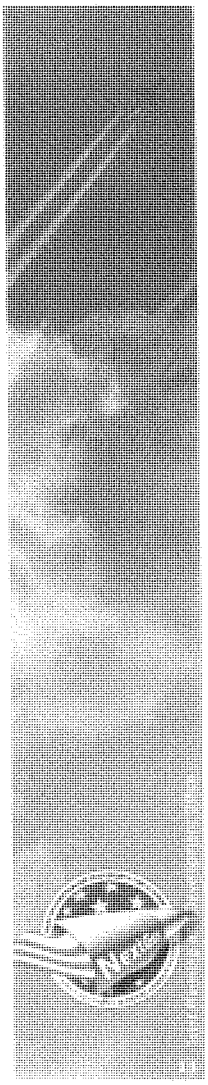
Integrated research planning is an essential element in the development of NextGen. Research conducted by all of the JPDO partner agencies and our private sector stakeholders leads to the development and fielding of critical capabilities. That is why the integration of research needs into our planning process is critical. The JPDO is building a research and development plan that will document NextGen research needs and the organizations that will perform the work. The plan will be delivered to OMB in August 2007 and help inform the FY09 process.

Demonstrations and Infrastructure Development — *Proving Technologies and Processes*

Demonstrations offer a unique opportunity to test the new concepts and capabilities that will go into making the NextGen vision a reality, while at the same time providing the opportunity to learn critical lessons about the functionality of essential technologies and processes. This not only makes these concepts "real," it also helps in further assessing our infrastructure and equipage requirements. This is a critical input into our resource guidance and planning. Some of the demonstrations and infrastructure development planned for the next eighteen months include:

Oceanic Trajectory-Based Operations:

Aircraft flying over oceanic airspace currently use designated routes. Sometimes these are not the most efficient in terms of time and fuel consumption. Trajectory-based flight uses plans tailored before and



Required Navigation Performance (RNP)

RNP is a set of standards that measures performance accuracy of an aircraft in a defined airspace, approach, route, etc. To fly an RNP route, the aircraft must meet the associated performance specification. In practice, due to the increased navigational precision of aircraft performance flying under RNP, air traffic control can reduce spacing without compromising safety for that population center.

Trajectory-Based Operations

The NextGen will use Trajectory-Based Operations. These are time-based flight paths from beginning-to-end, including ground segments. These will be the basis for planning and executing system operations. The trajectory-based design must both improve system efficiency and meet security, safety, and environmental compatibility goals.

during the flight to avoid congestion and take advantage of direct routes. This demonstration will create a proof-of-concept and working prototypes for an operational environment with flight profile predictability on long-duration international flights, where fuel burn is a prime concern. It will test means for implementing flexible flight plan management in actual operations. Trajectory-based oceanic operations will lead to more efficient use of airspace, more precise spacing, and reduced fuel usage.

High Density Airports Time-Based RNP:

Aircraft operations in a super density environment are one of the key NextGen capabilities. This demonstration seeks to fully utilize airspace in high density areas, resulting in a set of requirements and procedures for initial stages of super density operations. This demonstration focuses on accelerating the deployment of this capability by emphasizing procedures that reduce minimum separation distances in order to provide for the most efficient use of the runways and airspace.

Infrastructure Engineering for Trajectory-Based Operations:

To make Trajectory-Based Operations a reality requires more information exchange between users of the air traffic system. This engineering work will test the ability of various system users to obtain and apply critical aircraft information, such as position, direction, speed, and intent, along time-based paths in controlled airspace. This fourth aspect, the time-based segment of flight planning, makes this capability important in anticipating and avoiding potential conflicts between aircraft.

Initial Performance-Based Services Variable Separation:

NextGen's performance-based concept calls for aircraft separation standards to vary according to aircraft capability. This engineering analysis will lead to a set of requirements and algorithms necessary to implement these standards.

The Future Takes Shape: *Implementing Tomorrow's Capabilities Today*

Building the Foundation for NextGen — *Transformational Programs and Contributors*

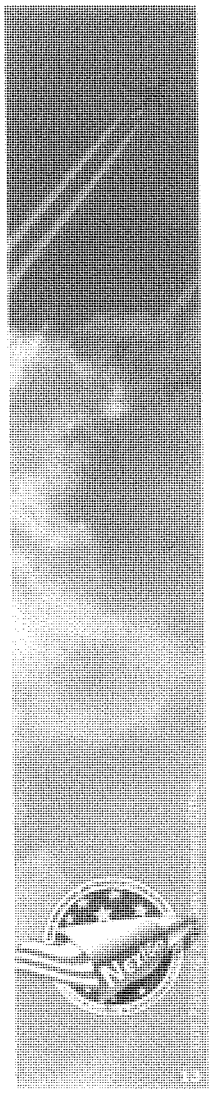
NextGen is about the long-term future of aviation. It deals with capabilities that will substantially expand and enhance our nation's air transportation system. While much of the work conducted by the JPDO focuses on defining the character of this vision, how it will work, and how the research and future investments need to be planned, it is also noteworthy that a host of foundational programs necessary to make NextGen a reality are already in development, and several are nearing deployment.

Many of these systems, while forming the foundation for NextGen, will also provide immediate benefits to the National Airspace System (NAS).

These programs and initiatives are contained in the FAA's FY08 budget and are categorized in two different segments. The first are the transformational programs, essentially the foundational infrastructure of NextGen, and the second are the NextGen contributors. These contributors are supporting the essential capabilities of NextGen. In addition to the transformation and contributing programs, building the foundation of NextGen requires addressing a number of top-level policy issues in the near-term, and a continuing focus on global harmonization.

Transformational Programs — *ADS-B and SWIM*

The transformational programs supported in the FY08 budget focus on the foundational technologies behind NextGen: namely, the development of network-enabled operations and satellite-based surveillance. Two of these programs, the Automatic Dependent Surveillance-Broadcast (ADS-B), and System Wide Information Management (SWIM) were defined in the 2005 Progress Report as "jump start" proposals.



In light of this recommendation and building on the successes of ADS-B in Alaska (Capstone) and in the Ohio Valley, the FAA in FY07 funded a national ADS-B and SWIM initiative.

The success in getting these programs under development is considered a major step forward for the JPDO and NextGen.

Automatic Dependent Surveillance-Broadcast (ADS-B)

ADS-B is a technology that will be the backbone of a future system that will revolutionize air navigation and surveillance. In fact, some companies, such as United Parcel Service of America, Inc. (UPS), are already using ADS-B in their daily operations and are realizing savings in jet fuel and significantly reducing noise and emissions.

ADS-B uses GPS satellites and ground-based transmitters to allow aircraft to broadcast their positions with greater frequency and accuracy than the current land-based radar systems at a reduced infrastructure cost. With ADS-B, pilots will see what the air traffic controller sees.

Supporting SWIM - the NEO Demonstration

Network-Enabled Operations are fundamental to the operations of NextGen. It is the ability to link together information from a wide range of sources, security, air traffic, weather, and defense. It is one of Washington's biggest challenges. In 2005, there was a step forward. A demonstration, focused on a mock security threat, proved that we could connect several legacy systems together from different agencies to create a shared user view of the air traffic environment. In 2007, we are going to take this a step further, adding security and disaster recovery scenarios.

System Wide Information Management (SWIM)

Providing an initial Network-Enabled Operations (NEO) capability to all the users of the air transportation system is a high priority for the JPDO and the NextGen partner agencies. It is fundamental to the success of NextGen and for improving safety, security, and efficiency. In a network centric system, the right information will get to the right person at the right time. SWIM is the program that will provide the framework to make this happen.

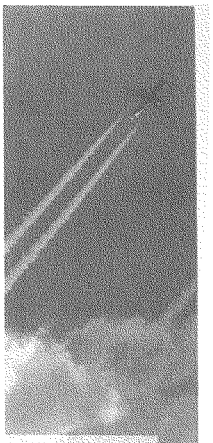
This means that the FAA, Department of Homeland Security and the Department of Defense get the entire picture, such as the aircraft, position, and flight-plan. Information will be available in real-time in a secure environment to decision makers in all conditions. This would include normal operational conditions as well as in a system-wide crisis.

Other Transformational Programs

Other work that is directly related to establishing this foundation of NextGen includes Data Communications, Network-Enabled Weather, and the NAS Voice Switch. These programs, just like ADS-B and SWIM, provide both near-term benefits to the NAS as well as laying the foundational capabilities in communications, network development, and computing that are necessary to support NextGen.

JPDO is working through its partner agencies to implement a new approach to the role of weather information in the management of aircraft operations. Key to this undertaking is emphasizing better decision making when dealing with adverse weather. This philosophy represents a new dynamic in the application of weather information

in the national airspace and is an improvement that has the potential to substantially increase the efficiency and overall capacity of the system. This vision of Network-Enabled Weather relies on a common weather database as well as forecasts and predictive tools available to all users in the system to facilitate common situational awareness. The end result will be an enhanced ability to manage air traffic in adverse weather.



NextGen Contributors — *Supporting Essential Capabilities*

There is a wide range of other investments in the NAS that offer critical supporting technologies and capabilities that are needed in support of the initiative. These include the En Route Automation Modernization (ERAM), Advanced Technologies and Ocean Procedures (ATOP), the FAA Telecommunications Infrastructure (FTI), and Wide Area Augmentation System (WAAS). Each of these, by developing or contributing to some aspect of the NextGen initiative, is an essential component to our future system-wide design.

Industry, through individual applications of new technologies in operational environments, such as the use by UPS in Louisville, Kentucky of ADS-B technology, or with research into specific technology concerns, such as the study being conducted by the NextGen Institute on backup systems to GPS-based surveillance capabilities, is a critical player, whose efforts are making a direct contribution to building the NextGen foundation.

NextGen Institute: Industry Contribution and Relationship

Industry is a partner in the development of NextGen. Working through the NextGen Institute, representatives from the private sector have played an active role in building the JPDO's products. This year alone the Institute added 48 new members, bringing the total number of participating private sector organizations to 226. The Institute hosted the NextGen Cost/Benefit Workshops. Also in 2006, in a project for the JPDO, the Institute was asked to develop a set of potential "backup" area navigation solutions for NextGen.

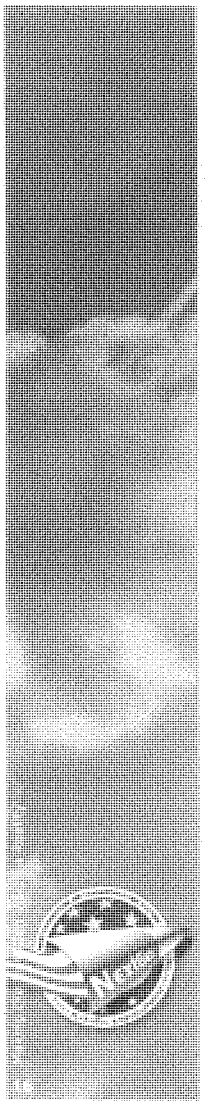
Shaping Future Policy — *Ensuring NextGen Progress*

In addition to research and investment in new technologies and capabilities, NextGen will also require new policy and new business models.

The Enterprise Architecture and the Concept of Operations in laying out the developmental sequences for key capabilities also provide a guide to the essential policy decisions that need to be made as NextGen is implemented. During the coming year, the JPDO will, through its policy research agenda, and a series of policy analyses, discussions, and forums, be preparing options and recommendations for consideration by the JPDO's Senior Policy Council.

In 2006, based on early work defining NextGen, the JPDO identified the near-term, top-level policy issues that must be addressed to ensure NextGen progress and the initiative's ultimate success. These non-prioritized issues and some prospective questions include:

1. **Safety Management System (SMS)** – SMS is a proactive data-driven approach for improving system safety. It does this prospectively, before incidents occur, rather than applying forensics to obtain data after the fact. Should that system be extended to cover all federal agencies that fly in the NAS?



2. **Net-Enabled Information Sharing** – NextGen requires a transformation in the sharing and management of information. The development of network capabilities that are functional in a real time air traffic control environment is critical. What policies need to be developed or changed in order to ensure that key system users and the intelligence community all work together toward a system that will allow them to seamlessly share information?

3. **Integrated Surveillance Approach** – NextGen based surveillance capabilities such as ADS-B will replace ground-based surveillance and navigational capabilities. If radars that are no longer needed for air traffic control are retained for security purposes, who should pay to maintain them?

4. **Navigation Backup** – NextGen relies on GPS-based navigation capabilities. What system should be used as a backup for GPS?

5. **Transportation Network Infrastructure** – Aviation users will operate through a series of networks and digitally-based data exchange systems that will use a range of wireless based technologies. How can we ensure sufficient spectrum is available for the wireless portion of the aviation information network?

6. **Required Communications-Navigation-Surveillance, Performance and Equipage** – Aircraft owners who require access to specific airspace will have to equip their aircraft to meet the requirements in these environments. Should users be required to equip with the avionics needed to benefit from NextGen or should they merely be given an incentive to equip?

7. **Implications of Increased Automation** – As NextGen evolves, the human role in air traffic management will change. For example, there will be automated flight planning and route management. Will stakeholders, including passengers, accept an increased number of air traffic control functions being performed by automated systems, or will they insist on retaining the current level of human involvement in air transportation? What are the training and operations challenges regarding human and automation interface? What are the liability implications of this change?

8. **Environment vs. Capacity** – As air traffic demand continues to grow, NextGen will need to address key environmental issues. What needs to be done to provide sufficient technology development and timely methods for fleet insertion to reduce levels of aviation noise and local air quality emissions, thereby greatly reducing environment as a constraint on capacity?

9. **Approach to NextGen Business Case** – The Business Case must focus on the synergistic benefits of the multiple capabilities of NextGen. Since the JPDO is developing such a holistic, system-wide cost benefit analysis for NextGen, what changes to the current case-by-case type of cost-benefit analysis are necessary?

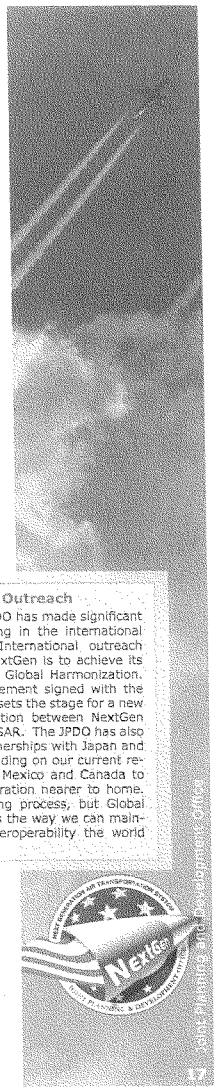
As NextGen matures more policy issues will arise. However, JPDO's goal, working in the context of its key planning documents, is to address these issues in a timely fashion so that key policy concerns are and resolved. Each of these issues will be a matter for consideration on by the Senior Policy Council during the coming year.

Global Harmonization — *NextGen in the International Environment*

NextGen faces some unique challenges in the international environment. We need to build a global system based on interoperability and harmonization. This approach could offer significant savings to the users and at the same time present the aviation industry with new and beneficial commercial opportunities. Global Harmonization is the guiding principle in the JPDO's international strategy for NextGen.

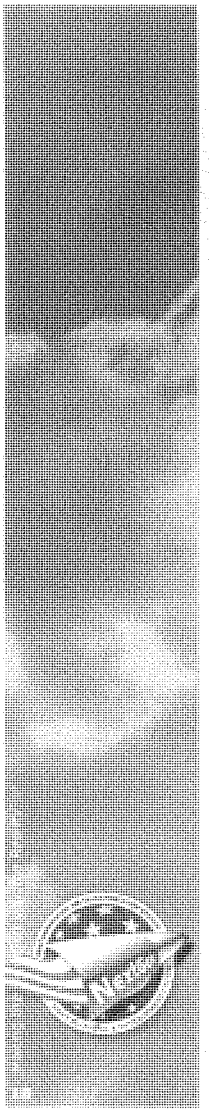
There have been several important steps in this direction. In June 2006, FAA Administrator, Marion Blakey, concluded an agreement with Jacques Barrot, Vice-President of the European Commission, in charge of Transport, which formalized cooperation between the NextGen initiative and its European counterpart, the SESAR program.

Beyond Europe, JPDO and NextGen partner agencies such as the FAA are seeking out partnerships with our international counterparts. In 2006, the JPDO established steering groups with China, Japan, Canada, and Mexico to facilitate cooperative activities on the design of NextGen. These groups are moving forward to pursue joint initiatives, including ADS-B, SWIM, and Enterprise Architecture.



International Outreach

This year the JPDO has made significant strides in working in the international environment. International outreach is essential if NextGen is to achieve its strategic goal of Global Harmonization. The recent agreement signed with the European Union sets the stage for a new level of cooperation between NextGen and Europe's SESAR. The JPDO has also established partnerships with Japan and China and is building on our current relationships with Mexico and Canada to facilitate collaboration nearer to home. It is a continuing process, but Global Harmonization is the way we can maintain smooth interoperability the world over.



The Skies Ahead: *This Year and Beyond*

The Nature of the Commitment — *A Pledge to the Future*

NextGen, with its vision of a transformation of the National Airspace System, is focused well into the future. NextGen covers a 20-year period of evolutionary progress toward the future National Airspace System, not a one-time implementation of some undefined super technology. A successful transformation requires an inspired commitment by government and private industry to steady and regular progress. Our commitment needs to transcend future changes in leadership and government organization. To do this, we need to define how NextGen will function, how this new initiative will guide future research goals, capital investment decisions, and policy development. This process is essential to the successful transformation of the system.

How NextGen will function

1) Delivering the final definitional documents

The JPDO's mission is no small task, but this year, working with its partner agencies and the aviation industry, NextGen has taken some important steps forward. In mid-2007, the JPDO will be releasing the Concept of Operations and the Enterprise Architecture. Both documents will continue to evolve and change. That is the nature of the development process, but the basic definition and the outline for the initiative will be in place.

From that point, the JPDO will be in a position to use these two documents to further focus on its key mission: namely the alignment and coordination of the budget priorities, programs, and initiatives of the JPDO partner agencies. This is essential if NextGen is to develop its capabilities on schedule.

The key to making this process work is to apply these definitional documents as a guide to funding our annual and long-term activities and budgets.

2) Developing and refining NextGen cost profile

Given the nature of that approach, one of the most important commitments the JPDO will have this year is to develop and refine the cost of NextGen. Estimated costs for near-term programs and research will be more accurate, while longer-term estimates, given the likely changes in technology and requirements, are broader in range.

Continuing to refine the cost estimate built on sound industry-based practices is essential in setting the stage for our budgetary requirements.

3) Supporting partner agency implementation of existing technologies, and demonstration of new technologies and capabilities

The JPDO is working not only to set the stage for future research and investment, but we are also actively pursuing the development of key technologies and capabilities that will lay the groundwork for NextGen. These initial capabilities represent some of the fundamental components of the initiative and they will be the basis for our future research and investment. This, too, is an iterative process.

ADS-B

ADS-B is different from traditional surveillance and navigation systems. It is far more accurate than radar and the data collected by this satellite-based system is visually available to all system users. With ADS-B the pilots have the same information as controllers on the ground. ADS-B is also far more cost efficient. The ADS-B units are relatively inexpensive and will replace the costly ground-based radars and navigational systems that are currently in use.

During the coming year, JPDO will work with partner agencies to prepare for initial testing and deployment of some of these foundational programs. There will also be demonstrations that will allow the aviation community to understand how NextGen will use its basic capabilities in a working air traffic environment. This will offer opportunities to learn from these tests and demonstrations in a way that will allow us to better understand future technology needs and equipment requirements.

Future research and decisions

1) Set the future direction of our research

Further, in its 2008 research guidance to its partner agencies, the JPDO focuses on the future phases of NextGen development. Some of the important research areas in the 2008 guidance include, examining alternative safety and fault implications for various architecture alternatives, working towards developing a common weather database, continuing research work on four dimensional (4D) trajectories, a focus on developing real-time wake vortex sensing capabilities, and beginning to work on a better understanding of the human role in a NextGen operating

system. The JPDO and its partner agencies are building a research and development plan that will document NextGen research needs and the performing organizations. The plan will be delivered to OMB in August 2007 and help inform the FY09 process.

2) Solidify and expand cooperation with partners

The JPDO established significant inroads with a number of partners and stakeholders in 2006. For example, in August 2006, the JPDO leadership met with key leadership at the Air Force's Air Mobility Command. This interaction helped to identify several areas of mutual interest. In many cases, the Air Force had already invested considerable resources in these initiatives. For example, the Command's efforts towards achieving seamless integration of weather data into flight operations management and their experience in dealing with global compatibility issues have direct parallel implications to NextGen. JPDO is also working closely with the National Weather Service, which is under the National Oceanic and Atmospheric Administration, within the Department Commerce, to unify efforts in weather research and program development. By working together and collaborating as partners, such as in these examples, the JPDO can leverage much of this valuable work in further developing key system capabilities. Continued interaction with organizations like this, both in the public and private sector, is an essential part of the NextGen strategy and demonstrate the true spirit of the legislation.

3) Institutionalization with the ATO

FAA's Air Traffic Organization (ATO), in cooperation with the JPDO, is restructuring the Operational Evolution Partnership (OEP) as the FAA's roadmap for NextGen. As an example of institutionalization taking root, the FAA Airports, ATO, the MITRE Center for Advanced Aviation System Development (CAASD), and the JPDO's Systems and Engineering Analysis Division collaborated on the update to the report entitled "Capacity Needs in the NAS." The updated report identifies the OEP airports, non-OEP airports, and metro areas where NextGen capacity improvements are needed.

Efforts similar to these will serve as templates for JPDO's work with other departments and agencies.

Implementation of the system

NextGen implementation is critically linked to the activities and priorities of our sponsoring and partner agencies. In particular, many of the key elements of NextGen's near-term investment and capability development are tied closely to the FAA's Flight Plan, the agency's basic guidance on its future plans and priorities. The following outlines some of these critical near-term and longer focus areas:

1) Required Navigation Performance

Required Navigation Performance (RNP) is a set of standards that measures location accuracy in the airspace. Increased navigational precision by aircraft can reduce spacing within the system without compromising

safety while at the same time increasing airport capacity. A total of at least 200 RNP approach procedures are expected by 2011.

2) Automatic Dependent Surveillance-Broadcast (ADS-B), Traffic Information Service-Broadcast (TIS-B), and Flight Information Service-Broadcast (FIS-B)

There has been substantial progress in implementing ADS-B. There is now a national ADS-B office, and the program has entered into a partnership with industry for future work in the Gulf of Mexico. The contract to deploy the system is likely to be awarded this summer and the Notice of Proposed Rulemaking (NPRM), important to the deployment of the system, is expected by the end of the year.

ADS-B is an aircraft-based surveillance service being deployed in selected areas of the NAS. This technology broadcasts once-per-second from the aircraft with its position, velocity, and identification. This enables the use of TIS-B and FIS-B.

TIS-B is a ground-based broadcast service that provides secondary surveillance radar. The TIS-B service is intended to improve the pilot's ability to visually see other traffic in the air and on the airport surface so that pilots can more effectively apply traditional "see-and-avoid" techniques.

FIS-B provides weather and other non-control, aeronautical information that allows pilots to operate more safely and efficiently.

Improvements in the capabilities available to aircraft with integrated displays, data-link, and traffic information will increase situational awareness. By implementing ADS-B, TIS-B, and FIS-B, we will continue to deliver dependent surveillance technologies and systems to key sites.

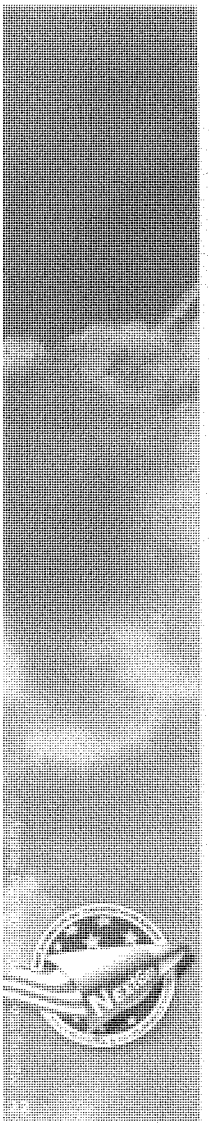
3) Capstone Program

The Capstone Program in Alaska is a long-term, highly successful application of ADS-B in a non-radar environment. ADS-B is one of Next-Gen's essential foundational technologies. It will continue its development with the goal of deployment throughout Alaska. Since initial deployment, general aviation accidents in Alaska have decreased by 40 percent. The practical information provided by this FAA program has already proven invaluable in guiding the development of NextGen.

4) Safety Management System (SMS)

The safety programs of NextGen must evolve from the traditional post-accident data analysis to an integrated forensic and prognostic evaluation and management of hazards and their potential risk. The key to success is the implementation of an integrated, national SMS encompassing all facets of the future air transportation system.

By improving the collection, consolidation, and analysis of safety data, it will be possible to identify emerging threats in a prognostic manner to prevent future accidents.



The NextGen SMS Standard will ensure consistency across all our industry partners and other federal agencies. This will provide the level of safety improvement commensurate with the increase in operations.

5) Implementation of the National Aeronautics Research and Development Policy

On December 20, 2006, President George W. Bush signed an Executive Order calling upon the Departments of Commerce, Defense, Energy, Homeland Security, State, and Transportation, NASA, the FAA, National Science Foundation, the International Trade Commission, and the Executive Office of the President to develop a National Aeronautics Research and Development Plan. This was a major milestone.

The JPDO, through its partner departments and agencies and in collaboration with the private sector, will be responsible for planning, coordination, and oversight of both research and implementation activities for the NextGen in meeting the nation's civil, military, and homeland security needs.

6) Continuous Descent Approach (CDA)

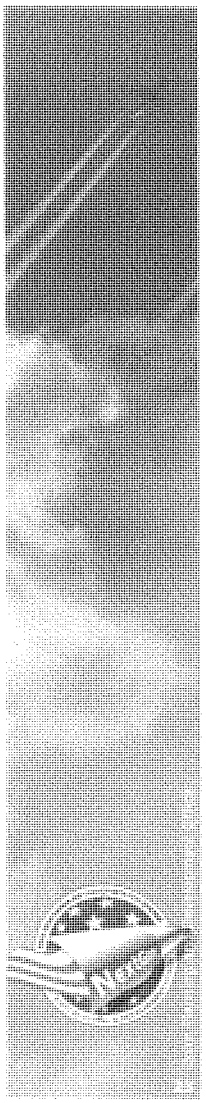
A Continuous Descent Approach is a procedure that optimizes the aircraft approach from the beginning of its descent to the touch down on the runway. Because this optimized approach profile minimizes the power levels required for the engines, noise, and emissions levels are substantially reduced.

In supporting our environmental stewardship, the JPDO will be working with several airports to implement CDA for night operations and initiate research into CDA applicability to airports with greater traffic levels, general mixed fleet, and mixed operations. A demonstration of CDA in a practical environment is one of the JPDO's 2007 objectives.

Conclusion

2006 has been a successful year for the JPDO. We have set the stage for the future of NextGen in our foundational documents, the Enterprise Architecture and the Concept of Operations. These will guide our future plans in resource planning, our research, and our work in policy development. We have begun development and implementation of some of our foundational technologies and we have also set the stage for a range of demonstrations that will highlight essential NextGen capabilities.

However, these are just the first critical steps in setting the course for this unprecedented initiative. The challenge is in maintaining a common vision and a commitment to the transformation of the national air transportation system. If we can succeed in this, if we can forge a new way for government to function across agency lines, and if we can build new paths for working with industry, then we can achieve the benefits and the rewards of the NextGen initiative. The future of aviation and our nation depends on our collective success.



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U.S. House of Representatives
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Ranking Republican Member

James W. Coon II, Republican Chief of Staff

April 18, 2007

Ms. Mary Walsh - AGC60
Assistant Chief Counsel for Legislation Staff
Federal Aviation Administration
800 Independence Avenue, S.W. - Room 923I
Washington, D.C. 20591

Dear Ms. Walsh:

In March, 2007, the Subcommittee on Aviation held hearings on the Administration's Federal Aviation Administration Reauthorization proposal.

I have attached questions from Rep. Joe Sestak and Rep. Robert E. Andrews regarding, the FAA Airspace Redesign Process to answer for the record. I would appreciate receiving the FAA's written response to these questions within 14 days so that they may be made a part of the hearing record.

Sincerely,

Jerry F. Costello
Chairman
Subcommittee on Aviation

JFC:ss/pk
Attachment

March, 2007
Subcommittee on Aviation
HEARINGS on
The Administration's Federal Aviation Administration
Reauthorization Proposal

Questions for the Record From:
Rep. Joe Sestak
Rep. Robert E. Andrews

To
Federal Aviation Administration

1. On May 13, 2005, the U.S. Department of Transportation Assistant Inspector General (IG) published results of an audit on the Federal Aviation Administration (FAA) National Airspace Redesign (NAR) program, and noted its concerns about the overall FAA airspace redesign process. This report stated that FAA cost and schedule estimates for the vast majority of airspace redesign projects are not reliable. Additionally, the report found " that the FAA's overall process for controlling costs; mitigating risks; and coordinating local, regional, and Headquarters efforts is not effective."

   The IG recommended that FAA:

   a) Establish cost and schedule controls for airspace redesign projects and incorporate costs for both planning and implementation.

   b) Establish procedures to ensure that airspace redesign efforts are coordinated with other FAA entities in a timely manner.

   c) Prioritize current airspace redesign projects and establish criteria for assessing a project's system-wide impact.

   d) Develop a strategy and establish guidelines for addressing the demand for new sectors.

   e) Re-evaluate how resources are allocated and used by local and regional facilities to determine the most effective way to move forward with airspace redesign efforts.

   What steps has the FAA taken to publicly address the recommendations raised by the IG's May 13, 2005 report?

2. In December 2005, the FAA released its draft Environmental Impact Study (EIS) of the airspace redesign over the New York/New Jersey/Philadelphia metropolitan area.

   In November 2006, Congressman Sestak organized an Advisory Board of leading local, regional, and national aviation experts who contend that the draft EIS does not adequately model and evaluate the full impacts of proposed changes to affected communities, such as the impact of noise on educational development, air emissions on health, adverse effects to property values, and inadequate consideration of ground safety. Additionally, these experts have also deemed the FAA's benchmarks, tools, and methodologies used to model these impacts to be antiquated, flawed, and/or inadequate.

   How will the FAA address these concerns to ensure that the full impacts and costs of the FAA airspace redesign are accounted for, so that full and appropriate mitigation strategies can be implemented in affected communities?

3. On October 19, 1999, FAA's Overview of NY/NJ/PHL Airspace Redesign Project document stated the following goal and objective on Page 7: "Incorporate increased noise abatement techniques whenever possible." This goal was consistent with FAA's previous position, as expressed by former FAA Administrator Jane Garvey, that "one of our goals is to enhance the environment to the degree consistent with safety and efficiency, both with noise abatement and improvement in air quality." In later documents distributed by the FAA, the goal of noise abatement was deleted and the goal of the Airspace Redesign Project became "the design and operation of a more efficient airspace, while maintaining a high level of safety."

   Why was the goal of incorporating increased noise abatement techniques deleted?

NATIONAL AIRSPACE REDESIGN (NAR) PROGRAM
AIRSPACE MANAGEMENT PROGRAM (AMP)

QUESTION: What steps has the Federal Aviation Administration taken to publicly address the recommendations raised by the U.S. Department of Transportation (DOT) Assistant Inspector General's (IG) May 13, 2005 report?

ANSWER: The FAA has implemented several programmatic changes to its airspace redesign efforts to address the DOT IG recommendations. In 2005, the National Airspace Redesign (NAR) program transitioned to the Airspace Management Program (AMP). AMP expands on the previous program to ensure project planning includes an execution and implementation focus, not just designs. The planning and design phases in AMP reflect resource constraints, with cross-Agency service level agreements setting the scope for projects. AMP emphasizes the projects that offer systemwide operational benefit, including an awareness of productivity and cost reduction goals. A key change in managing AMP project costs and schedules is in limiting the number of projects and defining project leads for those efforts.

AMP has developed a prioritization index based on each project's ability to meet Agency goals, customer and Agency benefits, and risk factors. This index maps to other criteria used by FAA Air Traffic Organization (ATO) budget planning mechanisms. With this index, the AMP office completed a quantified assessment of the operational benefits of all proposed projects. This assessment has been used to create an earned value metric that measures the progress and projected value of a proposed airspace effort.

Under AMP, all proposed sector or position changes are approved by ATO's En Route, Terminal, and/or Technical Operations Services offices. Once approved by the associated offices, schedules are coordinated with other modernization efforts to minimize cost and other potential risks at the given facilities.

In July 2005, the National Air Traffic Controllers Association (NATCA) removed all airspace liaisons from participating in NAR, and later AMP, projects. Because of NATCA's decision to pull its participation, other preexisting voluntary agreements with the bargaining unit were voided. Bargaining unit operational expertise was and has been provided through

existing clauses in the labor contract, allowing for review and input from subject matter experts through assignment of work. Other responsibilities outlined in the FAA's Airspace Strategic Management Plan, some of which were of concern to the Office of Inspector General, are no longer in place.

The best indicator of the success of the changes instituted since 2005 has been the number of accomplishments of AMP in the last two years. Even when faced with significant budget challenges (over 70 percent budget cut in fiscal year (FY) 2006 and reduced budgets in FY 2007 because of the Continuing Resolution), the program has successfully met all of its operational deliverables, including implementation of key projects, such as the Florida Airspace Optimization, Midwest AirSpace Enhancement, Los Angeles Arrival Optimization, Central and Northern California Terminal Redesigns, Oakland Center Dual Arrival Routes and Sector Split, Chicago Airspace Project Stage 1, the Las Vegas STAAV Area Navigation Departure Route, and airspace redesign to support new runways at Atlanta, Minneapolis, and Cincinnati. Combined, these projects have delivered hundreds of millions of dollars of customer operating cost savings.

NEW YORK/NEW JERSEY/PHILADELPHIA METROPOLITAN AREA AIRSPACE REDESIGN

QUESTION: How will the Federal Aviation Administration address the concerns raised by Congressman Sestak to ensure that the full impacts and costs of the FAA airspace redesign are accounted for, so that full and appropriate mitigation strategies can be implemented in affected communities?

ANSWER: The Federal Aviation Administration has strictly followed the requirements in the National Environmental Policy Act for analysis of environmental factors in the New York/New Jersey/Philadelphia Metropolitan Area Airspace Redesign. Further, as part of the response to the Department of Interior comments to the Draft Environmental Impact Statement (EIS), we are including added air quality analyses, which will be included in Final EIS. In developing the mitigation strategies, hundreds of thousands of flight tracks were analyzed to determine the proposed strategies that will minimize loss of operational benefits but reduce noise exposure.

NEW YORK/NEW JERSEY/PHILADELPHIA METROPOLITAN AREA AIRSPACE REDESIGN

QUESTION: Why was the goal of incorporating increased noise abatement techniques deleted?

ANSWER: Environmental factors, including noise, are a significant consideration in developing airspace and procedural changes. Airport noise abatement is not usually the responsibility of the Federal Aviation Administration, but of the airport authority. Environmental factors have been a concern in airspace redesign, and have been referenced in planning and status documents. However, noise abatement was never included in the formal and published purpose and need of the New York/New Jersey/ Philadelphia Metropolitan Area Airspace Redesign. Therefore, we do not feel this was ever removed or deleted from the project. We consider noise, and we do our best to minimize the impact of noise. We have dedicated significant resources toward addressing the environmental and noise issues as part of the New York/New Jersey/Philadelphia Metropolitan Area Airspace Redesign. The results of this effort have been released to the public. The results estimate a dramatic reduction in the number of people exposed to the noise thresholds, compared to the unmitigated proposal.

In the *2007-2011 FAA Flight Plan*, the FAA identified an Agency performance target to "reduce the number of people exposed to significant noise by 1 percent each year through FY 2011, as measured by a three-year moving average, from the three-year average for calendar years 2000-2002."

In the original integrated airspace alternative of the New York/New Jersey/ Philadelphia Metropolitan Area Airspace Redesign, some 341,000 people would have experienced noise increases within the FAA thresholds. With the proposed mitigation strategies applied, this number reduces dramatically to 67,000 people, which reflects an 80 percent reduction in the number of people exposed to the noise thresholds. At the significant noise threshold level of 1.5 Day Night Level (DNL) increase in the 65+ DNL, the mitigation package eliminates all of these impacts (15,826 people), supporting the agency goal referenced above. The mitigated preferred alternative also effectively reduces the total number of people exposed to aircraft noise of 45 DNL or greater compared to the no action condition.

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STATEMENT FOR THE RECORD

OF THE

AMERICAN FEDERATION OF STATE, COUNTY AND MUNICIPAL EMPLOYEES (AFSCME)

ON THE

FEDERAL AVIATION ADMINISTRATION REAUTHORIZATION

BEFORE THE

U.S. HOUSE OF REPRESENTATIVES

COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE

SUBCOMMITTEE ON AVIATION

MARCH 14, 2007

Statement For The Record
of the American Federation of State, County and Municipal Employees (AFSCME)
on the
Federal Aviation Administration Reauthorization
before the
U.S. House of Representatives
Committee on Transportation and Infrastructure
Subcommittee on Aviation
March 14, 2007

The American Federation of State, County and Municipal Employees (AFSCME) submits the following statement for the hearing record.

AFSCME is a labor organization that represents over 1.4 million workers, predominantly in the public sector. Over 2,000 of our members are employed by Federal Aviation Administration (FAA) in professional positions at the FAA Headquarters in Washington, D.C.

This statement will describe how the sweeping new authority granted to FAA by Congress to reform its personnel system has resulted in a fragmented and punitive system for FAA employees and the need for a legislative solution to this lingering problem. In 1995, Congress mandated in the Department of Transportation FY96 Appropriations bill (PL 104-50) that FAA develop a new personnel system in "consultation" with its employees. Congress specifically exempted FAA from pertinent civil service personnel laws, or other personnel rules or regulations under Title 5 of the United States Code (USC) to allow for increased administrative flexibility. FAA sought such exemptions purportedly to create a pay system competitive with the private sector but in doing so stripped employees of all union representation and negotiation rights and of even the basic right of employees to join a union.

At the urging of the various unions which represent FAA employees and who would lose the right to represent these employees, Congress reinstated employee union rights under Chapter 71, Title 5, USC, and directed FAA to legally "bargain" with the exclusive bargaining representative of the employees certified under section 7111 of Title 5, USC in the Federal Aviation Administration Reauthorization Act of 1996. The FAA Reauthorization Act also set up a flawed process for mediating bargaining impasses in the event FAA did not reach agreement with the employees. After utilizing the services of the Federal Mediation and Conciliation Service to mediate any disputes, FAA was given the authority to take the proposed changes to Congress for their review after 60 days of impasse. *In essence, at the end of the 60-day period, FAA would be free to implement a new personnel system without regard for any terms agreed to in prior bargaining or any agreements reached previously.* This flawed one-sided approach to bargaining provides no incentive for FAA to bargain in "good faith" because the agency has the statutory authority to wait 60 days and then implement its own rules and terms. Negotiating under this type of arrangement is a pointless exercise.

Notwithstanding these circumstances, the FAA unions, including AFSCME, entered into good faith negotiations with FAA only to end up with their contracts either stalled or employees working under FAA-imposed rules and pay, as AFSCME members currently are. The much-heralded new personnel system for the 21st Century that FAA was supposed to develop does not exist. In AFSCME's situation, we negotiated a contract and concluded negotiations in January 2001. Employees ratified the contract, and FAA subsequently approved it. However, since 2001, FAA has failed to implement the contract and has instead imposed its own work rules and pay system.

Employees do not even have a genuine grievance process where their complaints can be decided impartially.

The facts are that AFSCME and FAA initiated bargaining in June of 2000 over the new personnel system pursuant to the congressional mandates cited above. AFSCME and FAA came to agreement over the personnel system in January 2001. FAA made several proposals to restructure the pay system, including broad-banding pay, pay for performance, elimination of within-grade raises and market based adjustments to pay bands. In exchange for AFSCME's concessions, FAA agreed to provide an eight percent pay increase over seven years. AFSCME agreed to generate productivity increases sufficient to fully fund the eight percent pay increase.

When questioned by AFSCME about the failed implementation of the contract, then FAA Administrator Jane Garvey informed AFSCME that FAA would not execute the contract because the Office of Management and Budget (OMB) ruled that the agreement violated government personnel rules and regulations. Supposedly at issue were positions considered "clerical" or "administrative support." According to Garvey, OMB advised FAA that the pay increases were outside the range of similar positions in other agencies.

Obviously, this was a subterfuge by the Administration because the Congress gave FAA total flexibility in developing a new personnel system, exempt from government-wide personnel rules and regulations. To then use government personnel rules and regulation as an excuse to reject the contract is, at best, disingenuous. FAA was clearly not bound by such rules in their negotiated agreement as a result of congressionally legislated FAA personnel reform. The FAA requested and was given total flexibility to negotiate an agreement that would provide the agency with the ability to compete with the private sector in hiring and retaining qualified personnel. Moreover, AFSCME maintains that FAA was not even required to obtain OMB approval of contract terms. The only language in the FAA personnel reform legislation which indicates anything other than total flexibility for FAA is the following: "*If the services of the Federal Mediation and Conciliation Service do not lead to an agreement, the Administrator's proposed change to the personnel management system shall not take effect until 60 days have elapsed after the Administrator has transmitted the proposed change, along with the objection of the exclusive bargaining representatives to the change, and the reasons for such objections, to Congress.*"

An unfair labor practice charge filed against FAA for its refusal to execute and implement the contract based on bad-faith bargaining was denied by the Federal Labor Relations Authority. The decision was appealed, and the final outcome was adverse to AFSCME's position. The Administrative Law Judge determined that since AFSCME agreed to negotiate with the FAA that we somehow acquiesced to OMB's authority.

AFSCME has tried every means available to resolve this long and protracted contract dispute with FAA. At this point, AFSCME has a negotiated contract that FAA refuses to implement. AFSCME has asked Congress to review the contract issue and as a result report language was inserted, on two separate occasions, in appropriations measures directing FAA to implement the contract. FAA has chosen to ignore these directives. Considering that AFSCME has exhausted all means to resolve this matter and FAA has used all means to thwart our efforts and those of the other unions who are in the same untenable position, we believe it is time for Congress to resolve this matter and allow FAA employees to be fully represented by their duly elected representatives.

We appreciate the opportunity to submit remarks for the record on the Reauthorization of the Federal Aviation Administration.

HEARING ON THE FEDERAL AVIATION ADMINISTRATION'S FINANCING PROPOSAL

Wednesday, March 21, 2007

HOUSE OF REPRESENTATIVES
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE,
SUBCOMMITTEE ON AVIATION,
Washington, DC.

The Subcommittee met, pursuant to call, at 10:00 a.m., in Room 2167, Rayburn House Office Building, the Honorable Jerry F. Costello [Chairman of the Subcommittee] presiding.

Mr. COSTELLO. The Subcommittee will come to order.

The Chair would ask that all Members, staff, and everyone in the room turn off their electronic devices or turn them on vibrate.

The Subcommittee is meeting today to hear testimony on the Federal Aviation Administration's financing proposal. We have a long list of witnesses. We have two Members, a Member panel that will testify and then 10 other witnesses, and apparently someone with a hammer around here.

[Laughter.]

Mr. COSTELLO. I guess Jimmy Miller is working on that.

I will have an opening statement and will recognize the Ranking Member, Mr. Petri, for an opening statement, and we would encourage, because of the number of witnesses that we have, that other Members submit their opening statements for the record.

But before I give my opening statement, I want to recognize two of our colleagues who will be appearing here this morning to present testimony to the Subcommittee, both the Honorable Todd Tiahrt from the 4th District of Kansas, and the Honorable John Barrow from the 12th District of Georgia.

And at this time we will take your statements. We will waive the normal questioning of witnesses. We have extended that courtesy to Members in the past. We will extend it to you because we understand that your schedules will not permit you to be here very long this morning.

So at this time I would recognize our colleague, the Honorable John Barrow, for his opening statement and any remarks he would like to make.

TESTIMONY OF THE HONORABLE JOHN BARROW, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF GEORGIA

Mr. BARROW. Thank you, Mr. Chairman. I appreciate your consideration this morning.

Mr. Chairman, it is an honor to appear before this Subcommittee to discuss my concerns about the FAA reauthorization bill, especially the FAA's proposed funding mechanisms.

Mr. Chairman, I represent Savannah, Georgia, which is home to Savannah International Airport and Gulfstream Aerospace Corporation. That means that this bill is especially important to a lot of folks that I represent.

Gulfstream employs more than 5,000 people at their Savannah facility. Their annual payroll at this place is $360 million. And in the district alone they spend another $80 million a year with suppliers in support of their vendor operations. As a result, the impact of the FAA reauthorization bill in my district is huge.

I strongly endorse the necessity to modernize our air traffic control system. However, the President's proposal fails to address the critical need for a comprehensive plan for modernization. I urge the Subcommittee to insist that the FAA present a modernization plan, including timetables, milestones, and its estimated cost, before they initiate a debate on funding.

As with many of my colleagues in Congress, I don't agree with the Administration's attempt to link user fees to modernization of the Nation's air traffic control system. The system needs to be modernized no matter how we pay for it, and we can modernize it using the existing tax and oversight structure. But we need to organize a comprehensive plan first.

The Administration proposes to dismantle the current funding mechanism and tax structure that has built the safest, most efficient air traffic control system in the world. In contrast to the current system of aviation excise taxes set by Congress, user fees would be set annually by the FAA without congressional approval. Given the monopoly power of the FAA as the sole provider of air traffic services in the United States, and given the FAA's poor track record of fielding new technology to modernize the air traffic control system, we can't afford to put all of our right to make cost control decisions, all of our power to tax, and all of our power to spend on the FAA. We can't afford to put all of our government eggs in one FAA basket.

Giving the FAA the right to set user fees is a blank check and it would totally remove congressional oversight from the funding and governance of our Nation's air traffic control system. Now that we are trying to expand oversight is not the time to give it all away. User fees would require the FAA establish some sort of IRS organization to administer a system which would be much more inefficient than the current system.

In addition to user fees, the proposal raises general aviation fuel taxes by over 200 percent. That is nearly a 50 percent per gallon increase in fuel taxes and will have a huge adverse impact on the general aviation industry just as it is recovering from the economic downturn caused by the last recession and 9/11.

I think there are areas where the FAA should be independent of Congress. For example, I strongly support the FAA's independence in the area of safety oversight of designees and certified organizations such as repair stations and manufacturing facilities. But this argues for the current system, because safety oversight is an inherently governmental function and should not be paid for on a pay-for-service basis. If we are going to protect safety oversight as an inherently governmental function, we should reject user fees for the certification of new aviation products and technologies as a way to pay for it.

Once again, thank you very much for letting us appear before you this morning and thank you for your consideration in accommodating our schedules, and I yield back the balance of my time.

Mr. COSTELLO. I thank you, Congressman Barrow, for your testimony here today, and we not only receive your testimony, but you and I have had conversations concerning this issue as well, and I appreciate that.

Let me now call on our friend from Kansas, the Honorable Todd Tiahrt.

TESTIMONY OF THE HONORABLE TODD TIAHRT, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF KANSAS

Mr. TIAHRT. Thank you, Mr. Chairman. I have a written testimony that I would like unanimous consent to submit for the record.

Mr. COSTELLO. Without objection.

Mr. TIAHRT. Today I hope to convince you that general aviation is a vital part of our economy, that it is necessary for the future growth of our economy, that general aviation is extremely vulnerable to Federal policy, and that the FAA's proposal is a plan to fail according to the FAA itself. It will raise less revenue than the current system of fuel taxes and contributions to the General Fund, and it will set up, as Congressman Barrow said, an IRS within the FAA; and as a result of that, less people will fly and their current projections will have even less revenue. On top of all of that, their plan will give us less congressional oversight.

I represent the air capital of the world, the 4th District of Kansas. It is the home of Cessna, Hawker Beechcraft, Bombardier, which builds LearJets; Boeing; Spirit AeroSystems, which used to be Boeing Commercial; EADS Engineering; civil design shops; suppliers; contractors; maintenance facilities; and a world-class research facility called the National Institute of Aviation Research at Wichita State University.

Kansas companies deliver over 50 percent of all general aviation aircraft. These companies provide 32,000 well paying jobs in my district alone. In 2006, the three largest Kansas-based general manufacturers—Bombardier LearJet, Cessna, and Raytheon—manufactured over 1700 airplanes at a value of $5.8 billion. Forty percent of them went overseas in exports.

So it is a national importance that general aviation brings to us. Not only my district, but each one of the congressional districts throughout the Congress, all 435 districts, have either direct manufacturing jobs, fix-based operations, suppliers, subcontractors, or maintenance. In Congressman Barrow's instance, he has a huge manufacturing facility with over 5,000 jobs. Aviation is linked to a total of $142 billion of payroll alone in our economy and affects more than 600,000 jobs nationwide. But more important than that, employers across the United States depend on general aviation just to get their job done, especially in rural areas.

But I want to explain to you why general aviation is so vulnerable to Federal policy. It is a delicate industry in some senses . Let me give you an example. In 1994, my predecessor, Dan Glickman, worked very hard to get the general aviation revitalization act passed. In South Central Kansas, it created 4,000 jobs. But, yet, following September 11th, 2001, when our economy took a $2 trillion hit, Wichita lost 25,000 jobs.

Then there was the luxury tax back in 1991. Beechcraft alone lost 39 airplane sales in the first quarter when the tax went into

effect. They lost 500 jobs that were planned at that time. That doesn't account for what happened at Learjet or what happened at Cessna as well.

More recently, accelerated depreciation was what turned around general aviation. When we allowed companies to write off two-thirds of the cost of a new airplane in the first year or purchase, that revitalized again general aviation, and those 25,000 people who were laid off are back at work and now there are backlogs.

Finally, if you look at certification the FAA is supposed to be doing, they have not put the number of certifiers in place, and, as a result of that, we can't get new products on the market, even as small as safety parts, safety issues, because they are not certified. So here we have, once again, an industry that is so vulnerable to Federal policy held at a standstill, not being able to get new parts on the market or new safety issues in practice.

Now I want to move on to the Next Generation Air Transfer System, because it does not require user fees. The former Secretary of Transportation, Norm Mineta, one of his last comments, he said he did not want the Department of Transportation to be a choke point for economic activity. And I am sure you would all agree with that as well. Unfortunately, this current proposal is going to be a choke point.

There is a chart that is going to be shown later today that shows that the average daily use of an airline, a commercial jet, is about 3800 hours per year. A commercial jet flies about 3800 hours per year. A general aircraft flies less than one-tenth of that, about 370 hours per year. Yet, what is happening is that they are trying to shift the burden from commercial airlines to general aircraft.

I want to make sure that the United States is fully supporting an air traffic controller system. That is the plan. But to do it on the backs of general aviation is not a good part of that plan. It is difficult to see, and false to make the assumption, that the problem with having an airplane that carries 300 passengers has the same type of needs as an airplane that carries 3 passengers.

We have heard a blip is a blip is a blip. It is really not a blip, there is much more to it. In fact, if you look at following September 11th, 2001, there was absolutely no layoffs at Reagan National Airport, even after general aviation was completely closed out of that market. We didn't lay off any air traffic controllers. So to say that air traffic control should be paid for on the backs of general aviation I think is a misnomer and doesn't accurately represent what the costs of air traffic control area. In fact, if you look at where the big costs are for air traffic controllers, they are in hub areas, where you have a lot of commercial traffic.

I see that my time is up. Let me just summarize by telling you that this plan will generate less revenue. This plan will give less government oversight. This plan will have a crushing effect on the economy and it will certainly damage the general aviation manufacturing, the maintenance, the suppliers, the fixed base operations, and our future economy because of the rolling impact that it will have throughout the economy. So it is my suggestion that we do not have user fees, and if I can make it any clearer, I will try to do so in the future.

[Laughter.]

Mr. TIAHRT. Thank you for your time.

Mr. COSTELLO. Well, Congressman Tiahrt, we appreciate your testimony as well, and you, Mr. Barrow. I think you have made your points very clear to us, and at this time, as I said, we will waive the questioning. We know you have other commitments, so we thank you for being here.

At this time, the Chair will give an opening statement and then recognize Mr. Petri for his opening statement, and then ask other Members to submit their statements in the record.

I welcome everyone to the second of our hearings on the FAA reauthorization. This hearing focuses on the FAA's financing proposal. Tomorrow the Subcommittee will give consideration to the FAA's operational and safety programs.

On February 14, the FAA submitted its reauthorization proposal to the Congress. The FAA's proposal includes a new financing plan to transform the FAA's current excise tax financing system to a hybrid cost-based user fee system. The FAA has cited the need to finance a major new air traffic control modernization initiative, the Next Generation Air Transportation System, as a primary reason for reforming the current tax structure.

After a review of the FAA's proposal, I do not believe that the FAA has made a strong case for its proposed changes. Last September I said that, based on the CBO projections, the current tax and financing system could probably support the requirements of the next generation system. Today you will hear from the GAO and they will testify that, in fact, the FAA's current tax and financing structure has kept up with the demand for many years and can provide funding to cover the development and implementation of the NextGen system.

In addition, at the February 14th hearing, I noted that, based on the Administration's own cost assumptions and data, the FAA's proposal would hypothetically yield approximately $600 million less in fiscal year 2008 than maintaining the current tax structure and over $900 million less from fiscal year 2009 through fiscal year 2012.

I want to repeat that so everyone understands that the FAA's current proposal would generate $600 million less in fiscal year 2008 than maintaining the current system and $900 million less than the current system in fiscal year 2009 through fiscal year 2012.

The GAO will testify today that the FAA has not taken in to account changes in demand that could happen with an increased fuel tax, and this could result in even less revenue collected by the fuel tax than anticipated.

While the FAA states that we need an entirely new funding system to cover the capital costs of the Next Generation system, the FAA's estimated cost requirements for its major capital programs are actually lower than what they were four years ago.

The FAA's estimated total requirements for facilities and equipment, and the airport improvement program in its new three-year proposal are approximately $380 million and $1.5 billion less, respectively, than the FAA requested for the first three years of its last reauthorization proposal, the Centennial of Flight Aviation Authorization Act. In my opinion, this new proposal's lower funding

levels for capacity enhancing capital programs further weakens the FAA's argument that a radical financing reform is necessary.

But, more importantly, I believe that the FAA's proposal is bad for consumers, namely, airline passengers and other airspace users. The FAA believes that its proposal will make it operate like a business. I disagree. The truth is the FAA will never be able to compare itself to a business. Most businesses have competition to spur efficiency. The FAA has no competition. As I noted in February, airline passengers and airspace users either get their services from the FAA or they stay on the ground.

I don't believe it is in the public's interest to give the agency almost unilateral authority to raise its fee rate to match whatever costs are incurred. I believe that linking a new user fee rate to the air traffic control modernization program, in particular, could result incentives for the program to be carried out efficiently. The pressure for efficiency will be much less if the FAA can require airline passengers and system users to bear the burden of cost overruns or delays.

While the FAA argues that airline passengers will pay less under its proposal, I believe that they in fact ultimately could pay more, and they may wind up paying much more if user fee rates grow unchecked and airlines pass those costs onto their customers.

The Department of Transportation Inspector General has reported that the FAA's major acquisitions have experienced billions of dollars, and we have heard this in hearings before—they have experienced billions of dollars in cost growth and years of scheduled delays directly traceable to overly ambitious plans, complex software development, changing requirements, and poor contract management. The GAO has listed the ATC modernization as a high-risk program for the last 12 years.

It is true, as the FAA Administrator testified before this Subcommittee, that the FAA has met its acquisition costs and schedule performance targets. At least 80 percent of its acquisitions have been on schedule and within 10 percent of the budget. However, at least some of the FAA's recent success is due to the re-baselining of certain modernization programs.

When an acquisition is restructured in this manner, its historical cost overruns may not be fully reflected in the FAA's performance measures. The Inspector General of the DOT has noted that the FAA's Next Generation effort will, without question, be a high-risk endeavor and that there is considerable potential for cost-growth, schedule delays, and performance shortfalls, particularly with regard to new software intensive automation systems. The FAA should not be able to pass such potential cost growth directly onto consumers through its fee rate without congressional oversight or approval.

In addition, I believe that there are some very significant unknowns in this proposal that have not been addressed. For example, the FAA has not fully explained the potential administrative costs associated with tracking and billing 14 million flights a year. When I specifically asked the Administrator about administrative costs, they have not developed a plan to determine what the administrative costs would be.

What we do know, as the Administrator indicated here last week, that, in fact, time is not on our side. I believe that these factors argue strongly in favor of working within the current tax and financing structure.

With that, I would like to welcome our witnesses here today and to recognize our Ranking Member, Mr. Petri, for an opening statement or any remarks he would like to make.

Mr. PETRI. Thank you, Mr. Chairman. I join in welcoming our witnesses today and appreciate the effort that went into the statements that will be made a part of the record, as well as the summaries they will be presenting orally to the panel.

As you are all aware, we are in the midst of a very busy month here on this Subcommittee, and today's hearing will address a fundamental question: how we finance the FAA and, most importantly, the modernization of our air traffic control system. We are pleased to have all the panelists here to share their thoughts on the Administration's financing proposal. There is obviously a lively debate on the financing issue and, where there are disagreements, it is going to be our job to try to find the path forward and some kind of consensus.

In order for the United States to maintain its historical role as a leader in the global aviation industry, we must be certain to advance our modernization efforts. Other countries around the world are making great strides in that regard. The EU plans to have a constellation of its own satellite-based navigation system, known as Galileo, completed by 2010. The Russians are advancing their own program, GLONASS. Elsewhere in the aviation industry, China expects to be manufacturing its own regional aircraft by 2008 and is striving to produce a wide bodied aircraft by 2020.

For a century, the U.S. has led the aviation industry and our industry is, as we have heard from several witnesses earlier, crucial to our economy, and we can't afford to fall behind. Whichever financing mechanism is put into place, we must be sure that it can support the costs of modernizing the system.

So again I would like to thank all the witnesses for participating in this important hearing, and I look forward to your testimony.

Mr. COSTELLO. The Chair, at this time, would recognize the distinguished Chairman of the Full Committee, Chairman Oberstar, for any opening statement or remarks he would like to make.

Mr. OBERSTAR. Thank you, Mr. Chairman, and thank you for your opening statement, which is comprehensive, deals with all the policy issues that we need to address in the course of this authorization process, and shows your grasp of the subject matter and understanding of its significance.

I want to thank Mr. Petri for his comments and his participation, his diligence in taking control of aviation issues, moving from surface transportation in the past Congress. Welcome to the great exciting world of aviation.

I want to thank our two colleagues who testified earlier, Mr. Barrow and Mr. Tiahrt. I was not in the room, I was meeting in the waiting room with other folks, but I heard their testimony and it shows the level of interest among our colleagues in the House on the reauthorization. And I know there is a great deal of skepticism on both sides of the aisle about this financing scheme. While we

will be receptive, we are going to listen to views in the course of this hearing and several subsequent hearings that we will have, my intention is to give it a decent burial.

I have been through this reauthorization process for a little over 22 years. When FAA was emerging from the air traffic control of the 1960s, from which it had just emerged from the air traffic control of the 1930s, with radio beacons, preceded by lighthouses, preceded by bon fires, it was evident that we needed a robust management, robust technology system to manage the growing air traffic.

The air traffic growth accelerated in the aftermath of deregulation—it was voted in this committee room—and in the early 1980s, with industry, with the airlines and with the manufacturers—particularly at that time it was IBM—began design of the advanced automation system, which is a very comprehensive approach of modernizing air traffic in all of its aspects.

FAA had been criticized for moving too slowly, moving too fast; of being overly ambitious, not thinking far enough ahead. You can't be all of those things. You can't be wrong on all those accounts. I remember very distinctly 1986, 1987 people said, we just buy it off the shelf. We have got plenty of technology, just go and buy it.

You don't go buy these things off the shelf at Radio Shack, for heaven sakes. You are designing a totally new system. This is not data retrieval; you are not querying the Library of Congress for information, you are dealing with aircraft moving at 10 miles a minute, 7 miles in air, no curb to pull over, look under the hood and figure out what is going on. It has to be real-time. It has to be designed with a robust platform for adaptation off into the future.

And, yes, FAA did sort of over-promise and over-propose in developing the AAS that became the display system replacement, the DSR, but they went from 300,000 lines of computer code to 1,300,000 lines of computer code. They went from a system being down 10 to 12 hours a year to one that would be down 5 to 10 minutes a year. And now we need to evolve that system. It is not a matter of taking today's cell phone, throwing it out and buying a new one. You are building on a robust platform to move and evolve ever into the future into a system in which air traffic controllers, en route controllers, tower controllers, TRACON controllers, are managers of a system and thinking ahead looking ahead to where traffic is going to be five and ten minutes from now, not just to where they are at the moment. That is going to take robust investment.

This plan, submitted to us by the green eye shade budgeteers at OMB, does not move in that direction; it provides, as the Chairman said—and I hope everyone paid attention to it—less money, $900 million less money, $1,500,000,000 less money than we know; and unfairly distributes the cost around the system.

We encountered such a scheme in 1993, then proposed by Vice President Al Gore, in which he proposed to have sort of a semi-privatized air traffic system with the airlines in charge. We weren't going to allow the fox in charge of the chicken coop, and we are not going to allow it today either. Get ready, we are going to do something good for aviation. We are going to make good decisions for the future of aviation in this Country. But we are not going to

do it half-baked. We are going to make a continued robust investment that embraces all of aviation: airlines; domestic; international; general aviation, meaning corporate jets and private aircraft.

We need to deal with the North Atlantic system, the North Atlantic aviation for which the United States has responsibility over 3 million square miles of the Atlantic airspace. The oceanic guidance system has not been completed yet. That has been in the works for 10 years. That is a $30 billion market. We have to do better and move faster. We are responsible for 18 million square miles of the Pacific airspace. That is a $25 billion market growing at 9 percent a year. We have to have a robust system in place to manage that air traffic so that we don't have an aircraft, as we did with KAL 007, because it strayed out of control, out of recognition of our radar system.

Those are the big challenges ahead of us, not nickel-and-diming the system to death, as this proposal would do.

Excuse my enthusiasm, Mr. Chairman, colleagues, but I have been here a long while and have seen a lot of this happen. I am determined, under your leadership, Mr. Petri's participation, and all the Members of this Committee and the aviation community, we are going to do right by aviation. Thank you.

Mr. COSTELLO. I thank the distinguished Chairman for his remarks.

Before we go to our first panel, I would note to all Subcommittee Members that we have two panels remaining, this panel and another. We have a total of 10 witnesses, so I would ask Members to consider submitting their opening statements in the record.

And at this time I would ask unanimous consent to allow two weeks for all Members to revise and extend their remarks and to permit the submission of additional statements and materials by Members and witnesses. Without objection, so ordered.

Let me recognize, at this time, Members of the first panel that are here this morning. We welcome you and we appreciate your being here to present your testimony and also to answer questions of Members of the Subcommittee.

First, I would recognize Mr. Daniel Elwell, the Assistant Administrator for Aviation Policy, Planning and Environment for the FAA; Dr. Gerald Dillingham, who has testified before this Subcommittee many times, who is the Director of Physical Infrastructure Issues with the GAO; The Honorable Calvin Scovel, who has testified here just in the last few weeks, who is the Inspector General for the U.S. Department of Transportation.

At this time I would recognize Mr. Elwell for your opening statement.

TESTIMONY OF DANIEL K. ELWELL, ASSISTANT ADMINISTRATOR, AVIATION POLICY, PLANNING AND ENVIRONMENT, FEDERAL AVIATION ADMINISTRATION; DR. GERALD DILLINGHAM, DIRECTOR, PHYSICAL INFRASTRUCTURE ISSUES, U.S. GOVERNMENT ACCOUNTABILITY OFFICE; AND THE HONORABLE CALVIN L. SCOVEL, III, INSPECTOR GENERAL, U.S. DEPARTMENT OF TRANSPORTATION

Mr. ELWELL. Chairman Costello, Chairman Oberstar, Congressman Petri, Members of this Subcommittee, thank you for putting the spotlight this morning on the state of aviation's finances. While this is my first appearance at a Congressional hearing and it is an honor to be here, I recognize that I have been invited primarily to listen to the views of others, including my fellow panelists, the DOT Inspector General, and the GAO. Their views and the views of other witnesses here today are vital to the current debate over our legislation.

You know, I have spent close to two decades in one cockpit or another. I have flown military aircraft all around the world and I have had the pleasure of flying lawmakers home to their districts. No matter who or what I have transported, the point is to get there safely and on time. Nobody wants to be late.

Yet, without the funding provided by our legislation, there will be no NextGen system in time to prevent gridlock in the skies. Without the program flexibility, financial stability, and beneficial budget treatment that our bill brings, our plans to use satellite technology to control air traffic will likely just limp along while congestion races ahead. We have to plan for the future now.

In the meantime, the FAA is making headway in reducing delays on a variety of fronts. For example, in just the last year alone, we have added new runways at five of our busiest airports. They include Atlanta Hartsfield, Boston Logan, and St. Louis Lambert. Together, those runways will account for thousands and thousands of additional takeoffs and landings. But pouring concrete, while important, isn't the only answer. We have got to get started on NextGen now. Our bill will help put the infrastructure together piece by piece.

NextGen is an enormous undertaking, and it is not going to drop into place just like that. It is going to take time and money to make this system of tomorrow a reality. Everyone has a stake in this endeavor, so, naturally, we feel everyone should help make it come about. It is all about fairness and balance.

Yet, if you look at how the Trust Fund is structured today and who is paying what, you will find that it is mostly one-sided, and we at the FAA don't think that is fair. At least week's hearing, it became clear that this issue of balance is very important to this Subcommittee. We agree. And we believe that our proposal strikes the balance that has been missing in aviation financing for the last three decades. Our measure stands on two principles: first, the revenue that we collect should tie directly to the costs of providing the services; second, everyone who uses our services should pay their fair share. These principles come straight out of Business 101.

At last week's hearing, also, several Members talked about the importance of equity in funding FAA. Frankly, without implementing these concepts, equity will not exist. It certainly doesn't

exist today. Administrator Blakey has talked about how the current funding system treats the guy flying on a commercial flight in seat 22B, the passenger in the middle seat on a crowded flight at the end of a long day. We all know him. You represent him. You have been him. We have all been him. Right now, that guy is subsidizing the corporate CEO flying in the company jet and, yes, the general aviation pilot flying his Cessna as well. He is the most over-taxed individual in the system.

The Administrator has compared this to sitting in a restaurant and being asked to pay for the meal of the party at the next table. It doesn't make sense in a restaurant and it shouldn't make sense in aviation. That is because commercial aviation foots 95 percent of the bill, even though they use 73 percent of our services. General aviation, on the other hand, uses 16 percent but pays just 3 percent into the Trust Fund. This inequity becomes all the more glaring as our airspace braces for one billion passengers in 2015.

Year after year, passenger numbers in general aviation activity are rising at a record-setting pace. Last year we had 741 million travelers. Tops so far, but it won't be that way for long. We also set another record in 2006: delays. More than 490,000 flights didn't take off or land on time. From the looks of things so far, 2007 isn't shaping up any better.

It doesn't have to be like this. Under our reform proposal, we will be able to implement our NextGen transformation efforts a lot faster than under the current system. To get there we need everyone, commercial and GA operators, to pay for the costs that they impose on the system.

I appreciate that change is hard and the known is comfortable, but this concept of paying for what you use isn't a new one. I think it is even harder to justify an exception for aviation when you realize how much our Nation depends on flying. The next six months are pivotal. With the current financing structure expiring in September, we have to get this right the first time.

Once again, I appreciate the Subcommittee bringing this situation to everyone's attention, and I look forward to a fair hearing on our proposal. Thank you for inviting me to participate today. I look forward to answering your questions.

Mr. COSTELLO. Thank you.

Dr. Dillingham, the Chair recognizes you at this time for your testimony.

Mr. DILLINGHAM. Thank you, Mr. Chairman, Mr. Petri, Mr. Oberstar, Mr. Duncan. This morning I will be discussing GAO's analysis of changes to FAA's funding and budget structure that are contained in the Administration's reauthorization proposal.

Before I talk about those changes, I want to briefly discuss the ability of FAA's current funding system to provide enough revenues for FAA's activities, including the Next Generation Air Transportation System.

As you know, FAA is currently funded through a series of excise taxes and a contribution from the General Fund. This funding structure, with some changes to the excise taxes and the level of General Fund contribution, has successfully funded the FAA budget, a budget that has consistently trended upward.

The Congressional Budget Office recently projected that the revenues that could be obtained through the current funding structure would increase substantially over the next 10 years. Given certain assumptions, including no change in the excise tax rate, CBO estimates that through 2016 the Aviation Trust Fund could support about $19 billion in additional spending.

If Congress thinks that additional revenues are needed to fund NextGen, or for other reasons, Congress can also make additional revenues available under the current funding structure by increasing the excise tax rates or by increasing the General Fund contribution, or both.

Our bottom line is that the current funding system is able to provide enough revenues to support FAA's activities, including the early development of NextGen. However, the concerns that have been voiced about the equity and efficiency of the current system would not be addressed. In addition, keeping the current funding system would not address the Administration's desire to link FAA's revenues closer to its costs.

Now I would like to turn to the Administration's proposal.

Our analysis shows that some of the proposed changes to the current funding system may create a better alignment of FAA revenues and costs, and this alignment could address the concerns about revenue adequacy, equity, and efficiency that have been raised about the current system. However, the ability of the Administration's proposal to address these concerns is critically dependent on two considerations: first, how reasonably does FAA's cost allocation system allocate cost to users and, second, how closely does the proposed funding structure adhere to the principle of cost-based funding.

In the first instance, the key component of the proposed funding system is FAA's cost allocation report. That report was only recently made public and we have had only a short time to review it. So although we can't definitively answer the question about the reasonableness of the proposed allocation, our preliminary analysis raised some concerns that we think require further study. We currently have a detailed study of FAA's cost allocation methodology underway for this Subcommittee.

With regard to adherence to the principles of cost-based funding, we have also identified some concerns in this area, such as the policy decision not to apply a congestion charge to all users of terminal airspace near busy airports. These types of policy decisions on pricing may be appropriate in some instances, but they do not necessarily adhere to the principle of cost-based funding.

Let me now turn to the Administration's proposed changes to FAA's budget structure, which are designed to align FAA budget accounts with its lines of business. On one hand, such an alignment could allow for greater transparency and provide a better link between cost and revenues. For example, the new ATO account, which would fund operations, maintenance, and upgrades to the National Airspace System, could better enable FAA to charge for direct usage and modernization of the system. On the other hand, some FAA activities, such as those related to safety, may not be easy to divide into discreet categories. As a result, it may be difficult to allocate their costs between aviation users that benefit di-

rectly from a safe air traffic control system and the public that receives general safety benefits.

Mr. Chairman, in the final analysis, the Administration has introduced a complex proposal for funding FAA, and we believe that it deserves thoughtful consideration. However, adopting this proposal is not necessary to provide more money to FAA, but it does address some of the concerns that FAA and other stakeholders have raised with the current funding system.

We also think that a more detailed analysis is called for to determine whether FAA's cost allocation methodology can support a fair and efficiency-driven cost-based funding structure for FAA. Members of the Subcommittee, a timely reauthorization of the current excise tax is critical even if Congress chooses to continue its consideration of the Administration's proposal or other alternatives for funding FAA beyond this year.

Thank you, Mr. Chairman.

Mr. COSTELLO. Thank you, Dr. Dillingham.

Mr. Scovel?

Mr. SCOVEL. Chairman Costello, Ranking Member Petri, Members of the Subcommittee, I appreciate the opportunity to be here today to discuss FAA's financing proposal.

I would like to make five points today regarding FAA financing and FAA's proposal.

First, there are important reasons to consider alternative mechanisms to finance the FAA that have been well documented in previous reports and commissions on reforming FAA. While airspace users pay for the system, the current financing mechanism bears little relationship to the services they actually use, and whether they use them at busy or slack times. And concerns have been raised about whether the current system is fair, equitable, or flexible enough to meet FAA's evolving needs. However, it is important to note that FAA's current financing mechanism could support both FAA's ongoing efforts and the potential cost of developing the next generation air traffic control system (NextGen), now pegged at $4.6 billion between fiscal year 2008 and fiscal year 2012. This assumes revenue projections materialize.

Second, at the request of this Subcommittee, we examined the use of the National Airspace System and who contributes to its congestion. Our bottom line conclusion is that there are no marginal users. Specifically, general aviation activity accounts for a not insignificant amount of FAA's workload. Therefore, it is appropriate to consider this activity if the allocation of costs among users of the NAS is going to be included as part of any effort to move to a new financing system.

Third, FAA's cost accounting system provides the underlying data upon which user fees would be based. As we noted in testimony before this Subcommittee in February, FAA's cost accounting system can support the user fees currently envisioned by FAA. Some adjustments to the cost accounting system may be required, depending upon structure of the fees ultimately decided upon. In addition, FAA's method for allocating costs among user groups, which underlies what each group would pay under FAA's proposal, is reasonable. FAA's goal was to allocate costs in a manner that was simple, transparent, and repeatable. Further, FAA's cost allo-

cation method reflects tradeoffs and assumptions made by the agency. For example, FAA determined that the NAS was built to meet the needs of large air carriers. This resulted in fewer costs being allocated to general aviation and some air carriers using medium activity airports than other possible methods. Congress will have to decide if it wants to make similar tradeoffs.

Fourth, FAA's cost recovery proposal does not completely link costs and fees and, therefore, is not fully consistent with its stated rationale for moving to user fees. For example, FAA chose not to recover either the cost of towers at airports that board less than 100,000 passengers annually or flight service stations from general aviation operators. Instead, these costs will be recovered through the General Fund. Nonetheless, there is more of a link between costs and fees under this proposal than currently exists.

Fifth, how best to finance FAA is a policy call for Congress. Nevertheless, a number of issues need to be addressed. FAA must continue to take steps to control costs regardless of whether it is funded in the future by excise taxes or user fees. We also think greater clarity is needed with respect to how FAA will manage and execute NextGen initiatives, particularly given past experiences with cost growth and schedule slips. In addition, FAA's proposed borrowing authority presents serious risks unless it is accompanied by strong controls.

Finally, FAA's proposal provides one year for the new board to be appointed and reach agreement on a fee structure and fee levels, and for FAA to implement a billing system. This timetable is ambitious even if FAA employs a contractor for the billing process.

In sum, FAA is at a critical juncture with regard to how it is financed. Decisions should be made with an eye on FAA's projected workload and funding requirements. Excise taxes are one funding mechanism that could provide sufficient resources to support FAA's needs, but fall short in other regards. User fees are another alternative that are not without controversy, particularly regarding how costs are allocated among users.

Mr. Chairman, that concludes my remarks. I would be happy to answer any questions you or other Members of the Subcommittee may have.

Mr. COSTELLO. Mr. Scovel, thank you.

We, I am told, are going to have votes here pretty soon, but let me just say to the Subcommittee Members that, when votes are called for, we will go to the floor, take a short recess only to allow time for votes, and then we will come back immediately after the last vote and continue the hearing.

I have a comment, Mr. Elwell, concerning the FAA Administrator's statement to the Subcommittee last week and the issue of time, that time is not on our side; and I agree with the Administrator. She stated very clearly that we have to do a reauthorization this year and time is not on our side.

But I want to note, and I think it is worth noting, that one of the reasons why time is not on our side is that the FAA did not produce its reauthorization plan until February the 14th of this year. We asked continually last year when the FAA proposal would be coming out. There was an indication early on that there would be a radical proposal to change the current tax structure and the

way to collect revenue to finance and fund the system, including the modernization program. There was an indication that we would get the plan somewhere around last summer, and then it was September, and then it was by the end of the year, and then it finally came in on February the 14th.

So, you know, I just want to say that we now are dealing with hearings concerning the reauthorization proposal that we just received 30 days ago, and you are proposing a radical change to the system. A Member on the minority side declared the user fee proposal dead on arrival and you heard the Chairman of the Full Committee say today that he wants to give it a proper burial. I want to tell you that if in fact this was a serious proposal, it should have been delivered to the Congress on time, and to the American public and the users of this system, so that they could understand the ramifications, as opposed to delivering it to us and expecting us, in a very short period of time, to radically change the system.

Now, I don't expect a response from you, but I do want to make that point for the record.

Dr. Dillingham, in your statement you indicate, and I will quote: "The current funding structure has supported FAA as FAA's budget has grown, and it can continue to do so to fund planned modernization. Excise tax revenues are forecasted to increase if the current taxes are reauthorized without change and thus could support additional spending." Then you go on to say that, "If necessary, Congress can obtain more revenue by increasing the excise tax rates or the General Fund contribution to the FAA's budget," and it goes on and on.

I want to ask you two questions and ask you to give a very short response, if possible.

I asked the Administrator, when she was here, concerning the FAA's proposed budget, the Administration's budget, if, after we reviewed it, it was apparent to us that the new proposal would generate $600 million less than the current tax structure in fiscal year 2008 and $900 million less in fiscal year 2009 through 2012. And I asked her if she would dispute those figures, and she said that she could not really dispute those figures.

In your review, I ask you to comment. Is there any question that the new proposal that the FAA is proposing, the user fee system, is there any question that it would not generate less in fiscal year 2008 than the current system?

Mr. DILLINGHAM. According to the work that we have done to date, Mr. Chairman, that is correct, there is no evidence.

Mr. COSTELLO. So it is very clear that, if we enacted the proposed plan by the FAA, we would generate $600 million less the first year—those are my figures—and $900 million less from 2009 to fiscal year 2012.

Let me ask you, in your testimony you indicate that the FAA has not taken into account—and I mentioned this in my opening statement—what could happen if in fact the new scheme is enacted into law with an increase in fuel tax, which could result in less revenue collected by the fuel tax than anticipated, and I wonder if you might elaborate on that.

Mr. DILLINGHAM. Yes, sir. We talked to FAA about this and FAA indicated that they did not take this into account because their

rough calculation said that the fuel costs were less than 5 percent of the cost of operating the aircraft. We pointed out that, you know, without actually doing that analysis, you really can't say to what extent less fuel will be purchased. If less fuel is purchased, then less revenues would come in, and that may mean the need to raise the taxes higher or find the funds from someplace else to pay for AIP.

Mr. COSTELLO. Let me ask you about the rationale. As I indicated in my opening statement and I think the FAA has made pretty clear that, in part, the reason that they want to go to this new system is to finance the new modernization program. Your office has done extensive review of FAA acquisitions and the experience that the FAA has had in the past, spending billions of dollars and having what I would call cost overruns or costs that were not anticipated by the FAA, schedule delays, overambitious plans, complex software development, and so on, and two years ago your office reported that 11 of the 16 major projects it reviewed experienced total cost growth of about $5.6 billion.

So I guess my question to you, and I made clear where I am coming from and where I am going to, but I want to ask you in these experience cost growths of 11 of 16 programs of $5.6 billion over what the FAA anticipated, historically speaking, has the FAA had problems with the ATC modernization efforts because Congress did not provide enough money or was not generous enough in providing funding, or what were the reasons why they had a $5.6 billion cost growth in the 11 of the 16 programs?

Mr. DILLINGHAM. Mr. Chairman, there are many reasons why FAA has had cost overruns in the past. As you suggested, we have had the ATC modernization program on our high-risk list for about 15 years now. Among the reasons were also cited earlier in terms of overestimating or underestimating the complexity of the acquisition particularly with regard to software requirements creep, that is, once the program is set, someone or for some reason they will change what is required; lack of stakeholder input in some cases; lack of having the air traffic controllers as a part of the design and development. We also mentioned the fact that sometimes FAA's plans for money to acquire a system was not met by congressional appropriations and such, but that was a much smaller element than the other miscalculations.

Mr. COSTELLO. Mr. Scovel, since it was your report, I would ask you to comment as well.

Mr. SCOVEL. Thank you, Mr. Chairman. We stand by our assessment from 2005. It is clear that the transition to NextGen was then and continues to be an extraordinarily high-risk effort. As Dr. Dillingham has pointed out, it has been on the GAO's high-risk list for a number of years; it has been listed as a top management challenge by my office for our department for several years now as well.

Your summary in your opening statement, Mr. Chairman, captures our concerns with development of NextGen: overly ambitious plans, complex software development, shifting requirements, and we would add to that poor contract management, and we would point to the STARS program as Exhibit A in that regard.

Underlying all of this in terms of not only the interest of this Committee in terms of the financing proposal is the need, when assessing NextGen progress, of not only the cost to the agency, which will be very substantial in terms of many billions of dollars in order to implement NextGen, but also the need for industry to design and install the avionics that will be required in order to interface properly with NextGen programs. My understanding is that recent estimates of the cost to industry have also been in the range of $14 billion to perhaps as much as $20 billion as well over the development cycle of our NextGen programs.

What I am getting at, sir, is the need to integrate not only the agency's plans, but also the industry's needs in order to fully be able to exploit the potential of NextGen.

Mr. COSTELLO. Thank you. As I indicated, I do have a number of other questions. I will come back, hopefully we will have a second opportunity. But let me say that that is exactly one of the reasons why I am concerned with this user fee system, where the agency would have the ability, regardless of what the cost growth is for future gen, that if they underestimated the cost, if there was mismanagement, all they would have to do is generate the revenue to match the cost with very little oversight or control by the Congress. That is one of many issues that concerns me with implementing this user fee system.

The Chair at this time recognizes the Ranking Member, Mr. Petri, for any questions.

Mr. PETRI. Thank you very much, Mr. Chairman.

Mr. Elwell, you may have detected a slight note of skepticism about some of the Administration's financing proposals. I wonder if you could just respond to what you have heard in the context of a question, which is how is the Administration's bill is a better way to fund NextGen than the current system?

Mr. ELWELL. I think the primary reason we believe it is a better way is because, under our proposal, the budget treatment allows us to examine exactly where our costs are and capital expenditures, and set fees to recover exactly what we plan to spend when we intend to spend it. The offsetting collection treatment that is written into the bill allows those funds that we collect through user fees not to compete with other discretionary needs outside of the Administration and all us and you the transparency to follow the money, if you will, from the point at which we allocate the cost, set the fee, recover the funds, and then spend it for what we are collecting it for.

Typically, under the current system, with the financing of the FAA having absolutely no relation either to our current costs or proposed capital expenditures, we believe this is a far more transparent and direct link between costs and expenditures.

Mr. PETRI. Let me ask Dr. Dillingham. It is pretty clear that there have to be assumptions in order to allocate costs, and I just wonder if, doctor, you think the basis for the Administration's cost recovery system—based on your preliminary investigation, are the methods that the FAA used in the development of its cost allocation methodology reasonable? Do you have any comments on it?

Mr. DILLINGHAM. Mr. Petri, if you were to compare the methods and approaches that FAA used with either Federal standards for

setting up cost allocation system or ICAO standards, we would conclude that they are in fact reasonable. What happens after that is within those broad parameters of generally accepted standards or ICAO standards, there is a lot of flexibility and, therefore, within those parameters FAA has made some policy decisions and some assumptions that have turned out to have some pretty powerful implications in terms of cost recovery. But, yes, the short answer is it was a reasonable process.

Mr. PETRI. Dr. Scovel, what is your view of the FAA's method for allocating costs among the different users?

Mr. SCOVEL. Mr. Petri, I would concur with Dr. Dillingham that FAA's proposal, and specifically its cost allocation methodology, is indeed reasonable. As he pointed out, there have been certain policy decisions, what I referred to in my opening statement as tradeoffs made by FAA, specifically in its adoption of general aviation's contention that the NAS has been developed primarily to support the needs of the large air carriers. That resulted in an allocation decision by FAA that, frankly, works to the advantage of general aviation.

You mentioned cost recovery, as well, in your statement to Dr. Dillingham. FAA has made certain decisions in its cost recovery methodology as well that appear to favor to some degree general aviation. Those are policy decisions, of course, by the FAA and reviewable by you on the Committee and the rest of Congress. I am not offering my recommendation in favor of them or any other policy alternative, but I am merely pointing them out for your consideration.

Mr. PETRI. Let me just turn to one other subject briefly. I think there is some proposal for some $5 billion borrowing authority. Could you discuss that? Is that a desirable thing? Should it be done sooner, the timing of it? Should Congress have greater oversight it? Could you just put that in context for us?

Mr. SCOVEL. Yes, sir, I will try to do that. To be up front, I suppose I should say that we are skeptical currently as to the need for that $5 billion borrowing authority. As I understand the proposal, FAA suggests that it would need to borrow and would request authority to borrow up to $5 billion beginning in 2013, with all sums borrowed to be repaid by 2017. The primary basis for our skepticism at this point is the uncertain nature of the purpose for that borrowing.

Given FAA's track record when it comes to acquisition management, we would like to see very strong controls placed over that. The need and the ability to execute with that money program development and implementation within the time frame stated is an important concern of ours. We think that the short time frame between 2013 and 2017, which strikes us as unusual because, clearly, I think what FAA intends to do is to use that money to fund the development and implementation, institution of programs that will have far-ranging effects, far more long-lasting effects than 2017. So, in effect, they are borrowing money on the short-term, having to pay it back almost immediately without being able to see the long-range payoff and benefit. Those are our concerns.

Mr. COSTELLO. I thank the Ranking Member.

The Chair recognizes the gentleman from New York, Mr. Hall, under the five minute rule.

Mr. HALL. Thank you, Mr. Chairman and our Ranking Member, and thank you to our witnesses on the panel.

Just an observation. As the passenger in 22B myself a number of times, I would believe that I am and many of the traveling public, who I talk to as I frequently fly with them, when they are sitting waiting on a late flight, either late departure or late arrival or waiting for a gate to open up, the common opinion out there is not that what we need to do is build some pie-in-the-sky ill-defined $4.6 billion satellite-based system, but what we need is more gates, more runways, more air traffic controllers, and other similar things that cost less money and could be provided now. But that is just a comment.

I wanted to follow up on the question about borrowing starting with Mr. Elwell. What does the FAA anticipate will happen during this 2013 to 2017 time frame that requires the borrowing authority?

Mr. ELWELL. The plan for the purchase and development of NextGen has within the second five-year period—with 2008 to 2012 being the first five years—the second five-year period we anticipate cost spikes that under our proposal would require us to set user fees higher in one year than another. So having the ability to borrow for those expenditures gives some stability to the contracting of those expenditures and also leavens, if you will, the fees that we would charge going forward for the payment of those capital expenditures.

Mr. HALL. Okay, so the decision was made by the Administration philosophically that rather than charge a realistic user fee or tax, if you will, or something that pays as you go, that there is more anticipated borrowing and debt. That is a preferable course for financing this program, am I correct in that?

Mr. ELWELL. I think I would characterize it more as giving us the ability, when the large spikes come, to make the users pay an even user fee over five years as opposed to something that varies widely from year to year.

Mr. HALL. Okay. I will take that answer and ask Dr. Dillingham what your thoughts are on the proposal for $5 billion of borrowing authority in that time frame.

Mr. DILLINGHAM. I think we have some of the same concerns that the Inspector General voiced in terms of the short payback and the borrowing authority, and not knowing exactly what it is going to be used for; and it is not a lot of borrowing authority at that. We also, though, I think, are sort of gratified that there has been a move from the earlier proposal of going to the capital markets, but now FAA is moving towards borrowing it from the Treasury, which is certainly cheaper. But even so, we have a concern about any kind of situation that sort of commits future resources given the way the overall fiscal state of the Government is.

Mr. HALL. Right. Borrowing from a Treasury that is in record debt is a questionable proposition in my opinion.

Here is another topic, the President's proposal to move from excise taxes to fees and financing his dramatic shift. The proposal for AIP just cracks the $3 billion market height and only provides $8.7

billion overall. How can this proposal fund capital improvements at small and mid-sized airports such as Stewart Airport or Westchester in my district, if it provides almost $2 billion less over the next three years than it did over the last three years? I am just curious how a funding proposal that actually produces less money is going to allow improvements at small and mid-sized airports.

I guess first that would be to Mr. Elwell.

Mr. ELWELL. Of course, next week this Committee will have a full hearing on airports, so I don't want to try to get too far out of my area of responsibility, but what I will say, though, is that the proposals that we have in our bill that modify the current formulas we believe—and you will hear this next week in much fuller detail, but the formula changes puts the AIP money where it is most needed. The increase in the PFC proposal, the relaxation of some of the more unnecessary requirements that were placed on airports in capital spending, combined with the new proposal that would have no entitlement money going to those airports which have demonstrated self-sufficiency frees up entitlement money for the airports that need it most.

Mr. HALL. Thank you very much.

Thank you, Mr. Chairman. I yield back.

Mr. COSTELLO. I thank you.

The Chair, at this time, recognizes under the five minute rule Mr. Hayes.

Mr. HAYES. Thank you, Mr. Chairman, and thanks to all the witnesses for being here today. As I have listened very carefully, I find myself in agreement with both Chairman Costello and Oberstar about what is going on, and I have just a couple observations before questions.

Our focus needs to be on making the system better. It is working pretty darn well. We don't need to get our sledge hammer out, which is this very costly system, to drive a carpet tack. I mean, that has come across time and time again. It would seem the FAA is gulping the airline Kool-Aid, as opposed to my friend, Mr. Mica, we talk about sipping 3800 hours a year.

Mr. Elwell, you and I have talked about this at grave length. Emphasis needs to be far greater on next generation aircraft, not next generation cost system, which we just can't seem to get our arms around. Again, it is a problem looking for a solution that does not yet exist. I mean, I think in personal terms of what could be done with STARS and SIDS and existing equipment that everybody has now to provide the kinds of increased capabilities that we will not necessarily get with this huge expensive system. So please focus on those ideas going forward as well.

It is kind of like Earl Blumenauer. If you brought him in here and said, Mr. Blumenauer, your bi-caucus is not paying your fair share for highways. That is what is kind of being said here for general aviation. And it was talked about over and over again how many jobs, how much revenue, how much commerce. The general aviation industry provides a tremendous resource for this Country, and also exporting aircraft. We just can't afford to come in here and kill that whole process.

Tort reform needs to be—some frivolous lawsuits and what that is doing to the industry. That is a good focus of attention. Getting the airline pilot age issue solved in equitable fashion.

A quick question, Mr. Elwell. September 30th, if I understand correctly, the present tax system expires. It is going to be difficult to get something passed in that short amount of time. Wouldn't it be a good idea to go ahead and extend those as we continue this discussion?

Mr. ELWELL. Well, the history of extensions—many on this Committee remember vividly the highway bill. The history of extensions has proven that it wrecks havoc on especially capital programs at the airport level. It is very, very difficult to get starts on extensions that sometimes are just months at a time. Even a one-year extension could present difficulties with capital spending.

Our bill, remember, sir, proposes that the user fee regime not be put into place until fiscal year 2009, and any contemplation of getting the bill passed this year, having that year grace period to have everything set and ready to go.

Mr. HAYES. Well, again, my point is we have got a system that both of these other gentlemen have said is working, and if we go the other way we are going to decrease our revenue, so I think we can hear well enough to know that a six-month extension or we need to come up with a realistic extension to make a system that is working continue to function. In the meantime, 3 percent of the airports are causing the congestion, but we are focusing all our attention on there. There are a number of specific fixes—and you and I could go on for days about what they might be—that could be used immediately and really address those problems, again, without opening up this huge can of worms that has got us all concerned.

I think the questions that have been asked or are in our material have pretty well gone over. It boils down to this: the system works, it has got plenty of revenue; you have got a new system we don't understand that is going to cut revenue. Let's get on down the road and fix the problems that we have got.

Again, we thank you for coming, but I have been talking to—we are going to get all our pilots together; Mr. Salazar, I see, is here and Mr. Ehlers—the equipment manufacturers, talking to our pilots, and also talking to air traffic controllers, and begin to look at some things that we can do right now that won't cost money to speak of and solve some of the problems. But, again, thank you all for wrestling with this.

And I thank the Chairman and the Chairman of the Full Committee and all our Members for being so conscientious and interested in this.

Mr. COSTELLO. The Chair recognizes the gentleman from Colorado, Mr. Salazar.

Mr. SALAZAR. Thank you, Mr. Chairman.

First of all, let me thank the witnesses for being here today and testifying.

In September 2006 there was a hearing where CBO testified and I think Dr. Dillingham's testimony was almost identical to what was said. In general, basically, the CBO testified that the mod-

ernization of NGATS could be accomplished under the existing FAA financing structure.

In Colorado today, for example, the Colorado Department of Transportation tells us that the sale of general aviation fuel is down 23 percent across the State. I am sure it is probably the same in other States as well. The airport managers tell us that this is tied directly to the price of fuel. Nine out of 10 AOPA members have told us that if the tax on aviation gasoline is increased by even 50 cents a gallon, that they will reduce their purchase and they will curtail their flying.

Your proposal, Mr. Elwell, actually basically stated that you will raise aviation taxes by 355 percent. Now, you tell us that you have not taken into account that formula and I have some severe concerns about what is going to happen to general aviation. Right now, I have concerns that your plan is basically not well thought out. So I would like your comments on that.

I would also like Dr. Dillingham to make his recommendation, or I don't know if he can. Could you basically recommend or would you recommend that maybe FAA should wait and extend or wait for one year before we put such a risky proposal on the table?

Mr. Elwell, would you start, please?

Mr. ELWELL. When we laid out the proposal and went through the cost allocation and came up with an assignment of cost to the different users, we found that there is 3 percent input into the Trust Fund from general aviation in total, and, yet, as Mr. Scovel has just said, the allocation showed that GA has 16 percent of the burden on our system.

When we looked at how to set the fees and how the recovery process would work, we set a system that would recover 11 percent, which, of course, is less than the 16 percent of the burden that GA has. Of that 11 percent, 1 percent of the recovery from GA would come from I think the portion of GA you are talking about, 1 percent would come from the piston operator.

And when we looked at the fuel tax rate that would be needed to get there, and then we looked at the overall operating cost of a GA airplane owner, we found that it raised their operating rate to less than 5 percent and did not consider that to be substantial enough to warrant looking into the effect that that would have since, within the past five years, the price of fuel for GA operators had doubled and overall—now, I am not familiar with the Colorado statistics, sir, that you cited, but overall we saw that that translated to about a 2 percent decrease in activity.

So the answer to the question is we looked at it and, as a percentage of operating cost, didn't think that it was going to have as big an impact. And it not only went along with the cost allocation and the recovery of the system, we took almost two years to develop with very substantial interaction with the stakeholders, we just figured that it was and is the fairest way to do it.

Mr. SALAZAR. Dr. Dillingham.

Mr. DILLINGHAM. Mr. Salazar, I think what we said in our testimony is that we have certain concerns both with regard to the cost allocation as well as the cost recovery that FAA has put forward. I think the Chairman spoke this morning about the fact that the proposal has only been out there for a relatively short time, and

we think that it is sort of like the devil is in the details. And this Committee has asked us to look at those details and, though we don't make recommendations in this area, we say we need to put on the table that we do have some relatively serious concerns about the whole makeup of it. I mean, we talked about some of the assumptions that were involved in it. For example, one of the fundamental assumptions is this category of aircraft. They used two categories of aircraft when in fact they could have used many other categories of aircraft. And so, you know, I guess the bottom line for us is that we do have some serious concerns and we again just caution that we go forward with reauthorizing the excise taxes so we don't have that lapse again.

Mr. SALAZAR. Thank you. I yield back.

Mr. COSTELLO. The Chair recognizes the gentleman from Tennessee, Mr. Duncan.

Mr. DUNCAN. Well, thank you very much, Mr. Chairman. You know, this is my 19th year on this Subcommittee and I have sat through quite a few FAA reauthorizations in that time. You mentioned a few minutes ago Mr. Ehlers' statement—and certainly he is one of our most respected Members—when he said at the first hearing that this Administration was dead on—he used those words that we hear so often, dead on arrival, and maybe some parts of it are and maybe there are some parts that we could take a look at.

But, you know, in all those reauthorizations we have worked out some pretty tough issues. Mr. Hayes mentioned the lawsuit a minute ago. Chairman Oberstar will remember when we worked out the general aviation liability reform and took an industry that was just about dead and brought it back to life. Some said we couldn't work that out.

I think one thing that we haven't really taken into consideration too much—we talk about general aviation like it is all one thing, it is all the same, and it is not all the same. There are a lot of differences within general aviation. By the same token, there are a lot of differences—we talk about commercial aviation like it is all one entity, and it is not. There are a lot of differences between the different airlines and between cargo and passenger and several other things.

Mr. Coble asked me, during my six years as Chairman, who was my ranking Member, and I told him Mr. Lipinski. And no chairman and ranking Member, I don't think, could have gotten along any better than Mr. Lipinski and I did, but I told him, I said, the main difference was I liked to hold hearings because I felt like I learned something at every hearing, and his was the Chicago way; I don't think he wanted us to hold any hearings, I think he wanted us to work out everything just between me and him and our office.

[Laughter.]

Mr. DUNCAN. But, you know, there comes a time for both. We can all learn a lot from these hearings, but I don't think you can really work out a lot of these tough issues in a group this big. What I am going to suggest is simple, and after we hold these hearings, you couldn't find two fairer people than Chairman Costello and Mr. Petri. We certainly can't find anybody who knows more about avia-

tion in this Congress than Chairman Oberstar. I know, Mr. Mica, this is his top concern.

I know Administrator Blakey said, when she testified a few days ago, that she had held meetings with all the different parties before they did the proposal, Mr. Elwell. Well, now that we have got the proposal out there, now is when we need to start having some of these meetings.

Dr. Dillingham is not tied in, I don't think, to either side. He said he can't make recommendations, but he sure can give us some good information.

But I think there is some common ground that we can reach to work out most of these things, and we are going to have to make some changes because we have got all this growth that people are talking about, all these passengers that are going to be hitting us.

Mr. Hayes mentioned that 3 percent of the airports are causing most of the problem. We need to take a serious look at that.

The witnesses all said what was reasonable, and there is nothing unreasonable about anything that has been proposed except you have got to take into consideration what is politically feasible at the same time, and sometimes there are a lot of differences.

So I just thought I would make those comments, and I have some suggestions that I am willing to make to Chairman Costello and Mr. Petri at an appropriate time, when we get down to the nitty-gritty, which I think we will before too long.

Thank you, Mr. Chairman.

Mr. COSTELLO. I thank the gentleman from Tennessee.

At this time the Chair recognizes the gentleman from Washington State, Mr. Larsen.

Mr. LARSEN. Thank you, Mr. Chairman.

Dr. Dillingham, you said the devil is in the details. I agree with you. And if that is the case, there is a lot of devil in this proposal. There are a lot of questions unanswered going through this, so I have got a few questions.

I want to go back to borrowing authority a little bit. Mr. Elwell, you talked about the borrowing authority, the $5 billion borrowing authority and the need for that because you anticipated cost spikes in the future. Can you provide any detail of the activities of the borrowing authority, specific details that the borrowing authority would finance and what specifically are the cost spikes that you are referring to that you anticipate from 2013 to 2017?

Mr. ELWELL. I don't have with specificity in the second five years.

Mr. LARSEN. If you don't, then how can you talk about anticipated cost spikes?

Mr. ELWELL. We have it, sir, I don't have the JPDO stats with me.

Mr. LARSEN. Okay.

Mr. ELWELL. I would be happy to provide you plenty of detail for the five years. And, of course, as the Administrator has testified, for the first five years we can enumerate the $4.6 billion that our proposal would raise and exactly what it is spent on, but, yes, we will certainly get that to you.

Mr. LARSEN. Can you talk to us about the borrowing authority and whether or not you are creating a separate account to manage

that money, and to what extent either FAA will have oversight over the spending of that or Congress will have oversight over the spending of those specific dollars being borrowed?

Mr. ELWELL. Yes, sir. The oversight is the same as it is today. It would be subject to annual appropriations as it is today. This Committee's oversight in the reauthorization process and, of course, in the interim, whenever this Committee sees fit to hold hearings or to examine our accounts. In fact, I think the oversight of this Committee on the spending, both on the borrowing side and in the setting of the user fees, which would incorporate this service to the debt, I think the oversight is going to be enhanced because of the transparency of both how we are raising the money and exactly where we are spending it.

The cost allocation study that we propose to do annually would have 600 separate lines of cost that are as transparent as can be, and one of those lines, if borrowing—and, again, remember the borrowing is permissive—if the borrowing were to take place, it would be borrowed against one of those lines, completely to be transparent and examined. The funds would have to be appropriated, but they would also have to be sort of first-in-line, if you will, and paid back by an adjustment to the user fees.

But, in answer to your question, a separate account is not contemplated, it would be built into the fees.

Mr. LARSEN. You said the borrowing is permissive. It may be allowed under the authority if we end up allowing it, but my guess is if we allow it, it will get borrowed, honestly, probably to its fullest amount.

Dr. Dillingham, do you want to provide any answer to any question I asked about the borrowing authority? Do you have other concerns about it, or thoughts?

Mr. DILLINGHAM. No, sir. I think we expressed all of our concerns about the shortness of the duration and what it is actually going to be spent for and whether the Federal Government can in fact stand that, you know, should we need it.

Mr. LARSEN. Okay.

Mr. Scovel?

Mr. SCOVEL. Right. I guess when Mr. Elwell said that the justification for the anticipated spike is uncertain at this time underlies our term—and I used the word skepticism in describing our need for borrowing for the period 2013 through 2017. NGATS funding needs are fairly—and I emphasize fairly—well defined between now and 2012. Beyond that point, my staff finds the funding requirements rather murky.

Mr. LARSEN. Well, you mentioned that for industry alone it might be from $14 billion to $20 billion, which might sound small, but it is a lot of zeroes behind that. It is $6 billion difference. It is $14 billion or it is 48 percent more than that. So it does seem murky. And then going through some of the other numbers in the NGATS proposal as well, I am a little confused about whether or not the total cost of the program is $15 billion to $22 billion or if it is $15 billion to $22 billion plus the $14 billion to $20 billion that you outline. Have you got any thought on that?

Mr. SCOVEL. My understanding is that the agency's needs will be in the range of $15 billion to $20 billion; industry's needs, as well,

$14 billion to $20 billion, perhaps $15 billion to $22 billion. I have seen both ranges. So roughly comparable between the agency's needs for modernization and the industry's funding needs in order to accommodate.

Mr. LARSEN. Thank you. I have may have a second round of questions.

Thank you, Mr. Chairman.

Mr. COSTELLO. I thank the gentleman.

At this time the Chair recognizes the gentleman from North Carolina, Mr. Coble.

Mr. COBLE. Thank you, Mr. Chairman.

Gentlemen, good to have you all with us. You have been bombarded with many questions, but I don't think this one has been put to you.

Mr. Elwell, how have you taken the importance of general aviation into account in drafting your proposed bill?

Mr. ELWELL. I think the importance of general aviation is recognized throughout the bill, sir, and most of that consideration I think you will find in the policy decisions we make in recovery. Much has been said about the increase in the fuel tax that this bill proposes, and that is a necessary step to take if you are going to get fairness in the system, if you are going to get to a point where the users of the system pay for their use of the system.

But as is done in many user fee systems throughout the world, we took—and this has been pointed out by my colleagues on the panel already several times, that when decisions could be made on a policy basis for the recovery of the funds—of course, I want to emphasize again that the allocation of cost is an accounting process, but the recovery of those costs through the setting of fees is where policy can interject, and it is in that area that I think we recognize the importance of GA.

If you look at the bill, we propose that low-activity towers, about 286 of them throughout the Country, be funded by the General Fund. We also propose that flight service stations—flight service stations is service that we did an A-76 on flight service stations some years ago to tremendous savings to the FAA, but those flight service stations are used predominantly by general aviation pilots. The cost of that service, flight service stations, we also put on the General Fund as good for general aviation population.

Mr. COBLE. Thank you, Mr. Elwell.

This will apply to either of the three of you. How does the FAA user fee system affect regional service? Either of you three.

Mr. ELWELL. We don't believe that our proposal will adversely affect regional service at all.

Mr. SCOVEL. Mr. Coble, we anticipate that there will be some effect, although small, in that while there won't be tower fees, for instance, for regional jets landing at the small airports that Mr. Elwell mentioned, when those small regional jets take off and land, for instance, at a larger hub airport, there may well be user fees incurred there. Of course, there will be increased gas taxes, some of which may be passed on to customers.

Now, there may be some potential for offset, I should note in fairness, as well, because if reduced costs to the larger airlines are indeed passed on to passengers, some of those passengers, in trans-

ferring from a regional airline segment to a larger carrier leg of their trip., may find that those costs offset each other, but it is an if, and you can apply your own experience as to how often cost savings are passed on to customers.

Mr. COBLE. Thank you.

Dr. Dillingham, do you want to weigh in on that?

Mr. DILLINGHAM. Mr. Coble, we had the same kind of findings, at least preliminarily, that the IG has just related to you.

Mr. COBLE. I thank you, gentlemen.

Yield back, Mr. Chairman.

Mr. COSTELLO. I thank the gentleman.

At this time the Chair recognizes the Chairman of the Full Committee, Chairman Oberstar.

Mr. OBERSTAR. Thank you, Mr. Chairman.

I greatly appreciate the contributions. Dr. Dillingham, you have always served the interest of aviation and the public interest exceedingly well with your measured and balanced, thoughtful observations and inquiries into aviation, and other issues that we deal with.

Mr. Scovel, I welcome you to the Committee and to a long line of distinguished service by the Inspector General of DOT. We are grateful for your contribution.

Mr. Elwell, we welcomed you for the hearing without a statement previously submitted to the Committee because you are really going to backing up what Ms. Blakey said last week. And one of the things that she said is that the Trust Fund balance cannot support a lapse in funding and that the Fund did lapse 10 years ago because of a disagreement over reauthorization. That is not true. That was just a complete mixup, in fact, a failure in the reauthorization of a series of taxes that the new majority was engaging in, and in the process the airline ticket tax lapsed. It lapsed for a long time. And airline ticket prices didn't go down by 10 percent, they largely stayed the same. Don't rewrite history.

Your governance proposal lists all those who will have input, including foreign carriers. Why foreign carriers?

Mr. ELWELL. The air transportation system advisory board is not proposed to have a foreign carrier.

Mr. OBERSTAR. No, no. You have proposal and then a setting of fees listing all those who will have a contribution and have a voice in it, including foreign carriers. Why?

Mr. ELWELL. In the consultation process, Mr. Chairman, we do—not on the advisory board, but in the consultation process, we do list foreign carriers because they will be charged user fees.

Mr. OBERSTAR. I am not aware the Russians consulted with our carriers when imposing fees on the Polar routes. The Chinese don't consult our carriers when imposing their fees. The Europeans don't include our carriers in setting their fees. This is a misguided proposition.

You also include on the proposed board a representative of the Department of Defense. But then you, later on in the cost-based user fee explanation provision, state the military would not pay these fees. So a non-payer is going to have a voice on the board. Why?

Mr. ELWELL. Well, there are a number of non-payers who have a voice on the board.

Mr. OBERSTAR. But why the military?

Mr. ELWELL. The military uses our services; we use the military's services and——

Mr. OBERSTAR. I know that. But you are going to exempt them fees but give them a voice on the board.

Mr. ELWELL. That is correct.

Mr. OBERSTAR. And have you abandoned the weight component of the formula?

Mr. ELWELL. No, we have——

Mr. OBERSTAR. You are sticking with that?

Mr. ELWELL. The Administrator——

Mr. OBERSTAR. Why don't you use wide bodies instead of weight? That would be a little more credible. I don't want to help you with your proposal, but if you had said wide body aircraft instead of weight of aircraft, it would at least have a relationship to aviation considerations, such as wake turbulence and a distance needed en route, en trail between aircraft.

Mr. ELWELL. I am sorry, was that a question?

Mr. OBERSTAR. No, it is a statement you can respond to.

Mr. ELWELL. I think there is not a fine line to draw between weight. I mean, to say that you would introduce weight in the terminal area for 300,000 pounds, but not for 290,000. So our formulas are progressive with regard to weight. And while we do believe that weight plays a factor in the terminal area with regard to cost, the primary decision with regard to weight was on the policy matters I talked about earlier, the policy decisions for ability to pay and fairness.

Mr. OBERSTAR. Well, it is reasonable for airports to relate landing fees to weight because they do exert pressure on the runway and the taxiway and the parking apron, but they are not exerting a pressure on the air. The block is the same for a 747 as a 787—which will be entering in service, we hope—a 777 or the A-380. Same block. Doesn't have anything to do with weight in the air, but does have a lot to do with wake turbulence. Your proposal would be somewhat more credible—somewhat more credible—if that were included.

It was said well earlier, this proposition is not well thought through. There is a big rush to move from the splendid work that Russ Chew did in allocating costs in the system to then taking that cost allocation and applying it to cost recovery or to financing of the system.

Now, tell me, how is this proposition for a fund going to work, the borrowing authority? How is it going to be capitalized? Are you going to appropriate $5 billion and then FAA is going to borrow against it, or how is this going to work?

Mr. ELWELL. Mr. Chairman, the language allows for borrowing up to $5 billion in the five-year period, the latter five years of the bill. Conceivably, that could be $5 billion in the first year or——

Mr. OBERSTAR. Will FAA go to the Treasury to borrow it?

Mr. ELWELL. Yes, sir.

Mr. OBERSTAR. To the money markets to borrow it?

Mr. ELWELL. Treasury, sir.

Mr. OBERSTAR. To Treasury. And will that be borrowing at current market rates, Treasury notes?

Mr. ELWELL. It would be at the Treasury rates, sir. I am not——

Mr. OBERSTAR. Treasury rates. So it would be repaid to the Treasury at roughly 6 percent or so, whatever that rates happen to be at the time?

Mr. ELWELL. Sounds reasonable.

Mr. OBERSTAR. But not at the overnight rate that the Fed charges to banks.

Mr. ELWELL. I——

Mr. OBERSTAR. You don't know.

Mr. ELWELL. I am not qualified to answer that, sir.

Mr. OBERSTAR. A lot of stuff for us to work our way through.

What is the borrowing authority for? Why do you need that?

Mr. ELWELL. Well, the implementation of NextGen is going to have some capital expenditures in the latter five years, things like the software systems that the controllers and the traffic flow managers use; the civil aviation requirements for position, timing and augmentation; GPS constellation enhancements——

Mr. OBERSTAR. So you are going to borrow in the Treasury against these systems as they develop or as you are investing or as you are contracting with the private sector to build these systems for FAA, or what?

Mr. ELWELL. I think basically all the above, sir. It is to have stable funding on the front end of the contract——

Mr. OBERSTAR. Is that going to be repaid, then, from the fees you propose to charge to aviation?

Mr. ELWELL. Yes, sir.

Mr. OBERSTAR. Oh my goodness. That will take about three years to establish, given the way government systems work. By that time, we might just as well write the death knell for aviation. I just think this is a very dangerous scheme, dangerous to the future of aviation.

I would point out, although FAA and some DOT and some Administration spokesmen say funding is not secure, Congress has rarely failed to appropriate the amount of funds requested, and I think we can well count on a sustainable funding. We may have to increase the dollar amount going in to the ticket tax, but I think these schemes that come up to us in this proposal are risky; they will unbalance our system. For example, you propose to generate revenues from the oceanic system. Is that limited to our 3 million square miles of transatlantic airspace?

Mr. ELWELL. It is limited to the airspace we control, yes, sir.

Mr. OBERSTAR. And to the 18 million square miles we control in the Pacific airspace?

Mr. ELWELL. Yes, sir.

Mr. OBERSTAR. And what about the Polar system that we are using? We cooperate with the Canadian Air Traffic Control System in managing Polar systems. So there won't be a fee for that?

Mr. ELWELL. If the Canadians are controlling it, no.

Mr. OBERSTAR. No. Okay.

Well, I am unpersuaded, unpersuaded at all. I have been through these schemes for 25 years and I think you are off on the wrong track.

Thank you, Mr. Chairman.

Mr. COSTELLO. I thank the Chairman.

The Chair at this time recognizes the gentleman from Florida, Mr. Buchanan.

Mr. BUCHANAN. Thank you, Mr. Chairman, and I want to thank the Committee.

Back to general aviation. I want to get your thoughts or if it has been considered. My son is a pilot, and I am looking at a lot of these people who fly piston planes, and I am concerned about general aviation. One of the things you don't talk about in here is what the cost of the fuel is for these various entities. I know that—and this is just an estimate, because I didn't check it, but probably commercial is paying $2.00 to $2.50 a gallon. I am guessing. Navgas and jet fuel for people that maybe—net jets maybe pays $3.50 a gallon, estimate. But the guy that is flying a piston plane or a small turbine jet is probably paying $4.50 for jet fuel and $5.00 for Navgas.

So when you add 50 cents to that, the guy that is flying the small piston, you know, recreational flier, they are not millionaires, and you go from $5.00 to $5.50 a gallon, it is like in the car business when you are used to driving a large sports utility, it hits $3.00 a gallon. I think it can be a huge psychological factor, if nothing else, and that is one of my biggest concerns.

You look at your fee increase, but you really don't talk about what everybody is paying for their fuel, and I think it is a big factor, because we are close to $5.00 or maybe over $5.00; you add 50 cents, $5.50, $6.00 a gallon, I think it becomes a big issue.

I guess I wanted to ask all the witnesses your thoughts on that, if you gave it any consideration, because at the end of the day, like they have said numerous times, if we are going to drive a lot of people out of this industry, as well as the FBOs, some of them, then what have we really done in terms of increasing revenues? So I would like to—and I am kind of for sharing the burden, but I want to make sure, at the end of the day, there is enough gallons being bought that it makes sense, your 50 cents increase a gallon.

Mr. Elwell?

Mr. ELWELL. Thank you, sir. Again, when you look at the current burden, the current taxes, 19.3 cents and 21.8 for avgas and jet fuel, respectively. That represents about 1.5 percent of the total operating cost of those respective aircraft. The raising of the gas tax brings it up to still be under 5 percent. And as I said earlier, when the price of gas—which, by the way, is the proxy, but it is somewhat unrelated to the tax; the tax is the way in which the user will pay for their cost burden on the system. But when the price of fuel went up post-9/11, in the past five years, by almost doubling, we did not see a significant diminution of general aviation activity that we could peg to that, to the rising fuel.

So I think it is important to look at this rise in the fuel tax in relation to total operating cost. For instance, for a piston user, on average, I think it is about $2.00 to $4.00 per hour, and on the numbers that general aviation survey provides for the average recreational pilot, we are talking about anywhere from $400 to $500 additional a year to operate a piston aircraft, single-engine piston aircraft. So these are, in our estimation, not huge numbers, not de-

bilitating numbers. And certainly when you look at how we propose to recover their burden on our system, 11 percent versus the 16 percent, I think we have made a lot of accommodation for GA everywhere we could.

Mr. BUCHANAN. I talk to a lot of piston operators and a lot of them are concerned. I think by taking this up to $5.50, $6.00 a gallon, because I think that is where the reality is going to be, and if we add some other kind of increase, that is what I am hearing is the sentiment in Florida, and we have a lot of GA people there that are flying.

Doctor, you want to comment on that, any thoughts?

Mr. DILLINGHAM. Yes, Mr. Buchanan. We mentioned earlier that, as far as we could determine, FAA had not taken into account this issue of price elasticity: at what point does it become too expensive for certain aviation participants to fly. We don't know if it will make a difference, but there are statistical techniques that could be applied to in fact see if it made a difference. And, in fact, because a decision was made to divide the aviation community into piston and turbine, and not further divide it, it sort of set the stage for all things that followed in terms of cost recovery.

It is also the case that, as Mr. Elwell has said, certain policy decisions were made in terms of cost recovery, and as I am sure you are aware, around the world other policy decisions are made with regard to how to recover costs from GA operators, and in many cases it is a nominal fee. Of course, their GA is much smaller than ours, but it is still a policy decision that is made.

Mr. SCOVEL. Mr. Buchanan, if I may.

Mr. BUCHANAN. Yes.

Mr. SCOVEL. Thank you. I don't have before me figures regarding the price per gallon for Avgas or jet fuel, for instance; however, I will say that our research shows that while the percentage increase in fuel taxes for general aviation amounts to, by our calculation, 334 percent—and that is an eye-popping number, to be sure—our research further shows that the cost typically to the small piston aircraft user amounts to about $8.00 and change per flight hour; a larger amount, to be sure, for the user of a larger business jet, but in terms of the small recreational user we are looking, by our calculations, at about $8.00 per flight hour increase.

Mr. BUCHANAN. Yes. Some friends that I have got that used to fly twin King Airs are going down to single engine turbo props. They are looking at efficiency areas. They are still flying a bunch, but they are flying in planes that are more efficient per hour, operating cost.

So I just would ask you to take that into account when you are looking at this, where navgas—because they said 410,000 is part of the organization. There must be a million. I don't know what the total number is, but there are a lot of folks out there, and I can tell you, the other business I am in is the car business, and there is some psychological barriers that affect certain areas, where they will take that big sports utility and get something else. They liked it, but not that much.

Thank you.

Mr. COSTELLO. I thank the gentleman from Florida.

The Chair recognizes at this time the gentleman from Michigan, Dr. Ehlers.

Mr. EHLERS. Thank you, Mr. Chairman. I think we sort of beat the gas tax to death, although I am sure we have a lot more work to do on it. Let me shift gears a bit.

Perhaps it is my science background that makes me interested in this, but in the 13 years on this Subcommittee I have noticed a considerable number of cost overruns every time we have a new generation of equipment. So my questions are, first of all, for Mr. Dillingham, and we will go on from there.

The first question is how certain are you that the cost figures are accurately calculated and based on reasonable assumptions about developing the NextGen system? Secondly, the assumption has been that a good deal of the research effort would come from NASA, whereas NASA is shifting money, appears to be shifting money away from their aeronautics part and into the space area and the research. Will NASA be able to, as part of JPDO, really contribute substantially to this? And, if so, does that have to be paid for out of the increased fees or is that going to come out of NASA's research budget?

So most of those questions are relating to the progress of the whole JPDO and developing the NextGen system. So you are the independent observer here. I would appreciate your comments.

Mr. DILLINGHAM. Let me take on the last question first, with regard to the research and development efforts that were, early on, sort of slated for NASA. As you have just spoken about, their budget has been reduced significantly, and their focus has also been changed as well. It is an ongoing problem that has to be worked out from FAA's perspective in terms of how much is it going to cost to do the necessary research and development that needs to proceed some of the NextGen systems. This research is needed for regulation development, it is needed for demonstrations. All of these things need to be taken care of now, before the systems are acquired.

FAA has asked for certain amounts of money in this year's budget to start to close where NASA used to be; however, it is not clear to us that that is enough money. Their own REDAC committee has said that, because FAA's RE&D budget and its capabilities have been reduced so much, that it might take several years before that could be built up and several hundreds of millions of dollars as well to build that up. So it is an issue that has not been resolved.

Your first question was about whether the cost figures were correct. I think it is an estimate at this point in time. To give FAA credit, clearly, they are working in a unity fashion with industry and developers as well to come up with cost figures, but, again, it is just an estimate and estimates have been made before. FAA has in fact done better keeping on budget and on cost recently, but still, as I said earlier this morning, we maintain the ATC modernization on our high-risk list because it is in fact high-risk both for cost overruns and schedule breaches.

Mr. EHLERS. Let me just ask Mr. Elwell and Mr. Scovel to comment as well.

Mr. Elwell? Just on the last part, about your confidence level on the cost estimates for the research and development of the NextGen system.

Mr. ELWELL. We have a high confidence in the RE&D. Our concern, of course, is in being able to spend the money we need in the process, in the iterative process that Mr. Dillingham mentioned, which is a big part of our proposal, is the laying out of what is required to build NextGen and to be able to collect the fees necessary to spend the money where we need to spend it, which we at times have difficulty doing under the current system. But I think the estimates are realistic. As was pointed out, $14 billion to $22 billion through 2025 represents—or $15 billion to $22 billion, I am sorry, on our side represents sort of the going forward with NextGen. There are a lot of variables that are hard to pin down in the latter years, but the JPDO and the organizational evolution partnership with industry is going to be very helpful in getting that narrowed as we go forward.

Mr. EHLERS. Mr. Scovel, any final words?

Mr. SCOVEL. Yes. Thank you, Mr. Ehlers. As I noted before, the price tag of $4.6 billion for NextGen for the period 2008 through 2012 is the current price tag. To be sure, it needs refinement. Beyond 2012, as I mentioned before, we see a very uncertain future regarding the level of funding required for NextGen.

With regard to NASA, NASA has already told us they intend to spend less. You have noted that they are turning their research more to space instead of aeronautics. We reported in our report in February concerning JPDO that NASA intends, as well, to turn its focus more to basic research and less to the applied science and information technology that may be of most benefit to NextGen efforts.

If FAA intends to look to NASA exclusively for its research—and I know that is not the exclusive focus, but largely to NASA—then we think that is a wildcard, given NASA's stated funding intentions.

No question, lots of development ahead. Refinement needs to be accomplished both by FAA and industry. Beyond 2012 it is an uncertain picture for us.

Mr. EHLERS. Thank you very much.

Mr. COSTELLO. I thank the gentleman.

Let me mention to both the witnesses and those in the audience that you will notice a number of empty chairs over here. The leadership has called a caucus, so most of our Members are in caucus, and I am certain that Mr. Larsen probably just returned from there, and others will shortly.

Let me go to a second round.

Have you had a chance, Ms. Fallin, to ask? Well, let me recognize you at this time to ask questions or any statement you would like to make.

Ms. FALLIN. Thank you, Mr. Chairman. I appreciate the time, and I appreciate all of you being so patient to sit here for so long and answer all of our questions. I know that all of you are very committed to what you do and believe in the different positions that you are taking.

I do find it interesting that, from sitting up here, it appears that the FAA and the DOT seem to have a difference of opinion as to how this is going to work, and the FAA's proposed financing methods for the Next Generation and how FAA will meet its goals in raising enough revenue for the next system.

I hear one person say, and I think it was you, Dr. Dillingham, that the new system would generate $600 million less—is that a true figure?—$600 million less under the new system than what we currently get today. That is correct?

Mr. DILLINGHAM. Yes, that is correct.

Ms. FALLIN. Okay. And, Mr. Elwell, I have great respect for the FAA and love the FAA, and I have respect for what you are trying to do to update technology and take care of all the increased passenger needs and flight delays, and all the different things that we need to deal with. I also believe that we should have a culture of continuous improvement in government in whatever we are doing. But I was curious about how many years have we had the current fee structure? How many years have we had that system in place, the one that you are proposing to leave?

Mr. ELWELL. Since 1970, I believe, when the Airport and Airway Trust Fund was developed.

Ms. FALLIN. Because I remember you saying that everyone should pay their fair share and that we should link revenue to costs. So I guess my curiosity was if we have had it that long, has it always been a problem, considering what your goals are, to link revenue to costs and for everybody to pay their fair share?

Mr. ELWELL. Well, it has been a growing problem, ma'am, since deregulation in 1979, because when—actually, when it was developed, the excise tax system was meant and designed by Congress to be a cost fee for services and it was—I am going to use the term "alignable" because we were a regulated industry. The FAA regulated the industry, could set the price of tickets, and could therefore drive the generation of revenue.

Since deregulation, that has not been the case. In fact, we did bring a slide, and I don't know if it is cued up, but it would show you, as a function of departures over time, aircraft departures, through about 2006, the revenue generated, even though departures and, therefore, ostensibly revenue and the number of passengers flying seems to be steady, the revenue generation is really all over the place. And, unfortunately, the spikes—if it comes up—that you will see in the revenue, unfortunately, those spikes on either the high or low side rarely correspond with a same spike in the spending needs, and that is the problem, is that we have never been fully aligned on the spending side, and this proposal would do that.

Ms. FALLIN. Okay.

Mr. ELWELL. We didn't get the slide, I am sorry.

Ms. FALLIN. Thank you, Mr. Chairman. If I could continue on for just a moment.

Dr. Dillingham stated that with the present fee structure and the growth in the FAA revenue, that he predicted it would generate around $19 billion in revenue?

Mr. DILLINGHAM. Yes, ma'am. We were quoting the Congressional Budget Office analysis.

Ms. FALLIN. And that with that type of growth and revenue, that the FAA would be able to pay for the NextGen system, is that true?

Mr. DILLINGHAM. That is correct.

Ms. FALLIN. But although it would not meet your goal of having more revenue-to-cost basis, but it would meet your goal of transforming the system to meet the passenger increase, the time delays, the increased traffic in certain airports, that you would be able to develop the system with current revenues in place as they are now.

Mr. ELWELL. As the Administrator said, it is conceivable, but on a much different schedule, we would anticipate, because of the difficulty in getting, under the current system, as the Trust Fund is filled, being able to spend the money you need on facilities and equipment when you need it. Our proposal, through the user fee proposal, forecasts a billion more dedicated F&E by 2012 than even the last year's budget, the 2007 budget that goes through 2012 without the user fee proposal.

So while it is possible, as the Administrator said, to get it done, we don't believe that it could be done near as efficiently or expeditiously as our proposal, which is designed to generate the funds we need to invest in the system when we need it.

Ms. FALLIN. Thank you, Mr. Chairman. I yield back my time.

Mr. COSTELLO. I thank the gentlelady from Oklahoma.

We are going to a second round of questioning, and I am told any minute we will get called for a vote.

Dr. Dillingham, I mentioned in my opening statement and I made a comment as well about the fact that the Administrator has said that they recently have 100 percent record on major capital projects on time and within budget. Frankly, I want to ask you, you have looked at this. Is that because certain modernization programs have been re-baselined, for instance, like STARS, in order to, frankly, hide some of the growth in cost? I would like your comments.

Mr. DILLINGHAM. Mr. Chairman, we are still looking at that issue for you and the Subcommittee. It is true that FAA has announced that for the last three years they have had their major systems acquisitions on time and on budget in terms of the 80 percent in terms of time and the 10 percent in terms of budget. It is also true that some of those systems have been re-baselined, and that re-baselining can lessen the transparency of knowing what the original baselines were.

Our discussions so far with OMB indicate that under certain circumstances re-baselining is permissible and that information is communicated to OMB. Our question now is to what extent is that information communicated to the Congress and to the American public in terms of full disclosure, and we are still working on that and hope to have a report for you soon.

Mr. COSTELLO. That is a very diplomatic way to put it, lessen the transparency. And I realize that OMB, under certain circumstances, will say it is permissible, but it seems to me that it is a pretty difficult way for us to go back and assess the true costs.

Mr. Scovel, I wonder if you might comment as well.

Mr. SCOVEL. Yes, thank you, Mr. Chairman. We would concur in Dr. Dillingham's assessment of, as he and you put it, the lack of

transparency, perhaps, in assessing the true cost and schedule requirements of some programs that have been re-baselined. It is important to note that a re-baselined program is simply a snapshot in time of cost and schedule requirements. We would hope that any program, if you have re-baselined it recently enough, you could hit your cost and schedule goals.

We would further note that some of the performance targets that have been identified for the programs that have been re-baselined are simply, if you will, hardware delivery items, rather than performance capability based, and so they may not represent, in our view, a true picture of the progress a program may be making to full completion and readiness, as opposed to some intermediate steps that are less helpful to the Committee and to the public in assessing how FAA is executing a given program.

Mr. COSTELLO. Thank you.

Dr. Dillingham, I guess it was a few years ago the Committee asked you to take a look at how some other countries were funding their air traffic control system, and, as I recall, your team did look at some other countries and came back, and I think that some of those countries the general aviation community there assessed a smaller fee than what the FAA is proposing here in the reauthorization. I wonder if you might tell us the findings, in other words, what some of the other countries are doing relative to general aviation versus what the FAA is proposing in their reauthorization.

Mr. DILLINGHAM. Yes, Mr. Chairman. We did undertake that study and looked at five countries around the world, including some European states, Canada and Australia, and basically what we found is that, with regard to GA—keeping in mind that the U.S. GA population is many, many times larger than anyplace else in the world, but accommodations were made for the general aviation community in that in some cases they were charged a nominal fee based on either the number of flights that they took in a given fiscal year or they were just charged a nominal fee, period, without regard to the number of flights. For example, in Canada, they charge about $70 a year as an annual fee. That has been recently increased and also added a congestion charge when they go into a busy airport; and in Australia they do it by the number of flights they do in a fiscal year.

So, again, it is the issue of cost allocation versus cost recovery, and that policy decision about how to recover costs from GA differs from what we are proposing here.

Mr. COSTELLO. So the other countries that you looked at, they are not attempting to do cost recovery as the FAA is proposing here?

Mr. DILLINGHAM. That is correct, sir.

Mr. COSTELLO. Okay. Let me ask you what the implications are of basing the cost recovery only on cost allocation, as opposed to principles, for instance, of the ability to pay. What are the implications, if in fact this system is implemented, strictly based on cost recovery?

Mr. DILLINGHAM. I think one of the principal implications is something that has been mentioned many, many times this morning, that is, to what extent will this act as a damper on the general aviation industry in terms of the number of general aviation fliers,

as well as the general aviation manufacturing industry. It is an unknown, but clearly a possibility exists.

Mr. COSTELLO. Mr. Scovel, in your testimony you talk about the challenge that the FAA faces in a billing system within available time frames, and I wonder if you would elaborate on that.

Mr. SCOVEL. Yes, thank you, Mr. Chairman. If I could use a couple examples. The STARS program, which I know is well familiar to this Committee, involves a program that started off to provide for terminal modernization at 170 sites nationwide, for a cost of about $940 million. As the program developed, FAA found that it had funding and installation problems. It was forced to reassess the program. Ultimately, when the cost appeared to approach $2 billion, the program was cut to install that modernization equipment at 50 more sites. Ultimately, that in fact was reduced to 47, and the cost now is well in excess of $1 billion for a much smaller and less capable system.

That doesn't also include the cost of Common ARTS, which was the controlling system then in place and which STARS was intended to replace. That system had to be updated and modernized at a number of other locations in order to provide those locations with the capability needed, when in fact those locations had been anticipated to receive STARS but ultimately were denied that capability.

FTI is another example, sir, which my office has studied. This is the FAA's telecommunication initiative. It has been re-baselined. Its cost and schedule time lines have been extended. Our current assessment shows that FTI is still on a problem track; it has FAA's full attention, however, but the schedule has been extended. The importance of FTI as a platform for NextGen accommodation can't be overstated. We are carefully watching FTI and we have a current assessment of FAA's remedial actions in progress.[The witness added the following subsequent to the hearing: As we note in our testimony, FAA's proposal provides 1 year for the new board to be appointed and reach agreement on a fee structure and fee levels, and for FAA to implement a billing system based on the fee structure. This is ambitious even if FAA employs a contractor. FAA has a study underway to examine how a billing system could be setup, but we have not reviewed it. We think just getting the board up and running will be more time-consuming than FAA's proposal suggests.]

Mr. COSTELLO. I thank you.

At this time, the Chair recognizes the gentleman from Washington State, Mr. Larsen.

Mr. LARSEN. Thank you, Mr. Chairman. Just a few questions here before I think we are getting called to vote, having to do with the fee collection process. I don't know if those questions have been asked yet, but I hope not.

Mr. Elwell, the FAA's proposal will provide the FAA with the authority to terminate, reduce or withhold non-emergency services if a user fails to pay user fees. If you could distinguish and provide examples of what would be emergency services and what would be non-emergency services?

Mr. ELWELL. Sir, I don't think that I am really qualified to enumerate that. There is a hearing tomorrow, an ops and safety hear-

ing that is, Nick Sabatini and his shop will be eminently qualified to answer that.

Mr. LARSEN. Okay. Can you answer the question, if a user believes there is an error and they are billed for a service they did not actually receive, what sort of appeal process does the FAA envision having?

Mr. ELWELL. The appeal process I believe is in the language of the bill. I do not have the tenets of that memorized. Again, I feel like I am not answering any of your questions. I apologize. I would be happy to get that for you.

Mr. LARSEN. I feel that way, too.

[Laughter.]

Mr. ELWELL. I am sorry, sir. But there is built in language on the appeal process. And we anticipate that, especially in the early stages, to be part of the growing pains of a brand new system. But there is an appeal process built in.

Mr. LARSEN. We have asked Dr. Dillingham this question, I think, but I would like to ask you this question. Has the FAA analyzed the long-term effects of the user fee proposal on the growth of various aviation users, such as air taxis or business or general aviation? Have you looked at that and are you taking that into account, the results of those forecasts into account?

Mr. ELWELL. Again, as I said before, clearly the most dramatic change in payment is the GA community, because they were the most dramatic difference in what they are currently paying versus the costs they impose. While we didn't do a structured or detailed analysis of the effects that this would have going forward, we did feel an examination of what the tax means as a percent of operating costs that it was not as substantial as the recent doubling of the cost of gas over the past five years, which as I said before, did not demonstrate a significant reduction in activity.

So I am not sure what you mean by long-term. But we don't have a study, per se.

Mr. LARSEN. I asked a question earlier of Mr. Scovel about the estimate of the cost of the program, an FAA cost versus an industry cost to implement Next Generation. I think the numbers I saw were $15 billion to $22 billion, again a very wide range. on the FAA's side, then a $14 billion to $20 billion range for industry costs for implementation. Are those the numbers you are operating under?

Mr. ELWELL. Yes, sir, those are the estimates. Which I would point out are actually very closely in line with the estimates the Europeans are giving for SESAR.

Mr. LARSEN. I personally don't have too much of a problem with the idea of Next Generation. The name is not all that descriptive, but the concepts behind it, satellite based and so on. But in other committees that I sit on, we have a problem with some other projects. It comes down to Robert Frost's poem, a line from his poem that a man's reach should exceed his grasp, or what's a heaven for. It seems in a lot of these programs, our reach never quite gets to the grasp. That has been the concern that we have seen in some other major spending programs in other committees that I sit on, major spending programs in this Committee and other Subcommittees we sit on. It drives me to extreme caution, as well,

when I see the long-term, the 25 years of build-out, 18 to 25 years of build-out and the cost of this program. Is the technology mature to do this? Will it be mature by the time we expect it to be implemented? The financing plan seems to be questionable as well. At least we have a lot of questions about the financing plan as well.

I just don't want this to turn into, I don't want to turn a $25 billion venture into a $25 billion adventure.

Mr. COSTELLO. I thank the gentleman. I thank our witnesses on the first panel for their testimony today. We appreciate your testimony and your attempts to answer the questions that we have posed to you.

We will ask the second panel to come forward so we can begin the testimony of the second panel. Again, thank you, gentlemen.

While the second panel is coming forward, let me make some introductions of the witnesses on our second panel. Mr. Edward Faberman, who is the Executive Director of the Air Carrier Association of America; Mr. Phil Boyer, the President of the Aircraft Owners and Pilots Association; Mr. Jim May, President and CEO of the Air Transport Association of America; Mr. Stephen Alterman, President, Cargo Airline Association; Mr. Matthew Zuccaro, President of the Helicopter Association International; Mr. Ed Bolen, President and CEO of the National Business Aviation Association; and Mr. Roger Cohen, President of the Regional Airline Association.

Obviously this is a large panel. As I mentioned, we have a caucus going on on the Democratic side. We are about to start some votes, I am told, in the next 15 to 30 minutes. So I would ask our witnesses to summarize their statements and to adhere to the five minute rule, if they would. I would recognize Mr. Faberman for his statement at this time.

TESTIMONY OF EDWARD P. FABERMAN, EXECUTIVE DIRECTOR, AIR CARRIER ASSOCIATION OF AMERICA; PHIL BOYER, PRESIDENT, AIRCRAFT OWNERS And PILOTS ASSOCIATION; JAMES C. MAY, PRESIDENT AND CEO, AIR TRANSPORT ASSOCIATION OF AMERICA; STEPHEN A. ALTERMAN, PRESIDENT, CARGO AIRLINE ASSOCIATION; MATTHEW ZUCCARO, PRESIDENT, HELICOPTER ASSOCIATION INTERNATIONAL; ED BOLEN, PRESIDENT AND CEO, NATIONAL BUSINESS AVIATION ASSOCIATION; ROGER COHEN, PRESIDENT, REGIONAL AIRLINE ASSOCIATION

Mr. FABERMAN. Thank you and good afternoon.

I am glad to be here today to talk about the future of the Nation's aviation system and propose funding mechanisms to support that system. I am the Executive Director of the Air Carriers Association, that continues to try to bring affordable air fares to American travelers around the Country.

The Administration's financing proposal addresses a very important issue, but also raises a number of significant questions, including funding requirements should be fairly assessed to all operators in the system and to the general fund; congestion charges must not be allowed to further block access and competition; passenger facility charges should not automatically increase as those charges disproportionately impact lower fares; distribution of access at capac-

ity-constrained airports like LaGuardia should promote competition and must not further limit competition; and the Air Transportation Safety Advisory Board must include a representative of low-cost carriers.

It is essential that we create a first-rate system that makes flying easier and safer. At the same time, we must continue the dream of deregulation. This Committee has played an active role in improving the Nation's aviation system and in opening the doors to competition and travel options for consumers.

We support setting modernization as a priority. It is essential that the Nation's air traffic system be upgraded to meet growing demand and ensure the smooth operation of the system, while promoting maximum travel opportunities. We must also understand that we are not operating in an environment where costs are stable. Rather, costs, including fuel, security and facility expenses, continue to increase. Additionally, the cost for small airlines is higher at many airports because they do not have dedicated facilities and often struggle to get the facilities they need to operate.

The Department has taken steps to open skies around the world. We want to see those skies now opened in this Country.

Let me just comment on a few of the issues that have been raised this morning. We urge Congress to consider all possible cost-cutting measures and to take appropriate steps to enure that all stakeholders fairly participate in funding the system. The costs associated with these efforts cannot be borne by air carriers alone. Since the Nation's air traffic system is a national system that benefits travelers, communities, manufacturers, the entire travel and tourism industry and business expansion, general fund contributions must be at least maintained at existing levels.

The proposal allows the FAA to increase fees on its own initiative with very little oversight. Therefore, we cannot endorse that approach. Congestion fees must apply to all operators who use the Nation's largest and most congested airports. The cost-based congestion charge in the proposal has no restrictions and seems limitless. Any congestion charge the FAA decides to issue should be imposed on those carriers actually causing the congestion. We don't believe it is appropriate to charge a small carrier or any operator with a small number of flights at a particular airport the same charges as those operating hundreds of flights.

Low-cost carriers are already blocked from many airports and their operations are severely restricted in others. If congestion charges are imposed on carriers with only a few operations, it may close the door to access completely. As to general aviation costs, we are not proposing that they be significantly increased for less congested airports or that aircraft at small, uncongested airports should face any new charges.

Rather, at congested or closed airports, general aviation aircraft should pay fees identical to those paid by carriers operating full-size aircraft. The same applies for fees for regional jets. For example, a regional jet flying between LaGuardia and National Airport should not pay 20 percent less of what a larger aircraft pays when that regional jet blocks others from operating at those airports.

Currently, regional jets, VLJs and general aviation at congested airports contribute equally to congestion but pay a great deal less.

PFCs cannot be analyzed in a vacuum because they are not the only fees or costs the airlines must absorb. Even though a small PFC increase might improve airport facilities, increasing PFCs as proposed by some parties would impact the ability to provide the low fares necessary to generate system growth. It could also have a real impact on travel, because many people will travel more frequently when lower fares are available.

Congestion pricing, we believe we should consider it and look at it. However, there are too many questions out there as to whether it will promote, destroy or completely close opportunities for growth by all sectors of the industry. I also want to note that it is important that the Air Transportation System Advisory Board include representatives of all in the industry, including low-cost carriers.

We applaud the Committee for holding these hearings and we are very anxious to work with the Committee and the Administration to craft a bill that will effectively serve the airline industry and consumers. Our dream is to create a high-tech, safe and secure system that maximizes consumer choices and ensures that low fares are available to all. The concerns noted above, as well as those outlined by the Members of this Committee, and other parties, must be thoroughly discussed and significant revisions must be made before this proposal becomes a reality. This is only step one.

Thank you.

Mr. COSTELLO. Thank you. The Chair recognizes Mr. Boyer.

Mr. BOYER. Mr. Chairman, thank you.

As you know, I am President of the Aircraft Owners and Pilots Association, probably the first user group to sit here at the table. We have talked a lot about the effect of this bill on the general aviation community.

I represent 410,000 of those pilots. That is more than two-third of the Nation's pilots and aircraft owners. And they use their planes, in the main, like you use a personal automobile, for business, personal travel. We are talking the average type plan, a single engine, piston airplane.

The Chairman mentioned his number of years on this Committee. I have sat on this side of the table for about six years shy of the number of years you have, Chairman Oberstar. I have never seen such a distortion at a reauthorization hearing in all my years as this one here. We are manufacturing a crisis, a crisis about a Next Generation system, a crisis about funding. Where is the crisis? I would ask you to look at that very closely.

But let me go on record. Status quo, to our organization, to our pilots, to our Members, is not an option. We don't want to just renew what we had exactly. But if we could get user fees off the table we could begin a dialogue on many of the things all of us here and the panel before me, and others you have heard from agree on. Next Generation system and all kinds of other things, including, perhaps, the kind of excise taxes that are paid. Because as you know, Mr. Chairman, we have addressed those before. We have raised them, we have changed the configuration, et cetera. All those things are possible.

In business we always ask, what problem are we trying to solve? I would say there are various answers from whoever you ask that

question of. The Administration, we haven't talked about it yet. But they want to cut back on the general taxpayer fund contribution to the system. The airlines, in spite of the huge Government bailout that they have been given in the last few years, wants to cut back on the taxes that their passengers, not the airlines themselves, but their passengers pay to ride the system. And the FAA, unfortunately, it wants to get out from under the Government, the Congressional control that has served that agency very well for many, many years.

The Next Generation Air Transportation System, for heaven's sake, what a name to give to something. Obviously it is trying to sell you this crisis. Oh, we have got to do this now, we have got to do it to get things ready. But they have not determined the needs yet. They have no shopping list yet. It has not been priced out. Sitting next to me, my counterpart, is Mr. May. We agree on a lot more than you might think we might agree about on this proposal. But the one thing I think we agree on is we do need a Next Generation system. He and I co-chair the industry institute that handles the JPDO decision-making, the input.

At this moment, neither one of us, I would maintain, could spell out the technologies that are going to be burdens to his operators and my operators, the price of those technologies, nor could we put a price on what the ground base and the FAA has to pay.

My concern, and once again, getting user fees off the table, is get them out of here, and then we can get on with the dialogue. It is the camel's nose under the tent. Wherever you look in the world, remember, Jim would claim and the FAA would claim, well, these are primarily for the airlines. We say once they start at one segment of aviation, there is what I would call the trickle-down effect. Eventually, it gets all the way to the small operator flying VFR.

In this proposal, there are a lot of catch phrases and carefully worded sentences: GA will pay primarily through the fuel tax. Primarily. There is congestion pricing in this bill, user fees for using the large air space considerations that we call Class B. A lot of certification charges, also.

How would that affect users? Well, you asked questions of the last panel about the foreign models. I got an e-mail from an old friend from Australia just last week. When I was Chairman of the CAA, their civil aeronautics authority, I accepted the government's assurance that the user pays would put pressure on to reduce costs. The assurance was wrong. We now have user pays, general aviation is almost destroyed and there has been no real pressure on the bureaucracy to reduce costs.

The commercialization of their equivalent of FAA and their equivalent of our air traffic organization has been a disaster for GA in Australia. I believe we will have the same happen in the United States if it goes ahead. And this was from somebody who tried to sell me on user fees 10 years ago. It is pretty plain and simple, when you look at the figures from their own government, a 28 percent decline in general aviation.

Congressional oversight, we have talked about it, another catch phrase, offsetting collections. Look that up carefully. It is one appropriation that then goes outside of Congress' control. You have served us very, very well. I do not know that we will be as well

served by an Air Transportation Advisory Board. Once again, Mr. May, to my left here, even agrees, as I have heard his recent statements after seeing the proposal, that it doesn't give the airlines enough input into how the money will be spent.

The huge gas tax increase, my gosh, I can't tell you how painful that will be, and I don't have to, because the Members have probably been writing you and telling you exactly what they think. From 19.4 cents to 70.1 cents? We should have been having these hearings every year and slowly graduating that tax. I have never heard of an increase that huge at one particular time.

Then you heard it from Dan Elwell, the Administrator, who says less than 5 percent of the cost of operating a plane, it is not a burden on pilots. Well, all you have to do is read some of those letters. Here is what one of our Members say. I am not going to belabor this tax increase, but let's look how it falls graphically, 3.4 four times for piston aircraft, 3.33 times for jet aircraft.

But what about the other side of the coin? The legacy airlines, a huge savings, and the low-cost airlines, a savings also. Here is the table, but you know, the numbers that we had—I am sorry we spent the money, we used a consultant. And he came up with almost the same numbers you heard from this first panel. We are a billion dollars off, but what is that among friends. And that is, plenty of money here for the operations. Let's not forget that general fund contribution. Let's remember that the Administration would like to lower it to 18 percent and then even lower.

Here are the general fund contributions of various other things that benefit the general public. And as you can see, aviation right now is the lowest.

You have heard it on airports, all I want to do is once again repeat, let's get user fees off the table and as Mr. Duncan said, we can then have the dialogue we have been having about how to get a meaningful reauthorization. Thank you.

Mr. COSTELLO. The Chair thanks the gentleman and recognizes Mr. May.

Let me mention that there is a vote going on on the Floor, a series of votes. We will leave from here to go vote. My understanding is we will have about 45 minutes to an hour. We have four or five votes on the Floor with a motion to recommit.

So I would announce that the Chair would put everyone on notice that we will be back here in one hour or after the last vote.

Mr. OBERSTAR. Mr. Chairman, I can't help noticing Mr. Boyer's comment that he and Mr. May are close on—I will be worried if you get any closer.

[Laughter.]

Mr. COSTELLO. The Chair recognizes Mr. May.

Mr. MAY. Thank you, Mr. Chairman, and thank you, Chairman Oberstar, for your observation as well.

I am pleased to be here today on behalf of more than half a million passenger and cargo airline employees, three-quarters of a billion passengers who fly every year and the millions who ship goods daily to all parts of the world. You have an extensive written statement, I will truncate my oral statement and just hit a quick summary.

I think there is a need to modernize the air traffic control system and implement NextGen. As Phil has indicated, he and I agree on that point. At some point along the way, this Committee has to make a determination on the funding structure of that particular system. I would remind you that in 1970 when it was first established by Congress, it was done on the basis of user pays and cost-based financing. So I think we have to find a way to balance that cost recovery opportunity that goes on.

Today's system is shortchanging our future, and I am referring to the air traffic control system. It uses 1950s architecture that is ground-based, finite, point to point routings, inefficiencies. I don't think it has the ability to be scaled for new growth. And new growth is exactly what we are going to have. In 1970, when that Trust Fund was created, there were about 2,500 commercial airliners in the system of all sizes. At the time, there were about 1,800 corporate aircraft using that system.

Today, the numbers are 8,000 for our friends on the commercial side and 17,000 and growing, 18,000 corporate aircraft. I am referring now specifically to turbine, high-performance aircraft. The FAA projects, and I think they are accurate, that we are going to go from three-quarters of a billion to a billion passengers a year enplaned by 2015. Today there are about 45,000 IFR operations managed by our air traffic controllers and the FAA every single day, 45,000. That is going to jump to 62,000 in the next 10 years.

On top of that, we are going to have another 10,000 VLJs come into the system over that period of time. You will see a snapshot of some of the traffic taken from just a couple of days ago.

The point I am trying to make is that there is huge demand growing, the system we have cannot be scaled to accommodate that demand. The consequence of all of that is going to be delay. We have had some very significant weather-related delays this winter. We are going to have more significant weather delays in convective weather in the summer. We have projections from a man I think most admire, Russ Chew, indicating that we are looking at some 62 percent over 2004 levels of delay coming over the next 10 years, if we don't do something to change this system.

I don't disagree, actually, with Phil that we don't have a good game plan going forward as to what that system ought to look like. I do think that we are looking at somewhere in the range of $15 billion to $20 billion to put a new system together. I do think there is an imperative that we get that done and that we have an appropriate funding mechanism for making that happen. The consequences are particularly severe.

Now, the good news is, we have these systems going in around the world. There are a lot of countries, unfortunately, that are ahead of the United States in establishing Next Generation systems: GPS, satellite-driven, using technologies like ADS-B where you transfer the intelligence of the system to the cockpit of the aircraft. But that takes me to the second part, which means, we have an avionics change coming, and I think those numbers are reasonably accurate that have been quoted this morning about the cost to airlines being somewhere between $18 billion and $20 billion for equipage.

So I think that lost in the maelstrom of debate over the issue of user fees, i.e., cost recovery as opposed to cost allocation, is the fact that we have to find a way to pay for this system. I have advocated that it needs to be a four-part funding system. I think one part of it is some kind of a tax on the users of the system, whether it is an excise tax or whether it is a repeat of what we have today.

But it has to be a balanced formula, because today airlines are paying 94 percent of all the dollars that are going into the Trust Fund. And you may choose to excoriate the idea of a user fee. But I certainly hope you won't choose to excoriate the reality that we are paying the vast majority of the dollars into that system today and from an equity basis that needs to be rebalanced. I think the best way to rebalance it, regardless of the recovery mechanisms, is to do it in accordance with the use or the demand that is being placed on that system. Only fairness.

Mr. COSTELLO. I thank the gentleman, and we will announce that the Subcommittee will recess until 1:45 or until after the last vote, which I am told should take most of the hour.

[Recess.]

Mr. COSTELLO. The Subcommittee hearing will resume. We had obviously more votes than anyone anticipated, and it took longer than anyone anticipated.

But I will say that Chairman, the former Chairman of the Subcommittee, Jimmy Duncan, just reminded me on my way over, I said, I have witnesses that have been waiting for a long time, and he said, well, tell them not to feel too bad, I had six or seven CEOs of airlines waiting one day and we had 24 votes in a row and we had to cancel and bring them back the next day. Fortunately we did not have to do that.

Let me move on the next witness and recognize the President of the Cargo Airline Association, Stephen Alterman.

Mr. ALTERMAN. Thanks, Mr. Chairman. My name is Steve Alterman and I am President of the Cargo Airline Association.

Although we are an integral part of the air transportation community, the cargo segment is unique. In order to serve our worldwide customers and to provide them with time definite services, a large percentage of our flights are during the night-time hours, thus enabling us to offer expedited delivery throughout the world. We are also one of the fastest-growing segments of the commercial aviation marketplace, with growth rates of 3.1 percent domestically and over 6 percent internationally expected over the next decade.

In order to provide the service that our shippers in the world economy demand, we are dependent on a modern air traffic system. We simply cannot afford to continue to manage traffic with technology that was designed in the first instance to fight World War II. We must build a system using the technology and procedures necessary to address the shortfalls and capacity that will certainly occur. The modernization of our system must therefore be the major priority in the ongoing FAA reauthorization effort.

And modernization of the system is critical for reasons other than simply addressing future capacity. Operational procedures using satellite-based technology will yield more efficient operations resulting in less noise and less fuel burn, thereby reducing aircraft engine emissions. The environmental benefits cannot be over-

looked. Nor can the potential safety enhancements that will result with the provision of better and more timely information to both pilots and controllers.

Finally, it is crucially important that these steps to modernize be taken now. We cannot simply wait any longer. Capacity will overwhelm us.

With respect to the FAA financing proposal, it was issue don February 14th, 2007 and dealt primarily with the financing element of the system. Unfortunately from the cargo airline perspective, it actually created more questions than it provided answers. While the FAA has made significant strides in the past few months, especially in the area of the decision to use ADS-B technology, we still do not know the details of the Next Generation plan, and until the details of this plan are known, it is difficult to assess the funding required. Yet the FAA proposal focuses primarily on the funding element.

Before moving to completely overhaul the system that has provided the basis for the FAA financing for decades, it is necessarily to more completely analyze the requirements of the system and how those requirements impact the resources necessary. In our opinion, the questions that must be asked and answered are: what is the precise nature and associated cost of the Next Generation system; what are the cost savings the FAA will realize from implementing the modernized system; will the current system provide the funding that is necessary; what are the costs and benefits to the user community; and should this system be purchased or perhaps leased to allow flexibility by the agency.

Even if it is determined after this analysis that the current excise tax system must be completely overhauled, we cannot support the plan envisioned by the FAA proposal where the FAA is given virtually unfettered authority to set the level and structure of fees at will with little or no Congressional oversight and no provisions for judicial review. Such authority would clearly eliminate any incentive for the FAA to cut costs or restrain future cost increases since feels could always be raised to cover unnecessary agency spending.

But even more importantly, it appears that the user fee system envisioned by the FAA proposal will require a complicated and costly bureaucracy simply to assess and collect the fees. In an era of limited resources, care should be taken to ensure that to the maximum extent possible the funds generated are actually spent to improve the system. The added cost of establishing and maintaining a bureaucracy juts to assess and collect the fees simply can't be justified.

But whatever the eventual structure of the finance, we urge the following principles and considerations should be paramount. First, the U.S. aviation system is a national asset that benefits all citizens and drives the Nation's economy. The general fund contribution should reflect that fact. Historically it has been in excess of 20 percent and we urge that it not go down from there.

Second, whatever funding mechanism is ultimately decided upon, Congress should ensure that industry funding obligations are fairly allocated. As a basic principle, no industry segment should be forced to subsidize any other industry segment. From our perspec-

tive in the all cargo industry, where under the current system, we pay a 6.25 percent airway bill tax plus a 4.3 cent per gallon fuel tax, studies indicate that our industry segment pays somewhat more than 100 percent of our system use. This is before taking into account that we fly mostly at night.

While we don't expect any relief for that portion of the system that exceeds 100 percent, neither should we be expected to pay more than our current share in order to make up for the shortfall in other industry segments. This result can be accomplished by simply retaining the current funding mechanism for the air transportation of cargo or by ensuring that any new system does not impact our industry adversely.

Finally, I will wrap up, we strongly believe that Congress should support the funding necessary for continued research and development. It is today's research and development that provides tomorrow's products for the NextGen system. We can't overlook the R&D segment.

Thank you very much. I will be happy to answer any questions.

Mr. COSTELLO. We thank you very much.

Mr. Zuccaro?

Mr. ZUCCARO. Good morning, Mr. Chairman. Thank you for the opportunity to provide comments.

Rather than repeat the facts and figures and information you have probably heard already, I would like to focus on the uniqueness of the helicopter industry and its environment. HAI is a not-for-profit professional trade association of over 2,600 members, inclusive of 1,400 companies and organizations. Unlike many other trade associations, operations conducted by HAI members are not limited to one type of specific flying or one purpose. HAI members operate helicopters across a wide spectrum of uses, such as on-demand charter, commercial utility, corporate, law enforcement, emergency service, agriculture, as well as news gathering and private use. It is my sincere belief that the proposed FAA funding program, if enacted, will have an extremely detrimental economic impact on HAI members and will in fact constrain or eliminate some of these operations.

The current FAA funding methodology can meet the future operational and developmental needs of the FAA inclusive of the NextGen initiative, which HAI actively supports and promotes. This is generally not in dispute.

Almost all segments of the aviation community appear to be unanimous in their strong opposition to the Administration's funding proposal, the notable exception being the airlines. How can one support a proposed funding program that significantly reduces the cost to a high use entity such as the airlines and they place the highest demands on the system and then dramatically increase the cost to other segments of the industry, such as the helicopter community, whose utilization of the system is generally incidental with little or no impact.

All of this being done with the stated need to fund NextGen as the stated purpose, whose very makeup, technology, benefits and costs are not even yet known. The icing on the cake is the fact that the actual revenue to the FAA under the proposed funding program will be reduced by $600 million in the first year alone.

Consider this: currently some HAI members that are seeking initial FAA certification as commercial operators who are requesting similar FAA services are being advised that they can expect a wait of 18 months to 2 years for an initial appointment with an FAA representative. If this is the level of service under the current funding program, one can only imagine what it would be if the FAA reduces its annual income by $600 million.

It is important to note that the majority of HAI members are small businessmen and women who operate in excess of 5,100 helicopters and fly more than 2.6 million hours per year. The vast majority of these operations are actually conducted at private heliports and facilities in remote locations without utilizing the services of FAA air traffic control or the need to operate to and from airports. In fact, the very nature and capability of a helicopter, in conjunction with the prime benefit of direct, point to point transportation, actually eliminates the operational need and desire to operate to and from airports. This has been further enhanced by such industry initiatives as privately funded point in space, off-airport instrument approaches.

Historically, the helicopter industry has had to finance its own infrastructure with no Federal funding or support, inclusive of off-airport operation and maintenance bases, heliports, communications networks, and instrument approach procedures. This is due to the fact that the missions performed, operational altitudes, and locations of helicopter operations are normally outside the reach of the FAA ATC service area and the airport infrastructure. Some examples of this are the offshore operations in the Gulf of Mexico where over 650 helicopters support oil exploration and production, where helicopters have spent untold millions of dollars providing their own infrastructure, since they cannot talk to or be seen by the FAA air traffic control system. Similar situations can be found in hospital-based EMS helicopters that operate in remote rural areas where they accomplish their life-savings missions, utility helicopters which provide services on behalf of the greater good, such as firefighting, aerial application, logging, power line installation and maintenance. Also corporate operators serving the off-airport needs of the business community.

I hope you will agree that the helicopter community places the least demand on the air traffic control system and the airport system. In fact, the helicopter community is actually assisting the FAA in solving the problems of airport and air space congestion and the lack of capacity. We do that by removing from the system those passengers and those flights that would otherwise be flown in airplanes to airports and diverting them to off-airport, non-ATC environments. Utilizing advanced technology, helicopters have been able to provide off-airport city center to city center transportation, thereby further creating new capacity at congested airports. When one considers this situation, maybe some thought should be given to the FAA compensating the helicopter community for services rendered.

HAI and its members are supportive of the NextGen initiative, and when requested to support such initiatives, the helicopter community has already stepped up to the plate. Last year, HAI and its members formed a partnership with the FAA via an ADS-B memo-

randum of agreement, which facilitated the installation of ADS-B technology in conjunction with enhanced weather reporting and communications in the Gulf of Mexico.

As part of their commitment to assist the FAA in the first phase of implementing ADS-B into the national airspace system, HAI members are providing in-kind service valued in excess of $100 million to the project. This includes no-cost helicopter transportation for the FAA staff and related project personnel to the platforms in the Gulf of Mexico where the equipment will be installed. These flights are currently taking place as I speak. No-cost space for the equipment on the platforms and our commitment to equip with the proper avionics.

It is most interesting to note that although the helicopter industry is the only industry providing in-kind service and partnered with the FAA in this initiative, other airspace users, such as the airlines, will also reap the benefits of the new ADS-B system in the Gulf of Mexico once it is installed.

With the above in mind, it would seem appropriate that the helicopter community should be the one segment of the aviation community that has the least economic impact on it. To do otherwise would be like charging a farm tractor that only leaves the farm once a month to travel on a public road a short distance to go to another farm the same highway tax as a long-haul tractor trailer.

The current funding system has been tested and proven. From a conceptual point, as a thought, the majority of the funds collected from helicopter operators should not be assigned to runway and airport development. Instead, these funds should be considered in the utilization of funding a nationwide system of heliprots for the helicopter industry.

The current funding system, as I mentioned, is not yet broken. I think we should leave it in place. To replace it with something that has no logic, is widely opposed, will increase overall costs and has unknown results in terms of efficiency, fairness and productivity, would be counterproductive.

I also would mention as a closing remark that helicopters should be considered as a separate aircraft category and not put in the same category as any airplane category that is currently being considered.

With that, HAI and its members stand ready to work with you, the Committee, the FAA and the stakeholders to come up with an equitable funding system that will provide a safe, appropriate, efficient operating environment for all segments of the aviation community. Thank you for the opportunity to make these comments.

Mr. COSTELLO. Mr. Zuccaro, thank you very much.

The Chair recognizes Mr. Ed Bolen, the President and CEO of the National Business Aviation Association.

Mr. BOLEN. Thank you, Mr. Chairman. It is an honor to be here representing the National Business Aviation Association today.

As you know, and the others on this Committee know, business aviation is actually an FAA-defined term. Business aviation is the use of any general aviation aircraft, piston or turbine, for a business purpose. A number of piston operators, over 50 percent, according to AOPA, use their single-engine pistons for business pur-

poses; twin-engine pistons and turboprops are used almost exclusively for that.

So when you really look at the general aviation aircraft fleet being used for a business purpose, we have a slide, I don't know if we will be able to get that up or not. But it basically shows that the fleet is primarily 85 percent piston twins, turboprops and entry level turbofans. The kinds of companies that use these airplanes are as you would expect, small and mid-size companies primarily, again 85 percent of our membership. A typical member would be Richard Schein, a second generation owner of a recycling company in upstate New York that uses a twin engine Mitsubishi MU2 to go about expanding their work.

Mr. Chairman, we all are here today to ostensibly talk about modernization. But for those of us who were here 10 years ago, there is a strong sense of deja vu. After all, it was the last time that we had a user fee debate that the Nation's biggest airlines proposed a user fee formula that would have shifted $600 million of their costs onto what they assumed was their competitor.

But more importantly, it would have, as one senior executive CEO said at the time, given the airlines exclusive control over the ATC system. We want to make sure that does not happen today.

The FAA has proposed what they call a Next Generation financing system. And the FAA has done a lot of talking about the need to modernize. Our concern as we look at the bill is that when it comes to Next Generation, FAA is talking the talk but they are not walking the walk. This bill that they have put forward, as you know, cuts FAA funding by $600 million. It caps the general fund contribution below today's levels and takes it down in the future. It diverts money that could be used for modernization, the towers, runway expansions, new technologies, and uses it to create a bureaucracy. It allows the FAA to go into debt, and it fails to provide a modernization time line and cost schedule.

Now, Mr. Chairman, the general aviation community believes strongly in the need to modernize the system, because expanding capacity is necessary for our very survival. Every time there is congested airspace or congested airports, it is general aviation that gets squeezed out. You know this from Illinois, where we saw Chicago Midway, it was a great general aviation airport, then started attracting commercial service and we were pushed to secondary and tertiary airports. We have seen that repeated in Fort Lauderdale, San Jose, Manchester, New Hampshire. So expanding the capacity of the system is fundamental to our survival.

Now, when we look at how to do that, we think it is pretty straightforward and there are no easy answers. If someone wants to lose weight, they basically have three choices: they can eat less, exercise more or do a combination of those two. When we look at additional funding for the Next Generation system, we think that the FAA can try to look for cuts in non-essential, non-safety programs. They can look for an increase in the general fund contribution. We can increase taxes on aviation users across the board. We can do some combination of those.

But what the FAA has proposed is some radical scheme that moves us to user fees. I want to echo the comments of those who have preceded me in saying, let's get that idea off the table, so that

collectively we as a community can work with you to make the hard choices necessary to put us on the path toward continued modernization of our air transportation system.

Thank you, Mr. Chairman.

Mr. COSTELLO. We thank you, Mr. Bolen.

Our last witness for this panel is Mr. Roger Cohen, the President of the Regional Airline Association.

Mr. COHEN. Thank you, Mr. Chairman, Members. I am Roger Cohen.

For the past three months, I have had the honor of being President of the Regional Airline Association. I would like to just limit my remarks to those things that you have not heard yet.

Without much fanfare and under the radar screen, America has come to depend on regional airlines. Last year, we flew 158 million passengers. That is almost one out of every four passengers in the United States. We are about 40 percent of the commercial fleet and nearly 50 percent of the total departures every day.

Just yesterday, I saw the figures that post-9/11, our member airlines, in a very difficult environment, have added 18,000 jobs, 18,000 full-time jobs. Our network partners have been forced to eliminate 87,000 jobs, about 23 percent of the total work force. Most importantly, our regional airlines serve some 650 communities across this Country. Here is the telling point: 442 of those, 70 percent, are served exclusively by regional airlines. In other words, if it were not for regional carriers, those 442 communities would have no scheduled airline service.

Preserving this network of safe, convenient, and affordable regional airlines service is at the heart of RAA's views on the financing proposal. It is our number one priority. I wanted to clarify and answer to a question that was asked before, how this proposal would impact the regional airlines. I must tell you, we believe that the legislation before you would make air travel less convenient and less affordable for millions of Americans, particularly those who live in those 442 communities whose service is exclusively provided by regional airlines.

Everything else you have heard today, we echo many of the comments you have heard about modernization and working collectively with the other stakeholders toward the Next Generation system. There obviously is no disagreement on that.

But finally, at the end of a long day, but it is not an afterthought, I just want to share with you one last thing. I was a very young public relations representative working for TWA covering the hearings in Congress when Congress deregulated the airlines. Congress made a pledge to communities across this Country that they would not be abandoned, that because of their size, they would not lose all access to the national transportation network. The Essential Air Service program was created as part of that. Every Congress since then has maintained that pledge. We would hope and trust that you continue to recognize that pledge that was made to date, 140 of those communities across the Country.

With that, thank you very much, Mr. Chairman.

Mr. COSTELLO. We thank you, Mr. Cohen.

Mr. Boyer, you indicated in your testimony that nine out of ten of your members would reduce or curtail their flying if the fuel tax

is raised to 70 cents. Can you tell us how you arrived that at figure, nine out of ten?

Mr. BOYER. Actually about a year ago, once again, like you, we were waiting for a long time for this proposal. So it was supposed to be out last spring, and we decided when we started to hear of a dramatic fuel tax increase possibly being in it, we commissioned a study in conjunction with NBAA. We actually segmented the turbine and piston powered airplanes. We did a sliding scale that went from 25 cents, not knowing what it would be, all the way up to $1. Then we asked questions on, reduce your flying, curtail flying altogether. In the NBAA example, we said, disband your corporate fleet, et cetera.

Our numbers came out actually 88 percent would reduce or curtail their flying. Now, I am picking the largest of the numbers. The curtail was down at about the 27, 28 percent category. So it was a survey done of very statistically valid size sample of our membership. Once again, in anticipation of a proposal that came out about a year later.

Mr. COSTELLO. I understand also that you are doing some type of an analysis right now to take a look at similar charges that are imposed on boats and motor vehicles. I would just request that once the analysis is done that you make it available to our Committee, if you would.

Mr. BOYER. We very definitely will. It should be completed within about a week and a half or two weeks. It will address the certification fees that are in for getting a license, buying a plane and licensing it, and the charges that are in the bill that we didn't talk about today. But they are minuscule compared to what we are talking about at this panel.

Mr. COSTELLO. Thank you.

Mr. May, you talked about a commitment and that you would like to see a robust general fund contribution. As I have said many times to I think everyone here testifying today, I just wonder what your definition, what percentage should that robust contribution from the general fund be?

Mr. MAY. Mr. Chairman, I think it is probably north of 20 percent. But I think the question that needs to be answered first is, how much money are we looking to raise? What is the formula for trying to raise that money? Are you going to have some sort of a contribution by people who use the system? Are you going to have bonding? If you are going to have bonding, it has to be obviously under a lot better circumstances than are proposed in the Administration's bill.

I happen to think that innovative financing is a very worthwhile idea if done right, because there are some huge capital expenditures that are foreseen by the FAA. We are spending $2 billion a year, today, right now, on maintaining this antiquated system. How much savings are you going to generate out of that?

Then when you get down to that fourth leg of the equation, how much do you then need for general fund? And what are the policy considerations that attach to that?

Mr. COSTELLO. The next question that I would ask is, from the FAA's proposal for the user fees, it makes me a little nervous and concerned that the FAA would have almost unilateral authority to

raise fees. Given their track record, and it has been demonstrated, you heard from the earlier panel, both the IG and the GAO, I have concerns that if human nature is if you have a system where you can just spend whatever you decide to spend and then generate the revenue to match what you are spending, there is not an incentive for efficiency.

I just wonder if you have concerns about the FAA's ability to, under their proposal, to be able to generate revenue as their expenses go up?

Mr. MAY. Mr. Chairman, STARS, ERAM, WASS, FTI, $6 billion in overruns. We absolutely have those concerns. We have had the blank check conversation, if you will, with a number of people in the Administration and Members of Congress up here. We have looked, philosophically. We are paying 94 percent of the bill right now. I would like to readjust that down the road, and I would hope we would find some support for equity among users in the system.

But at the end of the day, I am still going to be paying the lion's share of the bill. It is in my absolute best interest to assure that we are not giving anybody, FAA or anybody else, a blank check to do what they need to do. That is why I happen to think that governance is a critically important subject also.

Mr. COSTELLO. Last question about privatization. You have indicated in your testimony and other conversations that you do not necessarily support privatizing the air traffic control system. Is that an accurate statement?

Mr. MAY. That is an accurate statement.

Mr. COSTELLO. Do you support some type of, if not privatization, a system similar to the Canadian system?

Mr. MAY. No, sir, I do not. What I have tried to suggest to people is, look, this is a difficult subject to talk about. But we have this massive job in front of us. There are a whole lot of people that have a tendency to try and indicate how they would like that job to be done, even though they are not part of the process, necessarily.

The FAA has about 5 percent discretionary opportunity with its AIP money. I think we both know what a major part of the reason for that is. Every time the FAA tries to shut down or consolidate operations, boom, a lot of our friends up here object to that. Seriously. Phil did a heroic job on flight service stations, trying to get them to go to a different status. It was not an easy task, even though it was the right thing to do.

So I think there needs to be some level of independent thought and governance created, however that happens. I am not advocating corporatization, privatization. But I think there needs to be some level of independent authority that says, here is what we need to do and we need to make the right decisions and we need to think through. Because the FAA by itself has not done a really spectacular job.

Mr. COSTELLO. Thank you.

Mr. Alterman, you indicate in your testimony that the FAA's proposal would require a complicated and costly bureaucracy. Do you want to just give a brief follow-up and explanation?

Mr. ALTERMAN. Yes, under the proposal, it looks to us, anyway, that it would be not really very simple to figure out who owes what and how to collect that money. An analogy I have made before is

that we all get solicitation letters from charitable organizations asking for money. One of the first questions I ask is, does all the money I contribute go to the intended recipient, or am I going to be giving money to pay somebody's salary and have 20 percent or more in administration fees.

It is the same thing here. There are not unlimited funds. Believe me, they are not unlimited funds. So the money we do raise should go to the modernization effort and not to fund another bureaucracy at the agency.

Mr. COSTELLO. And as it stands today, we still do not know what it would cost to administer the collection of these fees, how the system would operate and what the costs would be. When the Administrator was here, she indicated that it would be contracted out. But there were not costs associated with contracting out.

I thank you.

Mr. Zuccaro, you indicated that helicopters could help with, and currently help with the congestion at some of our airports. As you have seen and reviewed the FAA's proposal, would helicopters receive any kind of incentives for easing the problems with congestion at our airports?

Mr. ZUCCARO. Not that we noted in the proposal. Right now there are a number of elements. That is why I indicated what I said, if we are talking in terms of fairness and equitability, the money that is contributed by the helicopter operators through whatever system, some thoughts should seriously be given to develop that system that will allow that methodology of city center to city center to further develop.

We would require FAA funding or governmental assistance in developing that heliport network. Also the network of instrument approaches that would be off-airport, that would not require us to take up a slot, even in IFR weather. We currently do that now. It is privately funded. The heliports are privately funded. The approaches are privately funded. We are doing everything we can to draw more traffic into off-airport locations. With new technologies, such as the civil tilt-rotor, with the potential to carry up to 70 passengers, city center to city center, that is a significant off-take from the airport infrastructure and the IFR infrastructure.

But we really don't see any recognition of the helicopter industry in any of this. We are kind of lost in there. And we are placed in a category with piston airplanes. We do not operate, as I think I clearly indicated, like any airplane. Our needs are different, our requirements are different. But the good news is, our capabilities to help in the system off-airport are much different than airplanes.

So now, we are not being addressed at all. that is what is frustrating, quite frankly.

Mr. COSTELLO. Mr. Bolen, you have pointed out that there has never been an FAA modernization plan or program that has failed for the lack of support from the Congress or lack of funding from the Congress. You also point out that we may be going down a slippery slope here as far as reducing Congressional authority and oversight by implementing a user fee system. I happen to believe that both of those statements are correct. But I would ask you to elaborate.

Mr. BOLEN. I think they are fairly straightforward. When you look at the number of programs, and my friend, Jim May, just announced a few of them, the thing that Congress showed throughout all of those programs is a strong commitment to Congress to funding them unless and until the FAA determined they couldn't use those funds effectively.

The FAA has tried to say that the reason they can't modernize is because Congress has not been providing stable and predictable funding. That simply is not true. Even if you look at their request this past year for the NextGen programs, and there are two Next Generation programs in the current budget, one is ADS-B and the other is the system-wide information management system. The Administration asked for a collective amount of $50 million for those. Congress provided $80 million.

Congress is consistently supportive of capacity enhancement programs. They have not been the problem. They have provided strong, necessary oversight. They have made the FAA accountable, and that has made them better program managers. We don't want to see that go away.

Mr. COSTELLO. I thank you.

At this time the Chair would recognize the Ranking Member, Mr. Petri.

Mr. PETRI. Thank you very much, Mr. Chairman. I just have one or two, maybe three or four questions, but not too many, I hope.

Mr. Boyer, I apologize for having missed part of your testimony. But the full statement is in the record. You represent probably a majority of the pilots in the United States who are licensed. And so you have to take a pretty broad position. I don't know if you would be willing to address this question or not, but you heard my colleague, Mr. Duncan, talking about difference in charges for people who actually use the system as opposed to don't fundamentally use the system. We have a lot of people who are crop dusters or who are very much recreational pilots, going around but not really having their flights within the air traffic control system.

Do you have any suggestions as to how we could differentiate between elements of the general aviation community, or do you think one size fits all so far as the fuel tax assessment actually makes sense?

Mr. BOYER. Once again, I think if we can get the most onerous part of this bill out of the discussion, the user fee part, I think this is excellent discussion material. We have had long thoughts and actually suggested to the FAA in the two-year period they were putting this together some various categories. I don't mean to sound as if I have created this answer for your question, but the market is changing. Now, once again, you have a district that sees the most recreational side of general aviation, once a year at the world's greatest air adventure in Oshkosh. But all flying is not like that. Even that event, which is primarily people who fly what I would call below the radar screen, do have to use a control tower at that event. It is boosted up.

We are going to a system that more and more requires air traffic services, whether you just be a pleasure flyer. The security restrictions in aviation, the more control, the various classes of air space, the temporary flight restrictions, the use of a transponder and now

subsequent devices that will be used in NextGen all require operating. So it will be very hard to operate in the future as we did yesterday, as Mr. Graves, who came in, does with his Piper Cub in the middle of Missouri. But it will be very difficult to do that as we move forward.

So we are going to have take that into account. But it is something we would welcome the opportunity, already have put some ideas on the table to begin to figure out, okay, what segment uses more, uses less. It is still not going to be the science that the FAA would claim they already have down, and that our panel number one indicated may be right, may not be right. I think we are all going to have to work together on that.

Mr. PETRI. Mr. May, I think you pointed out that in the opinion of your organization, the existing system of paying could stand some improvement. Could you give examples of inequities and inefficiencies in the current system of funding the air traffic control system?

Mr. MAY. Mr. Petri, I think the cost allocation exercise by the FAA does as good a job of that as anything. If you take a look at where the FAA is expending its resources and energy, we account and commercial airlines account for probably somewhere in the range of 68 to 70 percent of operations in the system. We are paying for 94 percent of all the dollars that are going into the Trust Fund. That is a direct allocation number.

So what we have suggested is, if you want to focus in on that cost allocation, if you want to look at the other high performance users of the system, and as I explained to my friend, Mr. Boyer, back in April of 2005, I have no interest in going after the piston aviation GA crowd. But if you look at the high performance turbine operations, the net jets, the charters, the privately owned, the corporately owned aircraft that are in the same airspace that demand the same system, FAA tells us 98 percent of them fly IFR, then I think it is a matter of fairness and equity that if they are using 16 percent of the system, which they are, and they are paying for 6 percent, that that number needs to be adjusted. I think this Congress and this Committee, along with the Ways and Means Committee, will have the task of doing that. I think it is a matter of equity.

Mr. PETRI. Thank you.

Just one last question, if I could, of Mr. Bolen. Could you give us any sort of brief overview of what you feel can be accomplished in the next three to five years so far as improving the air traffic control system?

Mr. BOLEN. First of all, I think we ought to make sure we understand just how far we have come in the past couple of years. The foundation clearly of going forward according to the FAA, the Joint Planning and Development Office and everyone else associated with NextGen is the automatic dependent surveillance broadcast technology. That is a technology that the general aviation community pushed to have a pilot program in Alaska. The cargo carriers have done that in the Ohio Valley. We feel that that technology is clearly at the forefront of the modernization effort.

We have some questions related to certification and implementation that need to be ironed out. But that is clearly something that we can do.

Another example of the transformation that is already underway is reduced vertical separation minimum. Two years ago, we effectively doubled the amount of capacity in our en route air space because of significant investments that were made primarily by the general aviation community but also by the commercial airlines in altimetry that allowed us to go from 2,000 foot spacing to 1,000 foot. When we continue to look forward, ADS-B is clearly at the foundation. The System-Wide Information Management program, or SWIM, is part of that. Then we need to be about Phase 2 of the ERAM program. Those technologies are really at the heart of the next system. And when you look at what we think the cost of that is, either the industry groups, the Joint Planning and Development Offices, all of industry, the cost of modernizing the system for NextGen is somewhere around $300 million to $1 billion per year.

To put that in perspective, that is about 3 to 8 percent of the FAA's funding. It is an amount of money that we can all get our arms around and we should be able to find a way to make happen.

Mr. COSTELLO. I thank the Ranking Member.

The Chair will recognize the gentleman from Illinois, Mr. Lipinski.

Mr. LIPINSKI. Thank you, Mr. Chairman.

As we start out on looking at the FAA reauthorization and specifically, the funding here, I only have one question. But this question, a very broad one. Just to get a sense from all of you, because I have heard a lot of and I have read in your testimony a lot of ideas about what is wrong with the Administration's proposal. Not that I am here defending the proposal. But I would like to hear, probably starting with Mr. May, what you would see as the general outlines of what you think would be the most fair and the best way to fund. Where should the funding come from, how exactly? Because there is a lot of, understandably, problems that all of you have in different parts of the Administration's proposal. But what do you think should be done?

Mr. MAY. I will answer that as two questions. The biggest concern we have with the proposal staying strictly with the finance side of the proposal, is the subject that your colleague Chairman Costello brought up a minute ago. It has to do with cost and the lack of cost controls. It has the potential to become a wide open funding mechanism, blank check, whatever term you want to use. That is probably the single biggest concern I have with this.

What I would like to see going forward is a funding system that allocates revenue into that system in some fashion that is tied to the use of that system. I understand that——

Mr. LIPINSKI. How do you——

Mr. MAY. I understand that the term user fee is nuclear in this Committee, that you will be fighting with one another to have the honor of playing taps at the funeral. But there has to be some mechanism where you can allocate costs, a cost allocated revenue system that can suggest that if I, representing the commercial airlines business, United Airlines, right on down the line, am using

roughly 68 or 70 percent of the overall cost of the ATO, then I ought not to have to pay into the system more than what I use.

Mr. LIPINSKI. Let me focus down my question then on use and how use is defined. Because that is another question that is certainly out there for all kinds of different suggestions on this one. Mr. Bolen, you had something?

Mr. BOLEN. I was just going to follow up on that. You are absolutely right. How you define use is fundamental to this debate on one's fair share. What the big commercial airlines have been promoting for a number of years here in the United States is something that they have been promoting internationally for decades. And that is that you look at all airplanes the same, whether they have 3 passengers, 30 passengers or 300.

That idea of looking at all airplanes the same has been rejected by every country around the world. It has been rejected by the International Civil Aviation organization. We keep hearing about the privatized places like Canada and Australia. Even Canada says, it should be noted that from a cost of service perspective, the majority of the infrastructure and operating costs of the system are driven by commercial air carriers operating large transport aircraft. You see, everywhere in the world, they see the fallacy that all airplanes are the same. They understand that the system costs are driven by commercial carriers and their large aircraft operating in a hub and spoke model. We understood this when we created it in 1970, that the system was built by and for the commercial airlines. And we have repeated understanding that every time the financing has been extended, including the last time in 1997, when changes were made to the formula, but they weren't made to the concept.

Mr. LIPINSKI. If I can come back to, I want to let Mr. May conclude here, because this isn't meant to be any kind of statement on the definition of use that you use. I want to see if anyone else has any comments on that definition, then I will let Mr. May.

Mr. BOYER. Well, I hate to let Mr. May have the last word, but I think the key, and your question is an excellent one about how do we define use. How and when do you use the system drives costs. Not a lot of airliners are taking off at midnight or at 11:00 p.m., and that is a place where even Mr. Alterman in his written testimony said, we primarily use the system during a period that not a lot of airlines use it.

There are a lot of scheduling, and you have heard this, when you look at the airline schedules, all departures in the morning and late in the afternoon and sometimes during the middle of the day you can shoot a cannon off through those airports. What about the airlines that decide they are going to abandon a hub, that the FAA has put a huge infrastructure in the terminal radar environment, in the runway environment, Nashville is a good example, St. Louis is a good example. It is how and when you use the system, not just counting it.

And the last one is, in the news this week was the landing of the 380 here in the United States, at a couple of our airports. The Airbus 380 cost the Los Angeles Airport, using in many cases Federal funds, $60 million to upgrade. At JFK, it is $150 million. So these are costs in the system that the FAA is not picking up when they

call a blip is a blip or this was the cost of flying IFR. There is quite a difference between when you use the system, how you use the system and what you need from the system, like Category 3 approaches, which are not used by business aviation or general aviation, sophisticated approach lighting systems, et cetera. It is an excellent question.

Mr. LIPINSKI. If the Chairman will allow us to hear from Mr. May.

Mr. MAY. I think this is a discussion, Congressman, that can probably take most of the afternoon back and forth with a lot of different views. I would suggest to you that what the FAA has suggested as a measure is the distance flown in the system as a variable. Because what we are talking about is use of airspace, fundamentally, how much time do you spend in the system, how far do you travel in that system, and then some fixed component. I have a problem with the way the FAA did it in this particular piece of legislation, but a fixed component that relates to the number of operations or the use of terminals. I think you can adjust, as Mr. Boyer has indicated, by time of day, et cetera.

What I am trying to get at fundamentally is that if the FAA has a cost allocation approach and the IG sat here this morning and said it was sound, GAO sat here this morning and said it was sound, if you got an accepted cost allocation study, then you ought to apportion the cost of the ATO in some fashion back to people who are using that system. You can call it whatever you choose. I don't want to lead to corporatization or privatization. But I think there is an equity issue involved that says, if we are paying for 94 percent of all the costs of the ATO and we are only using by Price Waterhouse generated measurements that have been reinforced by the IG and the GAO, if we are only using 68 percent, then we ought to find a way to rebalance that equation.

Mr. LIPINSKI. Thank you. I know this discussion will continue.

Mr. COSTELLO. The Chair recognizes the gentleman from Kansas, Mr. Moran.

Mr. MORAN. Mr. Chairman, thank you very much.

Mr. Cohen, as I walked in you were talking about regional airlines. Kansas of course is a State in which regional airlines are awfully important.

I am interested in your just reminding me that, what components of FAA reauthorization should I and others who care about regional airlines and smaller airports be most concerned about? What issues do you want to raise? And is there something in the Administration's proposal that is particularly troublesome to the regional airlines?

Mr. COHEN. Mr. Chairman, Mr. Moran, yes, there is quite a bit that is troubling in the Administration's proposal. And I would just point, a couple of weeks ago, the FAA gave everybody in this room an illustration of various scenarios under which the new system would change, how you would pay, what you would pay today as opposed to what you pay tomorrow. The one that struck me as the representative of the regional airlines is that a CRJ from Minneapolis-St. Paul to Minot, North Dakota would have to pay 36 percent more under the FAA's proposal. And the next example they

gave was that a 747 from Tokyo to Los Angeles would pay 16 percent less.

I think that that same kind of calculus can be used virtually around the Country at all of those communities, a number of them in the middle of the Country, in Kansas, as you know, a number of places. It is interesting that you mentioned Kansas, because I had the pleasure of working for both Mr. May at the Air Transport Association and Mr. Boyer at the Aircraft Owners and Pilots Association. When I would work for AOPA and I would go out to try and talk to a number of mayors and city councilmen and State legislators about the value of their general aviation airport, what they have told me repeatedly over the last few years was the kind of great service that they were getting to multiple hubs from their commercial airport because of the regional aircraft that are serving them now. For example, right now in Wichita, you can go to Chicago, you can go to St. Louis, you can go to Denver. And there are multiple choices, much better, more frequent service than there had been previously.

So that is probably a long answer, but the question was asked earlier, and I don't know if you were in the room, by Mr. Coble, who asked the FAA how their proposal would impact regional aircraft. He said, I believe, I don't want to mischaracterize what he said, that it wouldn't harm them. And that is just patently not true.

Mr. MORAN. I know that this Subcommittee is going to have a hearing on essential air service, or at least the topic of essential air service is scheduled for April. I would invite you to visit with me and make certain that we are well informed of any issues that we need to pursue in regard to essential air service. Kansas is another State that is very much dependent upon that program.

Mr. Bolen or Mr. May or both of you, during the last FAA reauthorization, GAO found that the major cost drivers of the air traffic control system was the hub and spoke system. I know Mr. Bolen just talked about that. Is that still true today? I guess I just heard you say that what we started with a long time ago was, I think Mr. Boyer was saying this, that what we started with a long time ago was the hub and spoke system. The system was designed based upon that plan. And my guess is that not a lot has changed in regard to hub and spoke. Is that true?

Mr. BOLEN. I think over the past 10 years, since this particular Committee did a deep dive into FAA funding and actually modified the taxes to reflect what was the current environment, what we have seen over that time is that commercial operations have grown faster than general aviation operations, including general aviation turbine operations. And that in addition to them growing, they have grown in hub operations specifically.

That is why, and we have articulated a number of concerns with the FAA's cost allocation study. But it is hard for us to understand how it can be so radically different from what they did in 1997, since it was understood that hub operations drove costs then, there are more hub operations now, the relative activity between commercial and general aviation shows more growth on the commercial side.

And yet because they have gotten away from what is known as the first, best approach to accost allocation and the second best approach to cost allocation, and come up with their own customized system, they have come up with a cost allocation that shows general aviation owing much more this time around than the last time. So that is really our concern, is it seems to be at odds with good economic principles and with what we know has happened in the market over the past 10 years.

Mr. MORAN. When you describe what has happened, and my time is expiring, but are the projections the same for general aviation and commercial, as we look into the future, the same kind of increasing use?

Mr. BOLEN. I think there is a variable out there that has been discussed that no one really seems to know. And that is the impact of very light jets on the market. There are some who have suggested that will facilitate a new business model known as the air taxi market. And if that is successful, that could eventually change some traffic patterns. We don't really know. Jack Pelton, who you know is the President, Chairman and CEO of Cessna, which since 1927 has built half of all general aviation airplanes in the world, believes that there are maybe 500 very light jets that will be delivered between now and four years from today. We heard earlier, someone used a 10,000 figure. Difficult to know what those numbers are.

I think the important thing is that the number of general aviation airplanes has grown significantly since 1970, the mix of hours flown between commercial and general aviation has if anything become more dominated by commercial. The fundamental reason for that, and it was stated earlier in the hearing, is that a commercial airplane flies about 3,800 hours per year. A general aviation turbine airplane flies about 370 hours per year. In other words, for every commercial airplane, they are flying about 10 times as many hours as general aviation. We expect that to hold true with the very light jets as well.

Mr. MORAN. Thank you, Mr. Chairman.

Mr. COSTELLO. I thank you.

Mr. Bolen, just a quick question. You heard me, I think earlier, ask Dr. Dillingham about looking at other countries. I would ask you, in your capacity of looking at other countries, do any countries that you know of assess fees according to those who use the system? In other words, we talked about many other countries that for general aviation they assess one fee that is much lower, so it is not based on just how often you use the system.

Mr. BOLEN. Almost universally around the world, rates and charges are based on aircraft weight and aircraft distance. In some companies, if an aircraft gets below a certain weight, they will go to a registration type fee. So there are two different ways that are universally done. What we have said is in the United States, we have a very good proxy for aircraft weight and distance flown. That is called the fuel tax. We are able to pay that without an administrative burden on either the Government or industry. It is an ultra-efficient way to do it and we think it should be continued.

Mr. COSTELLO. Thank you.

The Chair recognizes the gentleman from Missouri, Mr. Graves.

Mr. GRAVES. Thank you, Mr. Chairman, I appreciate it. I have been here and there all day long today and I apologize for missing a good part of the hearing today. As you are well aware, I am very interested in this subject.

But I do have a couple of questions. One, the statement was made earlier today by Mr. Dillingham with GAO, he stated that cost overruns, when implemented in a new system by FAA in the past, the cost overruns were the cause of a number of reasons, including the lack of stakeholder input. My question is, how many of your organizations were included in that process as they were talking about this new air traffic control system and obviously, the stakeholders, as he put it, there are people who are going to be paying for it.

Mr. BOLEN. Well, Congressman, I would simply say, from an NBAA perspective, we have attended a number of briefings where the FAA has told us what they are going to do or how they are going to do it. We have always submitted comments and requested additional meetings to follow up with them. To date, those have not been, in most cases, answered. In the few cases where they have been answered, the requests have been denied.

Mr. ALTERMAN. One thing I can say for the FAA, as Mr. Bolen indicated earlier, the cornerstone of the Next Generation surveillance system will be a technology called ADS-B. We started working on ADS-B about 11 years ago when we started to look for an alternative to a radar-based collision avoidance system. I think we were before our time, because we never got that done, and we have a traditional TCAS in our aircraft.

What we discovered was that the technology involved, ADS-B, had a whole host of other options to help the system. And we have been working cooperatively with the FAA Safe Flight 21 office to help develop those, as has the general aviation community in Alaska, with the Project Capstone that they had up there. But I think the implementation of ADS-B technology reduced the accident rate by approximately 42 percent, or something around that number.

So not with respect to whatever proposal they have now, but over the past decade, I have to say that the agency has worked cooperative with industry on specific projects that will help the NextGen system.

Mr. BOYER. The one thing I can tell you, using Steve's ADS-B analogy, which we have been involved in, as you know in Alaska for almost over a decade, I think the FAA lacks some organization right now. The Committee should be aware that ADS-B is the one technology of NextGen that everybody seems to be talking about.

But on a fast track, because they are set up in silos for program offices, they are fast tracking a rulemaking procedure that will begin in September, they hope to have it out in September, just to say, hey, we have this new technology out. And there are still a significant number of unanswered questions. We have been scrambling in our organization for three weeks, meeting with various vendors, with the FAA and with others.

So the FAA is set up in a way in which it is not integrated over all paths. ADS-B could be a data link of the future, ADS-B has to be integrated with collision avoidance systems in the planes that

fly in the Class Bravo airspace. These things are not being looked at.

So this will probably cause a delay and an overrun unless we get stakeholders even more involved in asking these questions up front.

Mr. ZUCCARO. I can put a little different perspective on it from our standpoint, from the helicopter industry. We are involved heavily in the ADS-B initiative. As I pointed out previously, we had a situation in the Gulf of Mexico where for over 40 years, you had 650 helicopters operating on a daily basis, moving tens of thousands of people on and off platforms. You had no ability to talk to the FAA, nor could they see you. The operators had to create their own infrastructure.

Last year, we were able to negotiate with the FAA as a partnership the installation of ADS-B into the Gulf of Mexico. That is a complete turnaround from the past history of the operating environment in the Gulf. The burden economically had been historically on the operators completely to build their own systems, because there was no national airspace system extended out over the Gulf in the altitudes that they operated in.

We have stepped up to the plate in working with the FAA by contributing $100 million in in-kind services. We are committed to the technology. But the unique aspect of this is the advantage of ADS-B to the helicopter community is off-airport environment, outside that normal environment. It is an area such as this where we have nothing. We don't have communications or weather or air traffic control surveillance communications. It is to the EMS operator that is in a rural area that has no services, because he is below the radar screen, outside communications and not in an ATC environment. We have to create that system for him, and ADS-B provides us the best methodology to do that. So it is a safety enhancement and an operational efficiency enhancement.

I will acknowledge freely that we sincerely appreciate the Administrator's help and leadership in taking ADS-B to that level within the helicopter community to recognize the safety initiative and the operational information that it provides us. But it is a flip-side coin. As was previously noted with the question, how do you get an equitable system? You take our segment of the industry. We do not operate in that environment. We are paying for a system that builds runways and airports. We don't runways and airports. We need heliports.

How do we get that equitably put into place? We don't mind paying our fair share. But make sure it is fair and make sure we get the benefit of the funds that we put in that reflect our segment. We do operate at airports occasionally. And some of the funds we pay absolutely and rightfully belong in the support of those airports that we operate at. It is not an easy question.

Mr. ALTERMAN. One final point on what Mr. Boyer said. I think it points up a problem. One of the things that we mentioned in our testimony was, we don't seem to have the definition of the system yet. We have components of the system. And that is a real problem. We as an organization and as an all cargo industry, have supported the development of ADS-B. But before the commercial airlines start investing multi-billions of dollars in the avionics to support that,

we have to know what the system looks like and the benefits to the industry defined. We know that we have to do phase one, which is putting in ground stations, and that will help GA more than the commercial airlines. We don't have any problem with that. But we have to do the research to understand and get the system so that the air to air applications, where the real benefits occur to the commercial airlines occur. We don't have that defined yet.

So we are total supporters of ADS-B. We have worked on it for over a decade now. But how it fits into the system and the cost and benefits to everybody in that system have been poorly defined. That is what makes everything so difficult. We don't know what we are funding yet.

Mr. GRAVES. That is actually the best point of all, and I see no reason why we need to put a funding system ahead of something we don't even know quite yet what it is going to be.

Will the Chairman allow one more? And I have to ask this half in jest, and it is to Mr. May. In light of the subject matter, and talking about user fees and how we are going to fund the system, I think it was in the Wall Street Journal recently, the article about air carriers using highly sophisticated software to fly through Europe, so that they would miss user fees in certain countries. In fact, this one airline was cited as, they used it to avoid about $146 million worth of user fees in Europe.

I am just curious as to how that blends in with all this talk of, if we are trying to avoid user fees in Europe, then why on earth are we trying to implement them in the United States?

Mr. MAY. Mr. Graves, sometimes you have to be able to answer in half jest as well as ask the question.

Mr. GRAVES. I understand.

Mr. MAY. It brings a smile to my face.

Mr. COSTELLO. I thank the gentleman from Missouri.

Let me in closing thank all of our witnesses here today. Certain it was a longer day than you anticipated or we anticipated your being here. But it has been very productive. I think there is one thing that we all can, I think, agree on, and that is that the FAA's proposal in particular for the user fee system presents a lot of questions, answers that they have not been able to put forth yet. It seems to me that if you are going to radically change the current system that you need to explain what your alternative is in detail, outline the cost, the administrative cost as well as every other associated cost. And you need to get out and sell the plan.

As I mentioned earlier, we were told last summer, in June, that we would receive the FAA's proposal. Had we received it then, it would have given us time to analyze and to ask and try and spend some time on their proposal. Unfortunately, June slipped to September and then September to the end of the year. Then of course we received the proposal about 30 days ago.

Realistically, I don't know how we are going to be able to write a reauthorization bill and I don't know how the FAA or anyone else would expect us to implement this user fee system as it has been presented. As the Administrator pointed out, we do have a time problem. We have a short window here for us here in the House to be able to mark a bill up, get it from the Subcommittee to the Full Committee to the Floor, let alone what our friends on the

other side of the Capitol, the work that they have to do and then get it to conference and get it to the President.

So I think it has been said, and I will repeat it again, Dr. Ehlers said that it was dead on arrival, Chairman Oberstar said that the user fee system today, that he would like to give it a proper burial. I think that it would be in our interest to consider everything that is on the table, but to be realistic and move on and address things that we can agree on and can address.

So you have added to the debate today and we of course are holding a hearing tomorrow on the operations and safety issues. We will move on to hear from other stakeholders in upcoming hearings.

We thank you for being here today. We thank you for your testimony and the Subcommittee stands adjourned.

[Whereupon, at 4:00 p.m., the Subcommittee was adjourned.]

Congressman John Barrow

Before

U.S. House of Representatives

Subcommittee on Aviation,
Committee on Transportation and Infrastructure

March 21, 2007
Washington, D.C.

STATEMENT OF JOHN BARROW

Mr. Chairman, it's an honor to appear before the Subcommittee to discuss my concerns regarding the FAA Reauthorization Bill, specifically the FAA's proposed funding mechanisms.

I represent Savannah, Georgia – home to the Savannah International Airport and Gulfstream Aerospace Corporation. That means that this bill is especially important to a lot of folks I represent.

Gulfstream employs more than 5,000 people at their Savannah facility. Their annual payroll at this facility is $360M, and in the district alone they spend another $80M yearly with suppliers in support of their vendor operations. As a result, the impact of the FAA Reauthorization Bill on my district is huge.

I strongly endorse the necessity to modernize our air traffic control system. However, the President's proposal fails to address the critical need for a comprehensive plan for modernization.

I urge the subcommittee to insist that the FAA present a modernization plan, including timetables, milestones, and its estimated cost, before they initiate a debate on funding.

As with many of my colleagues here today, I don't agree with Administration's attempt to link user fees to modernization of the Nation's air traffic control system. The system needs to be modernized no matter how we pay for it. And we can modernize it using the existing tax and oversight structure. But we need to organize a comprehensive plan first.

The Administration proposes to dismantle the current funding mechanism and tax structure that have built the safest, most efficient air traffic control system in the world.

In contrast to the current system of aviation excise taxes set by Congress, user fees would be set annually by the FAA without Congressional approval.

Given the monopoly power of the FAA as the sole provider of air traffic services in the U.S., and given the FAA's poor track record of fielding new technology to modernize the air traffic control system, we can't afford to put all of our eggs in one FAA basket.

Giving the FAA the right to set user fees is a blank check and it would totally remove congressional oversight from the funding and governance of our nation's air traffic control system. Now that we're trying to expand oversight is not time I give it all away.

User fees would require that the FAA establish an "IRS" organization to administer a system which would be much more inefficient than the current system.

In addition to user fees, that proposal raises general aviation fuel taxes by over 200 percent. This is nearly a 50 cent per gallon increase in fuel taxes, and will have a huge adverse impact on the general aviation industry just as it's recovering from the economic downturn caused by the last recession and 9/11.

I think that there are areas where the FAA should be independent of Congress. For example, I strongly support the FAA's independence in the area of safety oversight of designees and certificated organizations, such

as repair stations and manufacturing facilities. But safety oversight is an inherently governmental function, and should not be paid for on a pay-for-service basis.

If we're going to protect safety oversight as an inherently governmental function, we should reject user fees for the certification of new aviation products and technologies as the way to pay for it.

The Administration's proposal also threatens innovation. It opens the door for certification

user fees that would impede the introduction of new and safer equipment into the aviation system. This could harm the competitiveness of U.S. manufacturers in the global market.

I want to thank you for giving me the opportunity to appear before the Subcommittee today to talk about this important issue. I also want to thank Chairman Costello and Ranking Member Petri for their commitment to aviation and for moving this important legislation as quickly as possible. I know that, working together, we can craft a bill that will modernize our nation's air traffic control system while protecting the oversight role of Congress over this national asset.

STATEMENT OF THE
THE HONORABLE JERRY F. COSTELLO
SUBCOMMITTEE ON AVIATION
HEARING ON
THE FEDERAL AVIATION ADMINISTRATION'S FINANCING PROPOSAL
MARCH 21, 2007

- I want to welcome everyone to the second of our hearings on the Federal Aviation Administration (FAA) reauthorization. This hearing focuses on the FAA's financing proposal. Tomorrow, the Subcommittee will give consideration to FAA's Operational and Safety Programs.

- On February 14, the FAA submitted its Reauthorization Proposal to Congress. The FAA's proposal includes a new financing plan to transform the FAA's current excise tax financing system to a hybrid cost-based user fee system. The FAA has cited the need to finance a major new air traffic control modernization initiative, the Next Generation Air Transportation System ("the Next Generation system"), as a primary reason for reforming the current tax structure.

- After careful review of the FAA's proposal, I do not believe that the FAA has made a strong case for its proposed changes. Last September, I stated that, based on Congressional Budget Office (CBO) projections, the current tax and financing system probably could support the requirements of the Next Generation system. Today, the Government Accountability Office (GAO) will testify that, in fact, the FAA's current tax and financing structure has kept up with demand for many years and <u>can</u> provide funding to cover development and implementation of the Next Generation system.

- In addition, at the February 14th hearing I noted that, based on the Administration's own cost assumptions and data, the FAA's proposal will hypothetically yield approximately $600 million less in FY 2008 than maintaining the current tax structure and over $900 million less from FY2009 to FY2012. The GAO will also testify today that the FAA has not taken into account changes in demand that could happen with an increased fuel tax, and that this could result in <u>even less</u> revenue collected by the fuel tax than anticipated.

- While the FAA states that we need an entirely new funding system to cover the capital costs of the Next Generation system, the FAA's estimated cost requirements for its major capital programs are actually lower than what they were four years ago.

- The FAA's estimated total requirements for facilities and equipment and the Airport Improvement Program in its new three year proposal are approximately $380 million and $1.5 billion less, respectively, than what it requested for the first three years of its last reauthorization proposal – the *Centennial of Flight Aviation Authorization Act.* In my opinion, this new proposal's lower funding levels for capacity enhancing capital programs further weakens the FAA's argument that radical financing reform is necessary.

- But more importantly, I believe that the FAA's proposal is bad for consumers, namely airline passengers and other airspace users. The FAA believes that its proposal will make it operate like a business. I disagree. The truth is, the FAA will never really be able to compare itself to a business. Whereas most businesses have competition to spur efficiency, the FAA has no competition. It is a monopoly. As I noted in February, airline passengers and airspace users either get services from the FAA or they stay on the ground.

- Because the FAA is a monopoly, it is not in the public's interest to give the Agency near unilateral authority to raise its fee rate to match whatever costs are incurred. I believe that linking a new user fee rate to the air traffic control (ATC) modernization program, in particular, could reduce incentives for the program to be carried out efficiently. The pressure for efficiency will be much less if FAA can require airline passengers and system users to bear the burden of any cost overruns or delays. While FAA argues that airline passengers will pay less under its proposal, I believe that, in fact, they could ultimately wind up paying more if user fee rates grow unchecked and airlines pass those costs on to their customers.

- The Department of Transportation Inspector General (DOT IG) has reported that the FAA's major acquisitions have experienced billions of dollars cost growth and years of schedule delays directly traceable to overly ambitious plans, complex software development, changing requirements, and poor contract management. The GAO has listed ATC modernization as a high risk program for the last 12 years.

- It is true that, in the last three years, the FAA has met its acquisition cost and schedule performance targets - that is, at least 80 percent of its acquisitions have been on schedule and within 10 percent of budget. However, at least some of the FAA's recent success is due to the rebaselining of certain major modernization programs. When an acquisition is restructured in this manner, its historical cost overruns may not be fully reflected in the FAA's performance measures.

- The DOT IG has noted that the FAA's Next Generation effort will, without question, be a high risk endeavor and that there is considerable potential for cost growth, schedule slips, and performance shortfalls, particularly with regard to new software intensive automation systems. The FAA should not be able to pass such potential cost growth directly onto consumers, through its fee rate, without Congressional oversight and approval.

- In addition, I believe that there are some very significant unknowns in this proposal that have not been addressed. For example, the FAA has not fully explained the potential administrative costs associated with tracking and billing 14 million flights a year.

- What we do know, as the Administrator pointed out last week, is that time is not on our side. I believe that fact argues strongly in favor of working within the current tax and financing structure.

- With that, I want to again welcome the FAA today and I look forward to the testimony.

T&I Subcommittee on Aviation
The Federal Aviation Administration's Financing Proposal
Statement of Rep. Doris Matsui
March 21, 2007

Thank you Chairman Costello and Ranking Member Petri for holding today's hearing. As was made clear at last week's hearing, the nation's aviation system is facing tremendous challenges. Funding for the current Aviation Trust Fund is expiring this fall. So this Committee must act.

At the core of this debate is how the burden of paying for our aviation system will be distributed among various users of the system as well as among the general public. I know we have a range of witnesses scheduled to testify today. And we'll be hearing many different opinions about who should pay for what and how.

At this point I am listening to all points of view on this issue. What I hope is that everyone can focus on building and sustaining an aviation system that has the capacity to meet the rising demand that we will be seeing in the next ten years and beyond. And doing that in a way that is safe and efficient.

Thank you to all the witnesses who have come here today to offer testimony.

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Statement of Rep. Harry Mitchell
House Transportation and Infrastructure Committee
Subcommittee on Aviation
3/21/07

--Thank you Mr. Chairman.

--Last week we began examining the Federal Aviation Administration's (FAA) reauthorization proposal. At the time, I identified a number of issues of concern to me.

--First and foremost, I am concerned about safety.

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--According to the FAA, 70 percent of our air traffic controllers will become eligible to retire over the next 10 years.

--We need to make sure the FAA has the resources it needs to recruit, train and maintain controllers to replace these retirees, and keep the flying public safe.

--I am also concerned about reports of passengers being trapped on grounded planes for extended periods of time without access to food, water and medical attention. In some

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cases passengers have been held in such conditions for more than seven hours .

--In my view, this is not just a matter of comfort and convenience. It is a matter of safety, and deserves to be addressed.

--Safety is, of course, the top priority, but I am also concerned about efficiency. Last month, the Washington Post reported:

> **"Airlines' on-time performance dropped for the fifth year in a row in 2006, with one in four flights arriving late or not at all, according to data**

released yesterday by the Bureau of Transportation Statistics."

" The airlines also mishandled a massive amount of luggage -- 4 million bags, or 6.7 for every 1,000 passengers, the industry's worst rate since 1990."

--I know we can do better.

--On a similar note, I am concerned about airport maintenance and growth.

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--The FAA proposes a $1.8 billion cut to the Airport Improvement Program ("AIP"), which funds capital improvements at commercial airports.

--This program is important, and I am pleased that the committee will be devoting an entire hearing to it next week.

--Today's focus is the FAA's financing proposal.

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--The FAA is proposing a significant change to its traditional financing system. Specifically, it is proposing a change to cost-based user fees.

--To the extent the FAA wants to better align its fees with the costs certain activities impose on our air traffic control system, I believe this makes sense. Unfortunately, the devil may be in the details.

--For example, the FAA is proposing to base certain fees on aircraft weight. This would

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mean that, even though two planes travel the same distance, and require the same amount of time and attention from our air traffic controllers, the heavier plane would be required to pay more.

--I'm not sure this is fair.

--Regardless, I look forward to hearing from today's witnesses, and learning more about the FAA's proposal.

-- I yield back the balance of my time.

OPENING STATEMENT OF
THE HONORABLE JAMES L. OBERSTAR
SUBCOMMITTEE ON AVIATION
THE FEDERAL AVIATION ADMINISTRATION'S
FINANCING PROPOSAL
MARCH 21, 2007

I want to thank Chairman Costello and Ranking Member Petri for calling today's hearing on *The Federal Aviation Administration's Financing Proposal.* I understand that this is the second in a series of hearings on the FAA reauthorization proposal, which was submitted on February 14, 2007.

The Administration cites the need to pay for Next Generation Air Transportation System (the "Next Generation system") as its rationale for aggressively promoting a radical new hybrid tax and user fee financing structure for the FAA. I have reviewed the FAA's proposal, and I believe that it is a solution in search of a problem. The current tax and financing system is tried and true, and it has accommodated the enormous growth American aviation has experienced over the past 30 years. I believe that it can continue to do so. Today, the Government Accountability Office (GAO) will also state that the FAA's current tax and financing structure can provide funding to cover development and implementation of the Next Generation system.

In February, I stated that, based on the Administration's own cost assumptions, the FAA's new proposal would hypothetically yield approximately $600 million less in FY 2008 than maintaining the current tax structure and over $900 million less from FY 2009 to FY 2012. According to the GAO, the FAA has not taken into account changes in demand that could happen with an increased fuel tax, and that this could result in even less revenue collected by the fuel tax than anticipated.

Moreover, despite the fact that the FAA has cited the need to finance the Next Generation system as a reason for financing reform, the FAA's estimated cost requirements for its major capital programs are actually lower than they were four years ago. The FAA's estimated total requirements for facilities and equipment and the Airport Improvement Program in this new three year proposal are approximately $380 million and $1.5 billion less, respectively, than what it requested for the first three years of its last reauthorization proposal – the *Centennial of Flight Aviation Authorization Act.* These lower capital funding levels raise further questions about the FAA's assertion that financing reform is necessary.

In addition, I believe that the FAA's proposal is not in the best interest of consumers, both airline passengers and other airspace users. The FAA believes that its new financing proposal would make the FAA operate more like a business. In the business-world, efficiency is driven primarily by competition. But the FAA has no

competition, and the consumers of its services have nowhere else to go. Therefore the comparison of the FAA to a business is spurious.

Therefore, I have serious reservations about implementing a user fee for which there does not appear to be a hard ceiling, and for which FAA would have broad authority to raise fees to match whatever costs are incurred. Linking a new user fee rate to the air traffic control (ATC) modernization program, may not provide enough incentive for the program to be carried out efficiently because the FAA can require airline passengers and system users to bear the burden of any cost overruns.

The FAA also believes that its financing proposal would be more transparent. I disagree. The current 7.5 percent airline ticket tax is very transparent, generally written right on the airline ticket, and airline passengers know that they are paying it. However, I believe that under the FAA's proposal, airline passengers and other airspace users could end up paying hidden costs for any future problems with the FAA's modernization program. The FAA argues that airline passengers will pay less under its proposal. However, I believe that they could end up paying more if user fee rates grow unchecked and airlines pass those costs on to their customers.

The problems that the FAA has experienced with ATC are well documented. The GAO has listed ATC modernization as a high risk program for the last 12 years.

Likewise, the Department of Transportation Inspector General (DOT IG) has reported that the FAA's modernization program experienced billions of dollars cost growth directly traceable to overly ambitious plans, complex software development, changing requirements, and poor contract management.

The DOT IG has also noted that the FAA's Next Generation effort will, without question, be a high risk endeavor and that there is considerable potential for cost growth, particularly with regard to new software intensive automation systems – the types of systems that have gotten the FAA into trouble in the past. Consumers should not responsible for such potential cost growth.

Thank you again, Mr. Chairman, for holding this hearing. I look forward to hearing from our witnesses.

STATEMENT OF

REP. THOMAS E. PETRI, Ranking Member

SUBCOMMITTEE ON AVIATION

HEARING ON

The President's

FAA Financing Proposal

March 21, 2007, 10:00am, 2167 RHOB

Good morning. I would like to welcome our witnesses today. As you are all aware, we are in the midst of a very busy month here on the subcommittee, and today's hearing will address a fundamental question of how we finance the FAA, and most importantly, the modernization of our air traffic control system.

We are pleased to have you here to share your thoughts on the Administration's financing proposal.

There has been lively debate on the financing issue. Where there is disagreement, we must try to find consensus.

In order for the United States to maintain its historical role as a leader in the global aviation industry, we must be certain to advance our modernization efforts.

Other countries around the world are making great strides in their modernization efforts. The EU plans to have a constellation of its own satellite-based navigation systems, known as Galileo, completed by 2010. The Russians are advancing with their own program GLONASS.

Elsewhere in the aviation industry, China expects to be manufacturing its own regional aircraft by 2008, and is striving to produce its own wide-body aircraft by 2020. For the last century, the US has led the aviation industry. Our aviation industry is critical to our economy and we cannot afford to fall behind.

Whichever financing mechanism is put into place, we must be sure that it can support the costs of modernizing our system.

I'd like to thank all of our witnesses for participating in this important hearing. I look forward to working with my colleagues on both sides of the aisle, the FAA, and industry in the process of enacting an FAA financing mechanism that is equitable among the users and fair to the traveling public.

With that, I yield back the balance of my time.

Opening Statement
Congressman John T. Salazar
T&I Aviation Subcommittee Hearing
The FAA's Financing Proposal
March 21, 2007

Thank you, Mr. Chairman.

I'd like to thank all of the panelists for being here today.

The Administration's financing proposal has been a major focus of this subcommittee.

I've talked to people back in my district, and many of them share my concern with the FAA's proposal.

The FAA proposal would increase the gas tax on General Aviation to 70 cents a gallon—a tax increase of over 300 percent!

I am very concerned that if this proposal moves forward, there will be a significant reduction in general aviation activity.

Today the sale of general aviation fuel is down 23 percent across the State of Colorado.

Airport managers tell me this is directly tied to the price of fuel.

Adding an additional 50 cents on top of the existing price could cripple general aviation.

Additionally, passenger traffic is forecasted to continue to increase, yet the FAA proposes to move away from the aviation segment—general aviation—that has the largest potential for growth.

I share the concern of many of my colleagues that linking a new user fee rate to the FAA's modernization program could reduce incentives for the NextGen program to be carried out efficiently.

I look forward to the testimony today and again, I thank the panel members for being here.

Thank you.

Rep. Todd Tiahrt

Testimony
House Committee on Transportation and Infrastructure
Subcommittee on Aviation
"FAA Financing Proposal"
March 21, 2007

First, thank you Mr. Chairman for allowing me to appear before your committee today. The discussion we are having today regarding the Federal Aviation Administration's financing proposal is probably the most important discussion in Congress this year to my district. For if the FAA proposal is adopted it would devastate the economy of Southcentral Kansas. I believe that it will have a devastating effect on the national economy as well.

Today I am going to show you that this user fee proposal should be rejected by Congress. General aviation is a vital part of our economy and is necessary for future growth. General aviation is extremely vulnerable to federal policy. Furthermore, the FAA proposal is a plan to fail, according to the FAA's own accounting. It will raise less revenue than the current system of fuel taxes and general fund contributions. In addition, this proposal will set up an IRS within the FAA, something no one should support. The effect will be that less people will fly. Finally, Congress will have less oversight of our air traffic control system.

Air Capital of the World

Today I come before this Committee as the Representative of the "Air Capital of the World." I represent Southcentral Kansas, home to Cessna, Hawker Beechcraft, Bombardier, Boeing, and Spirit Aerosystems as well as EADS engineers, several design shops, suppliers and subcontractors, maintenance facilities and the world-class research of the National Institute for Aviation Research at Wichita State University. Thus I am deeply concerned about issues that affect the aviation community. General aviation is a diverse and vital segment of aviation that would be devastated by a user fee approach.

Kansas companies deliver over 50 percent of all general aviation aircraft. These companies provide around 32,000 well-paying jobs. In fact, 54 percent of the greater Wichita area's manufacturing jobs go into building the general aviation aircraft that would be hit hardest under a user fees system.

In 2006 the three largest Kansas-based GA manufacturers (Bombardier-Learjet, Cessna, and Raytheon) manufactured 1,708 airplanes at a value of $5.8 billion. Of that total production, exports accounted for 537 (31%) airplane deliveries at a value of $2.3 billion (40%).

Fortunately, despite the troubles of a few years ago, the situation for general aviation is brightening. Deliveries of all three categories of general aviation aircraft—piston, turboprops and business jets--are on the rise. Importantly, so is employment at the general aviation companies. Cessna hired 2,000 new employees in 2006 and has plans to hire another 1,000 in 2007.

But our industry is just now recovering from this post 9-11 recession and user fees will cripple the industry and discourage the use of general aviation. In addition, the proposal would dramatically slow down production, cause job loss across the industry and force subcontractors

to close their doors—sending more manufacturing jobs and work overseas.

National Importance of GA

The aviation industry is not only important to the State of Kansas but also to each and every one of your districts. Your constituents work for large and small aviation manufacturers, suppliers or repair stations, your constituents are pilots and support staff, and thousands of your constituents rely on aviation for their livelihood and those of their employees. According to economist Janet Harrah, the Director of the Center for Economic Development and Business Research at Wichita State University, activity linked to the aviation manufacturing industry totals $142 billion in annual payroll, and 2.8 million employees in the U.S. as a direct or indirect result of the industry.

A 2005 study by the General Aviation Manufacturing Association (GAMA) places general aviation's total economic impact on the U.S. economy at over $150 billion, including $53 billion in wages and salaries and attributed employment of over 1.2 million people.

In 2005 more than 606,000 Americans were employed in the aviation manufacturing industry directly. Companies engaged in the manufacture and assembly of complete aircraft accounted for the largest percentage of jobs, followed by primarily engaging in manufacturing search and detection systems. Employment projections indicate that aircraft and aircraft parts manufacturing employment will increase about 8 percent over the next decade, adding more than 36,000 jobs. Total employment for all industries is expected to increase about 15 percent during the same 10-year period.

In addition to all of our constituents who work in the general aviation industry, many thousand more of our constituents count on general aviation in order to run their businesses. In fact, 70% of all general aviation flight hours are for business. Employers across the United States depend on general aviation to conduct business and enable them to compete in the 21st Century economy. Thousands of small and mid-size businesses across the nation rely on general aviation. In many rural areas, business owners simply could not survive without utilizing general aviation.

GA is a vulnerable industry

General aviation is a delicate industry, while can be an economic powerhouse during good times; it is delicate to market fluctuations and government policies. It is often said that aviation manufacturers are the first to be hit and the last to recover from a recession. We have certainly seen that cycle play out in Kansas. The number one concern in the general aviation community is that user fees will stall the recovery of this important America industry. Pilots and the companies that rely on general aviation airplanes to help them compete in the marketplace do not want the administrative burden of dealing with user fees.

Let me give you some examples of government's direct impact on the health of GA.

Before Congress enacted GARA, the General Aviation Revitalization Act of 1994, Kansas was

bleeding jobs due to increasing liability costs. A "statute of repose," GARA was designed to protect manufacturers of smaller, private aircraft (less than 20 seats) from liability for accidents involving older airplanes and/or parts. GARA bars lawsuits against the manufacturer of an aircraft or component part once that item has been in service for 18 years. If a plane has been flying for 18 years before crashing, it is safe to assume that it is not a design flaw that brought it down. This act of Congress was directly responsible for thousands of new jobs in aviation manufacturing.

On the flip side, the terrorist attacks of September 11, 2001 were not only a blow to our psyche, but also a $2 trillion hit to our economy. The economic impact of the attacks hit the aviation manufacturing industry more than any other and Wichita was said to be proportionally the community most affected by the ensuing economic downturn. We lost 25,000 jobs in the aviation industry alone.

GA is also vulnerable to tax policy. In 1991 Congress passed a luxury tax that had a negative effect on the industry. Beech Aircraft Corp says it lost 39 airplane sales in the first quarter as a direct result of the tax. Beech had planned to add 500 jobs in 1991 but instead laid off 20 workers. It says the 39 lost sales would have provided a year's worth of work for 255 employees. GAMA estimated that almost 1,500 jobs in 1991alone as a direct result of the tax.

We have seen the positive effects of the accelerated depreciation adjustment in the tax code that Congress granted in the wake of the economic devastation of 9-11. Accelerated depreciation is a clear example of how government policies can affect and industry and help get it back on its feet without having to use subsidies as we did to bail out the airlines. Unfortunately, this boost is only temporary and will not sustain the industry for the future.

Finally, government regulatory policy can also have a big impact on this industry. When FAA certification officers are under funded, it delays the response time to get new products into the market. Last March, this subcommittee under the leadership of then Chairman Mica came to Wichita to hear from the manufactures and suppliers about the challenges they face. The impact of the dearth of certification officers came up again and again.

And during this same time, international competitors such as Embraer were making headway into the market. Our government should be helping this industry compete in the global economy, not hinder its ability to do so.

The "Next Generation Air Transportation System" does NOT require User Fees

There are many fine witnesses on the panels following this one – such as Ed Bolen and Phil Boyer - who will detail the impact of the FAA proposal on the entire aviation industry. But I would like to make a couple of points about the inconsistencies in the proposed plan.

I was heartened by former Secretary Mineta's comments that he did not want the Department of Transportation to be the choke point for economic activity, and I am sure that you agree. Unfortunately, this proposal represents such a choke point.

We have, by far, the biggest, most complex and yet the safest and most efficient air traffic control system in the world. The US alone accounts for about 60% of the world's air traffic activity. Maintaining this system and preparing it for future needs is one of our most important national duties.

FAA's "Next Generation Air Transportation System Financing Reform Act of 2007" would shift billions of dollars in taxes away from the airlines and onto general aviation small businesses by imposing user fees – or as some more aptly call them, taxes.

We want to make sure the U.S. has a fully supported and efficient air traffic control system and that general aviation contributes its fair share. However, this proposal is predicated on the false assumption that a plane with 3, 30 or 300 passengers exerts the same burden on our air traffic control system. According to Aviation Daily, the average annual hours per aircraft is 3800 for a commercial jet and only 370 for a GA aircraft.

If taxes or fees are set by dividing costs by the number of flights—a method outside mainstream economic theory—then the consequences could be quite substantial. In fact, the result would likely be an unfair, dramatic, and devastating increase in the cost of operating general aviation aircraft.

This concept is based upon the belief that "a blip is a blip is a blip." This couldn't be farther from the truth. For example, take Reagan National Airport where the government shut down general aviation following September 11, 2001, and even today it is not fully up and running again. There was **no** reduction in the cost for air traffic control during that time when GA was grounded.

You will hear arguments that airline passengers are paying for GA. This is not true. In areas where GA is shut down, the cost for ATC remains the same. In fact, it is the airlines that we routinely bail out with taxpayer dollars, regardless if they are passengers. After 9/11/01 we passed a bailout of $5 trillion for the airlines. GA got nothing, and in fact was shut down. Furthermore, as an affront to the taxpayer the airlines took these taxpayer dollars and bought foreign made jets (one airline bought only Airbus jets) – at a time when we were losing 25,000 aviation manufacturing jobs in Wichita alone.

As a basic principle, no industry segment should be forced to subsidize any other segment. General aviation has always contributed to the aviation trust fund through fuel taxes that are easily collected and efficiently administered. This is a fair representation of their use of the system.

The Administration proposes the elimination of most of these excise taxes beginning in FY 2009 and proposes user fees as the replacement for this lost revenue to the Airport and Airways Trust Fund (AATF).

The FAA plan calls for a 360% increase in fuel taxes for general aviation. A 360% increase. In addition to increased fuel taxes, the FAA proposal will subject all users of the system to substantial increases in fees for: aircraft registration, airmen certificates, medical certificates,

certificates for flight schools and training centers, certificates for repair states and maintenance technical schools, designee apportionment and training. User fees would necessitate the establishment of another government bureaucracy to administer a system that, in comparison to fuel taxes, would be an inefficient mechanism to collect revenue.

If you tax something, you always get less of it—an important rule to remember when making policy in Washington. This is exactly what will happen to general aviation aircraft if the FAA and airlines push through a user fees regime. Consider the fact that if all general aviation planes were grounded tomorrow, the savings for air traffic control would be virtually zero. It is the larger commercial jets, whose hectic schedules at a limited number of national airports cause the huge bottlenecks that drive the cost of air traffic control in the U.S. Given these facts, a user fees system seems radically unfair to smaller planes.

Perhaps most disturbingly, Congress is being asked to approve this financing proposal and create an IRS within the FAA.

Finally, where is the modernization plan for which we supposedly need a new funding mechanism? I urge you to work to find common ground among all aviation stakeholders and move this debate from user fees to modernization of the air traffic control system.

A user fee system would be the worst kind of Washington meddling, where the supposed "cure" is far worse than the disease. When FAA officials claim that user fees are the best thing for U.S. aviation, they are focusing on an ill-deserved tax break for the airlines and turning a blind eye to the thousands of jobs we would lose in Kansas and across the United States.

Appropriations Perspective

I also come here today as an Appropriator. As an appropriator I must warn two things.

One, this new financial plan will, in fact, bring in less revenue to the system. Their own proposal shows that a user fee based system would generate $641 million les revenue in FY08 and over $900 million less from FY09-FY2012. This certainly does not seem wise at a time when they claim that the needs of the system will increase.

That is the best case scenario. We know that the shortfall will be even worse because less people will fly. If we are in the unfortunate situation of having another catastrophe like 9-11 or a health scare like SARS the system will collapse.

There is no need for a new stream of revenue; Congress has continued to increase funding for the FAA through an appropriation that combines funding from the Airport and Airways Trust Fund (AATF) and the general fund. Some may call for a reduction or elimination of the general fund contribution but this system has worked well for over 40 years.

In fact, the FAA's budget has grown on average three percent a year for the last five years.

Revenue in to the Airport and Airways Trust Fund is projected to increase 71.2 percent (to $19.2 billion) by 2016. As such, the current system of aviation excise taxes combined with a general fund contribution will be more than sufficient to support FAA's future funding needs and modernization.

And two, Congress will lose oversight of FAA operations. Instead, as their funding will be off-budget, an unaccountable outside board will make decisions about our nation's ATC, unaccountable to anyone – Congress, the judiciary, or the American people.

What would an FAA free of congressional oversight put its resources into? They already bypass congressional intent and shortchange the needs of the system as seen in the under funding of air traffic controllers. I am routinely amazed that the FAA does not seem worried about the lack of controllers in the pipeline. This is the issue they should be addressing in their vision for the "next generation" not reducing costs for the airlines.

I am also concerned that without Congressional oversight the FAA will continue to under fund important functions of their mission as they already do. Despite the fact that Congress specifically appropriated money to fund certification officers, FAA disregarded that and spent the money elsewhere – at a time when US producers are attempting to compete in an expanding global economy. Kevin Hawley, President of Aerospace Systems and Technologies in Salina, Kansas told us last year that the "workload of the FAA continues to grow while staff remains dormant or decreases." He feels the effects of that as does Finley Nevin, President of Global Engineering and Technology in Kansas who told us that because of "the problems with the manning of the local FAA" his company's project "took entirely too long, slowed delivery and therefore affected jobs." If the FAA is unresponsive to the needs of our constituents when we do have oversight, how will it behave when we don't?

The FAA currently blatantly disregards the health of the aviation sector. In the past 18 months alone, the FAA has zeroed out funding for certification officers, reduced the funding for research and development, shortchanged air traffic controllers, and is now proposing user fees that will cripple the aviation industry.

I have reintroduced the "Promotion Responsibility for Our U.S. Aviation Act" (PRO U.S. Aviation Act) and I encourage you to cosponsor this important bill. This bipartisan bill will simply restore the responsibility of promoting the aviation industry to the mission of the Federal Aviation Administration (FAA). This bill will not cost anything and will not detract from FAA's focus on safety. In fact, ensuring the health of American aviation is one of the best ways to ensure the safety of flight.

International

Finally, I want to briefly touch on the fact that the user fee approach to solving air traffic control fiscal issues has had troublesome results around the world. The United States has by far the most air traffic in the world, both commercial and GA. So in one way it is hard to compare apples and oranges. But we can see two stark warnings coming out of European user fee systems:

First, the systems are extremely vulnerable to market forces. After the attacks of September 11, 2001 decimated air traffic worldwide, and again after the Severe Acute Respiratory Syndrome (SARS) incidents also affected air travel, most nations had to turn to their governments to sustain their air traffic operations because user fees simply were not cutting it.

Second, general aviation is decimated. User fees have contributed largely to the downtrend in general aviation world wide. The number of aircraft per capita in the European Union is significantly less than the United States, and this is partly to explain for their struggle to compete in the global economy.

These examples from other nations show us that user fees are not the answer.

Conclusion

This year you will take up the daunting task of the FAA reauthorization bill. You are entrusted with ensuring the future safety and efficiency of the air traffic control system. I hope I have convinced you that user fees will not do so. They will instead weaken the system and, even more troubling, destroy general aviation in this country.

BEFORE THE
SUBCOMMITTEE ON AVIATION
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE
UNITED STATES HOUSE OF REPRESENTATIVES
WASHINGTON, D.C.

TESTIMONY OF
STEPHEN A. ALTERMAN, PRESIDENT
CARGO AIRLINE ASSOCIATION
1220 19TH STREET, NW, SUITE 400
WASHINGTON, DC 20036
202.293.1030

ON

THE FEDERAL AVIATION ADMINISTRATION'S FINANCING PROPOSAL

MARCH 21, 2007

Good morning. My name is Steve Alterman and I am the President of the Cargo Airline Association, the nationwide organization representing the interests of the all-cargo air carrier industry, as well as other businesses and entities with a stake in the air cargo supply chain. (A list of current members is attached).

The All-Cargo Industry

Although an integral part of the air transportation community, the all-cargo segment is unique. In order to serve our worldwide customers, and to provide them with the time-definite services they require, a large percentage of our flights are during nighttime hours, thus enabling us to offer expedited delivery throughout the nation and the world.[1]

[1] Such nighttime operations are clearly "off-peak" and result in an efficient use of system resources.

The all-cargo industry is also one of the fastest growing segments of our commercial aviation marketplace, with growth rates of 3.1% domestically and 6.3% internationally expected over the next decade.[2] In order to continue to provide the service that our shippers and the world economy demand, we are dependent on a modern air traffic management system that provides the flexibility for growth in the coming years. We simply cannot afford to continue to manage traffic with technology (radar) designed in the first instance to fight World War II. Rather, we must build a system using the technology and procedures necessary to address the shortfalls in capacity that will occur as future demand continues to grow. **The modernization of our current system must therefore be the major priority in the ongoing FAA Reauthorization effort.**

Modernization of the system is critical for reasons other than simply addressing future capacity. Operational procedures using satellite-based technology will yield more efficient operations, resulting in less noise and less fuel burn, thereby reducing aircraft engine emissions. These environmental benefits cannot be overlooked. Nor can the potential safety enhancements that will result with the provision of better and more timely information to both pilots and controllers.

Finally, it is crucially important that the steps necessary to modernize be put in place this year. Changes of the magnitude contemplated do not take place overnight and every year of delay pushes modernization further down the road. Without action in 2007, we run the very real risk of both capacity and environmental constraints inhibiting the industry growth that will be

[2] U.S. Department of Transportation, Federal Aviation Administration, FAA Aerospace Forecasts, Fiscal Years 2006-2017.

necessary to accommodate both passengers and shippers in the coming years. Unfortunately, since we are operating under a Continuing Resolution for Fiscal Year 2007, we have already lost a critical year for the modernization effort. For example, the House Appropriations Bill for FY 2007 contained $100 million for ADS-B development and the Senate Bill contained $80 million. These critical funds cannot now be spent and we are forced to revert to FY 2006 levels that are not adequate to support today's level of activity. A further delay by not reauthorizing the FAA this year will be devastating to the modernization effort.

The FAA Financing Proposal

On February 14, 2007, the FAA released its long-awaited legislative plan for dealing with both the programmatic and financing elements of the Next Generation System. This proposal radically changes the current system of fees and taxes used to fund the air transportation system. Unfortunately, this proposal provides more questions than answers, and the Cargo Airline Association cannot support the FAA proposal in its present form.

While the FAA has, over the past few months, made significant strides toward modernization (especially in the area of making the decision to use ADS-B technology as the next generation surveillance tool), we are concerned that the proposed legislation does not contain a comprehensive Next Generation plan. Until the details of this plan are known, it is difficult to assess the funding required. Yet the FAA proposal focuses almost exclusively on the financing element and not on the details of the system. To some extent, therefore, we are putting the cart before the horse and need to step back to ensure that the right questions are being asked.

Before moving to completely overhaul the system that has provided the basis for FAA financing for decades, it is necessary to more completely analyze the requirements of a modernized system and how those requirements impact the resources necessary. Questions that must be asked and answered include:

1. What is the precise nature and associated costs of the Next Generation system infrastructure?
2. What are the cost savings the FAA will realize from implementing the modernized system?
3. Will the current system provide the funding necessary for modernization?
4. What are the costs and benefits to the user community? And,
5. Should the infrastructure needed for modernization be purchased or perhaps leased to provide maximum flexibility as technology advances?

Even if it is determined, after this analysis, that the current excise tax system must be completely overhauled, we cannot support the plan envisioned by the FAA proposal whereby the FAA Administrator is given virtually unfettered authority to set the level and structure of fees at will, with little or no Congressional oversight and no provisions for judicial review. While the proposed Bill does list use-related factors that the Administrator might take into consideration in setting user fees, all of these elements are discretionary and need not be used. Such authority would clearly eliminate any incentive for the FAA to cut costs[3] or restrain future cost increases since fees could always be raised to cover unnecessary agency spending.

Perhaps even more importantly, it appears that the user fee system envisioned by the FAA proposal will require a complicated and costly bureaucracy simply to assess and collect the fees. In an era of limited resources, care should be taken to ensure that, to the maximum extent possible, the funds generated are spent to improve the system. The added costs of establishing

[3] Indeed, without any detail in the proposed Bill, we have no idea of what expenses can be eliminated in a modernized system.

and maintaining a multi-million bureaucracy cannot be justified, especially when other, simpler, options may be available. At the least, these other options should be explored before committing to any proposed user fee scheme.

Whatever the eventual structure of FAA financing, we urge that the following principles and considerations should be paramount.

First, the U.S. aviation system is a national asset that benefits all citizens and drives the nation's economy. The consequences of a sub-par system are constrained economic growth and diminished U.S. competitiveness in the world marketplace. Congress has historically recognized these facts by providing a General Fund contribution in excess of 20% of the FAA Budget. We are disappointed that the President's Budget and the FAA legislative proposal not only provide a smaller percentage of General Fund contribution for Fiscal 2008, but actually envision a decrease in funding for 2009 and 2010. With the need for significant infrastructure investments in the coming years, this federal contribution should increase, not decrease.

Second, whatever funding mechanism is ultimately decided upon, Congress should ensure that industry funding obligations are fairly allocated. As a basic principle, no industry segment should be forced to subsidize any other segment. From the all-cargo perspective, where under the current system cargo industry members pay a 6.25% air waybill tax plus a 4.3 cent per gallon fuel tax, studies indicate that our industry segment pays somewhat more than 100% of our system use.[4] This is before taking into account that much of our use of the system is at off-peak times – meaning that not only do we place a relatively low burden on the system but , by

[4] *See* Air Cargo Airlines System Use Analysis, S,H&E, 2006.

spreading operations over 24 hours, we also enhance the system's overall efficiency. While we do not expect any relief for that portion of our system use that exceeds 100%, neither should we be expected to pay any more than our current share in order to make up for the shortfall in contributions from other industry segments. This equitable result can be accomplished by simply retaining the current funding mechanism for the air transportation of cargo or by ensuring that any new system applicable to us does not unfairly impact our industry segment.

Third, we strongly believe that Congress should support the funding necessary for Research and Development in an amount adequate to develop the necessary "out-year" modernization products. As a practical matter, today's R&D provides tomorrow's Facilities and Equipment, and any funding gaps in this area will seriously impede the modernization effort. This issue is of special concern in light of the re-prioritization of NASA R&D funding to concentrate on future space travel and "de-prioritize" short and mid-term aeronautics research. A specific area of R&D concern is the research necessary to address growing environmental concerns.

In summary, we strongly believe that modernization of the current air traffic system is absolutely essential and the Cargo Airline Association and its member companies are committed to working with Congress, the FAA and colleagues in the aviation community to arrive at an equitable system that meets the needs of all aviation interests.

Thank you very much.

THE CARGO AIRLINE ASSOCIATION
The Voice of the Air Cargo Industry

MEMBERSHIP LIST

ALL-CARGO AIR CARRIERS

* ABX Air, Inc.	Wilmington, OH
* Atlas Air, Inc.	Purchase, NY
* FedEx Express	Memphis, TN
* United Parcel Service	Louisville, KY
* Air Transport International	Little Rock AR
Capital Cargo International	Orlando, FL
DHL Express	Miami, FL
First Air	Gloucester, Canada
Kalitta Air	Ypsilanti, MI
Kitty Hawk Inc.	Dallas, TX
USA Jet Airlines, Inc.	Belleville, MI

AIRPORT ASSOCIATE MEMBERS

Ft. Wayne International Airport	Ft.Wayne, IN
Louisville International Airport	Louisville, KY
Memphis-Shelby County Airport Authority	Memphis, TN
New Orleans International Airport	New Orleans, LA

OTHER ASSOCIATE MEMBERS

Aviation Facilities Company, Inc.	McLean, VA
Bristol Associates, Inc.	Washington, DC
Campbell-Hill Aviation Group	Alexandria, VA
Keiser & Associates	Oakland, CA

* Member, Board of Directors

Corrected

STATEMENT OF ED BOLEN

PRESIDENT AND CEO

NATIONAL BUSINESS AVIATION
ASSOCIATION

BEFORE THE

SUBCOMMITTEE ON AVIATION

COMMITTEE ON
TRANSPORTATION AND INFRASTRUCTURE

U.S. HOUSE OF REPRESENTATIVES

MARCH 21, 2007

STATEMENT OF ED BOLEN
PRESIDENT AND CEO
NATIONAL BUSINESS AVIATION ASSOCIATION

Mr. Chairman, and members of the Subcommittee, My name is Ed Bolen, and I am the President and CEO of the National Business Aviation Association. I am grateful for the opportunity to appear before you today. NBAA commends the Subcommittee for holding this important hearing to discuss the future of our national air transportation system. NBAA members have a vital interest in a strong and healthy aviation system.

NBAA was founded 60 years ago to represent companies that utilize General Aviation as a tool for meeting some of their transportation challenges. NBAA and our members are committed to working with Congress to transform and modernize the nation's aviation system. Likewise, we are committed to modernization policies that support the continued growth of each aviation segment, including General Aviation, which plays a critical role in driving economic growth, jobs and investment across the U.S. We strongly support the shared goal of keeping our national aviation system the safest and most efficient system in the world.

General Aviation is an essential economic generator, contributing more than $150 billion to annual U.S. economic output, and directly or indirectly employing more than one million people. Most General Aviation aircraft operating around the world are manufactured in the U.S., and our industry is continuing to build a strong American manufacturing and employment base that contributes positively to our national balance of trade. Congress recognized just how fundamental General Aviation is to our nation's transportation system, rural economies, manufacturing capability, and balance of trade when it passed the General Aviation Revitalization Act a little more than a decade ago.

FACTS ABOUT BUSINESS AVIATION

Business aviation, as many members of the Subcommittee know, is an FAA-defined term. According to the FAA, business aviation is the use of any General Aviation aircraft – piston or turbine – for a business purpose.

Business aviation is a vital part of the American economy and our national transportation system. There are some facts about business aviation of which you might not be aware.

Business aviation operators encompass a broad cross-section of interests, including businesses, governments, schools and universities, and not-for-profit organizations. Servicing and supporting these organizations are FBO's, maintenance technicians, suppliers and service providers.

Approximately 85 percent of the entities that rely on general aviation to meet a portion of their transportation challenges are small and mid-sized businesses that own and operate a single airplane.

These include businesses like:

- Manitoba – a small, family-owned metal recycling business in Lancaster, N.Y., which first used a piston-twin airplane and now uses a turboprop to help expand its business beyond its local area.

- Aero Charter, a thirty-year-old, family-owned company in Chesterfield, Missouri. The owners, who are also the company's pilots, use a mix of business aircraft types, including business jets, piston planes and a turboprop. They serve as the sole provider of air transportation for Mid-America transplant services, an organ-donation company.

Business aviation also has a long history of philanthropic activity.

Organizations like the Corporate Angel Network arrange free air transportation for cancer patients traveling to treatment using the empty seats aboard business aircraft. They have arranged more than 20,000 flights since their founding in 1981.

Similarly, Angel Flight America's seven member organizations and 7,200 volunteer pilots arranged more than 18,000 flights in 2005 *alone* to carry patients to medical facilities.

The Veterans Airlift Command uses business aircraft and unused hours of fractional aircraft ownership programs to provide free flights for medical and other compassionate purposes for wounded service members, veterans, and their families. Veterans Airlift finds volunteers in the business aviation community to fly their missions on request and contribute the full cost of their aircraft and fuel for the missions flown.

The community also reliably snaps into action to respond to national crises. In the days and weeks following Hurricane Katrina, our operators provided an outpouring of generosity and assistance. Hundreds of thousands of pounds of supplies were transported into the Gulf Coast region aboard business aircraft, which also were used to transport victims out of harm's way.

The aircraft involved in business aviation are diverse, like the industry itself. For instance, according to statistics by the Aircraft Owners and Pilots Organization, a majority of the hours flown in piston-engine airplanes are for business purposes. Among the turbine-powered airplanes used for a business purpose the Beech King Air is the most common model. The King Air is a twin-engine turboprop that was first introduced in 1965 (see Chart 1).

Business aviation tends to fly at altitudes above and below the commercial airline traffic that prefers to operate in the range between 29,000 feet and 39,000 feet. We also tend to use different airports. In fact, General Aviation represents less than 5 percent of the total operations at the nation's 20 busiest commercial airports. The ability to use smaller, less-congested facilities is key to the value and flexibility of business aviation aircraft.

FAA REAUTHORIZATION

Mr. Chairman, we in business aviation are united with the rest of the General Aviation community in our grave concern about legislation the FAA recently unveiled, which the Agency calls the Next Generation Air Transportation System Financing Reform Act of 2007.

The FAA and the nation's big airlines are promoting this user fee proposal as a forward-looking "modernization bill." But to everyone who was around the last time the nation's big airlines pushed a user fee scheme in Congress, there is a strong sense of déjà vu.

Some of you may remember that, in 1997, the nation's seven largest airlines pushed for a user fee scheme that would shift $600 million in taxes onto what they viewed as their competitors – the low-cost airlines. But, according to one airline CEO at the time, the real goal was "control of the FAA by the Big Seven and for their exclusive benefit."

This time around, the airlines have picked a new target for their tax shift – General Aviation, and they have increased the amount to $2 billion. The objective of reducing Congressional control of the FAA remains unchanged.

The airlines have not been secretive about their goal of reducing Congressional control. One year ago today, the Air Transport Association (ATA) called a press conference where, according to *The Wall Street Journal*, their chief lobbyist was quoted as saying: "We need to get Congress out of this process."

Lest anyone think ATA was misquoted, the association said again in August at an Airports conference in Florida, "it is critical we have a governance structure that is, to the best of our ability, free of the pressures of Congress."

Mr. Chairman, as I indicated earlier, the proposed bill is being promoted by the FAA and the big airlines as a modernization bill. Let me be clear, the General Aviation community, including business aviation, takes a backseat to no one in terms of pushing for modernization. Our motivation is simple – every time airports or airspace get congested, it's General Aviation that is the first to get squeezed out.

It wasn't that long ago that Midway Airport in Chicago was a great General Aviation airport with flight schools, flying clubs, and so forth. Then, low-cost carriers began using the airport, forcing General Aviation flights to go elsewhere. This same scenario has been repeated in San Jose, California and Manchester, New Hampshire, and it is happening in Fort Lauderdale, Florida.

In order to expand system capacity, General Aviation has been at the forefront of the modernization effort. We were early adopters of GPS navigation systems. We worked to develop the ADS-B test program in Alaska – a test program that is now the foundational technology of the modernization effort. Just two years ago, General Aviation operators collectively spent millions of dollars equipping their airplanes with new altimetry so that we could double the capacity of our en-route airspace.

We are also working closely with the Joint Planning and Development Office to define and implement the Next Generation Air Transportation System.

Because of its deep involvement in the modernization process, NBAA has as much knowledge and visibility into the FAA modernization process as any industry organization in the country. It is with that knowledge and visibility that I can tell you without hesitation that, when it comes to modernization, the FAA talks the talk, but doesn't walk the walk.

Let's look at the facts:

- This proposal cuts FAA funding by $600 million in 2008 alone.
- It caps the use of general taxpayer revenues – the General Fund contribution – below what it is today and further reduces the General Fund contribution in out years.
- It takes money that could be used for air traffic control transformation and diverts it to assess and collect user fees. Whether the bureaucracy is built inside the government, or outside through contractors, money must be used to create and maintain this new assessment and collection bureaucracy.
- It also authorizes the FAA to go up to $5 billion in debt starting in 2013.
- This FAA proposal does not outline the technologies, the timelines or the costs of the next phase of modernization.

So: rather than modernizing, this bill cuts FAA funding by $600 million, reduces the General Fund contribution by hundreds of millions, and diverts money that could and should be spent on runways, towers and modernization technologies and wastes it on a new bureaucracy. After all that, it allows the FAA to go into debt.

Mr. Chairman, as I said: The FAA talks the talk – but doesn't walk the walk – on modernization.

Worse still is the fact that this bill is based on a flawed and unprecedented cost allocation study. By FAA's own admission, they have abandoned all economic principles for how to allocate costs to different users in favor of a simple accounting approach. No other nation uses such an approach for allocating air traffic control costs or for setting user charges or taxes.

In fact, the FAA's new approach runs counter to international guidelines. The International Civil Aviation Organization states:

> "... it is particularly important to recognize that the major part of the air navigation facilities and services infrastructure has been established to serve the requirements of commercial air traffic, and that some users receiving extensive service could not, by reason of the nature of their activity, have called for the provision of service on such a scale on an economic basis.
>
> "The primary beneficiaries among the users should therefore be carefully identified to ensure that realistic allocations of costs to the various user categories are made."

This is a very serious issue. As you know, the FAA has proposed in its legislation that all future fees and charges must be based on its own cost allocation study. Any errors in the study or its methodology will put at risk many segments of our nation's air transport industry and those communities around the country that are dependent on them.

So, if this is not a modernization bill, what is it?

This proposal is an effort by the FAA and the airlines to reduce Congressional authority and move toward commercialization.

Mr. Chairman, I have already reminded the Subcommittee what the big airlines' goal was in 1997, and what they have said their goal is today: basically to shift their costs and reduce Congressional control. Their public comments suggest that Congress is an impediment to modernization and that the authorization/appropriation process is too unstable and unpredictable to allow for modernization.

The facts tell a different story.

FAA funding has steadily increased over the past decade, often in excess of the amount the FAA has requested (see Chart 3). Moreover, there has never been an FAA modernization program that has ever failed for a lack of Congressional support or funding. Even this year, Congress is funding the FAA's two Next Generation Air Traffic programs – System Wide Information Management, or "SWIM," and ADS-B – in excess of what the FAA requested.

In our view, Mr. Chairman, the battle over aviation user fees is a battle over whether Congress will retain control of the air traffic system or whether that control will shift to unelected bureaucrats or even industry.

Aviation user fees would reduce Congressional authority and put us on the slippery slope toward commercialization.

In fact, last August, the Reason Foundation published an article in support of aviation user fees that said "user fees are the essential precondition to commercialization." The General Aviation community urges you not to establish that precondition.

Instead, we urge Congress to produce a real modernization bill that retains Congressional authority over air transportation in the United States. The continued transformation of the system is a primary focus of the General Aviation community. In our view, this debate should not be about winners and losers, but about building a system that can meet all future demand.

Mr. Chairman, modernization is not one "big bang" – it's not purchasing a big new piece of technology and plugging it in. It is a stable transformation of our communication, navigation and surveillance systems.

It has been said that modernization could cost somewhere between $300 million per year and up to one billion dollars per year in new spending (although the FAA itself is proposing a little less than $200 million in modernization spending in FY09). If those numbers are in the ballpark, we are talking about an annual increase in the FAA's current budget of between 3 percent to 8 percent (see Chart 4).

If that is what is needed, then it seems Congress has a least 5 options for getting there:

1) Congress can direct the FAA to make modernization a priority and find 3 to 8 percent of its budget that can be redirected to modernization without compromising system safety or efficiency. Most multi-billion-dollar budgets, whether in the government or the private sector, include some non-essential spending that can be redirected. In fact, businesses are often faced with unexpected or new priorities and must meet these challenges within existing resources. A re-ordering of priorities in the range of 3-to-8 percent of a budget is not excessive.

2) Congress can declare modernization a national priority and increase the general taxpayer revenues supporting modernization. Increasing the General Fund contribution from 19 percent of the FAA's total budget to 25 percent would fully pay for even the high-end estimates of modernization. The last time that Congress fully debated an appropriate General Fund contribution, in 1990, it was determined that 25 percent was the correct amount to cover the public benefits of a strong national aviation system – including national defense, emergency response, postal service, medical emergencies, local commerce and interstate commerce.

3) Congress can increase the existing aviation excise taxes across the board.

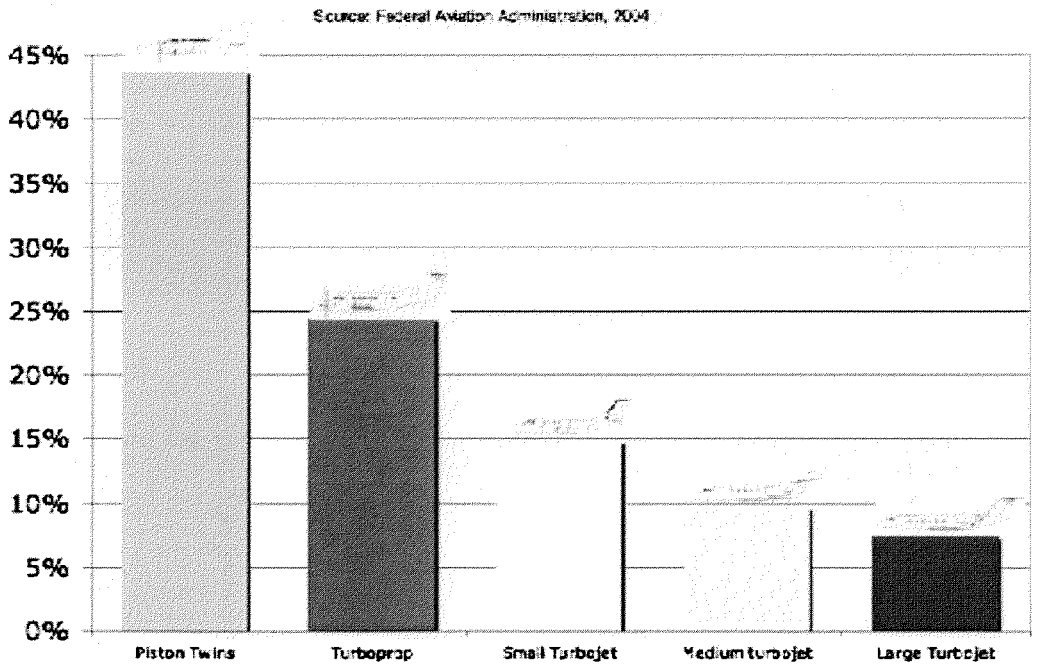
4) It can do some combination of the above; or

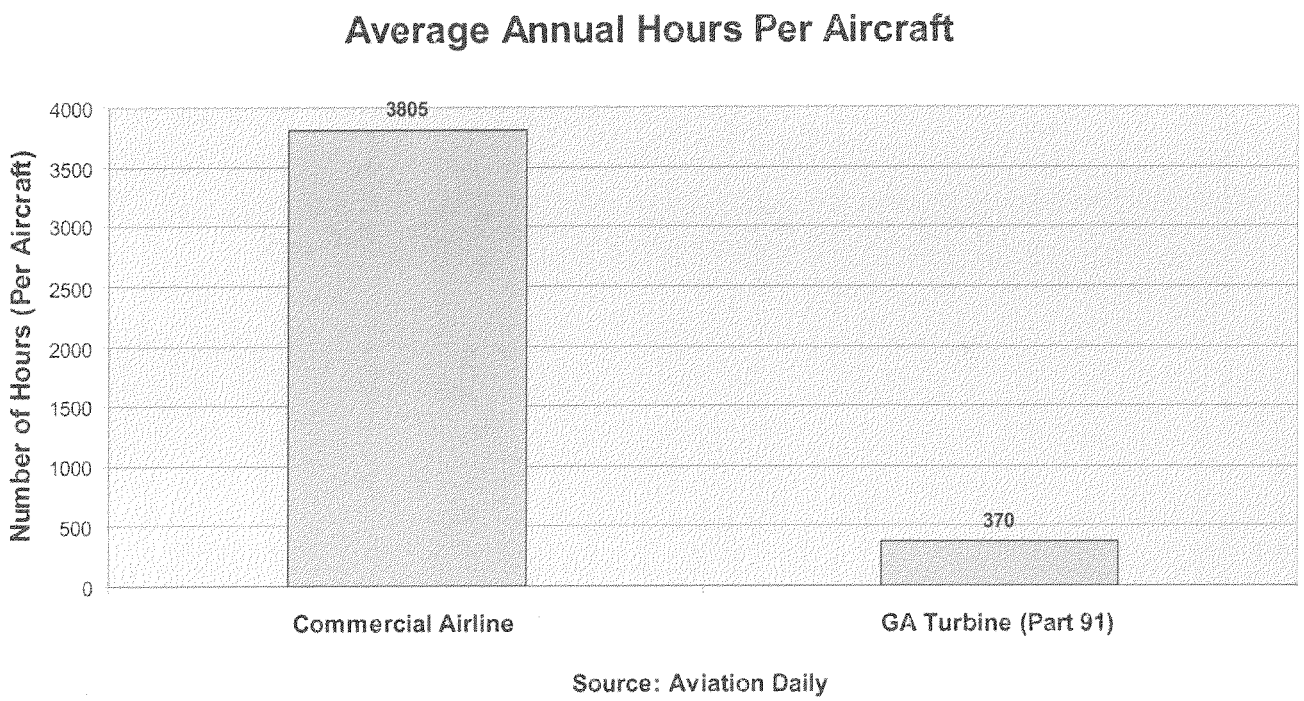
5) It can scrap a Congressional process that has allowed the United States to be the world's leader in all aspects of aviation for decades, and has given the U.S. the largest, safest, and most efficient air transportation system in the world, and replace it with a radical scheme that will reduce Congressional authority, divert millions of dollars to establish a massive new bureaucracy (either inside or outside the government), dilute the FAA's focus on safety by giving it the authority to assess and collect revenues, and put us squarely on the path toward commercialization.

Mr. Chairman, expanding the capacity of our nation's air transportation system to accommodate demand can and must be a national priority. But no one should mistake aviation user fees with a modernization plan (see Chart 5).

We urge the Subcommittee to immediately reject aviation user fees in any form and begin focusing on how we can work within the established Congressional process to expand system capacity to enhance mobility for all Americans. NBAA looks forward to working with this Subcommittee to accomplish this critical national goal.

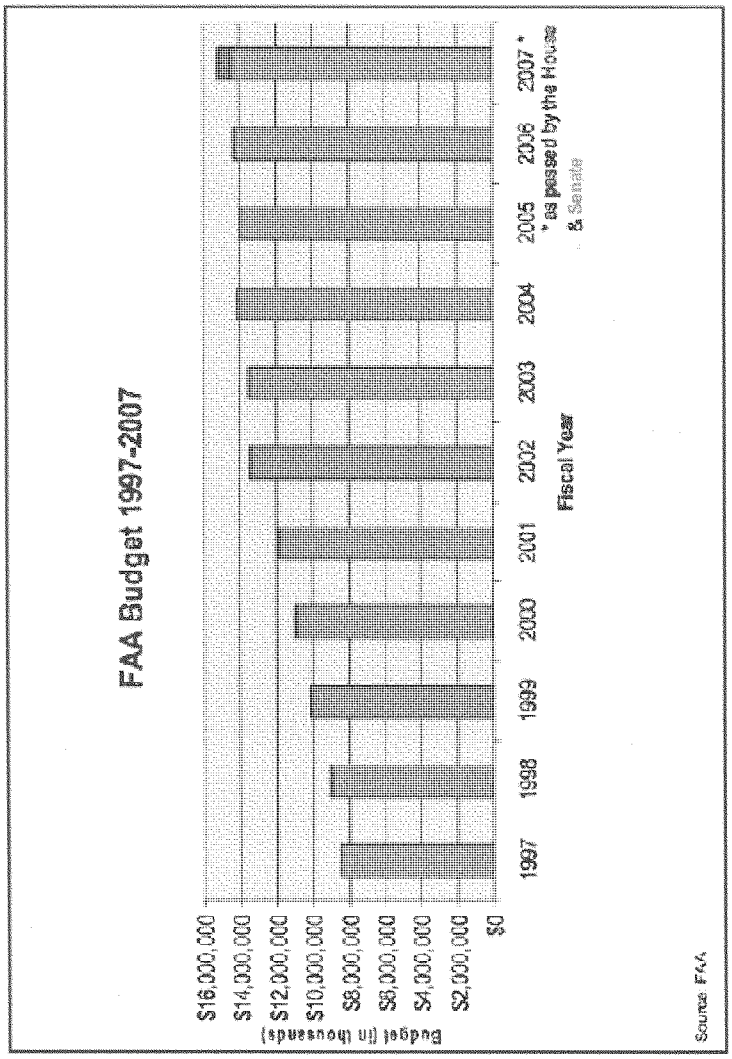
U.S. Registered Business Aircraft




Average Annual Hours Per Aircraft
Number of Hours (Per Aircraft)
4000
3500
3000
2500
2000
1500
1000
500
0
3805
370
Commercial Airline
GA Turbine (Part 91)
Source: Aviation Daily

#2

3


FAA Budget 1997-2007
Budget (in thousands)
$16,000,000
$14,000,000
$12,000,000
$10,000,000
$8,000,000
$6,000,000
$4,000,000
$2,000,000
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1997
1998
1999
2000
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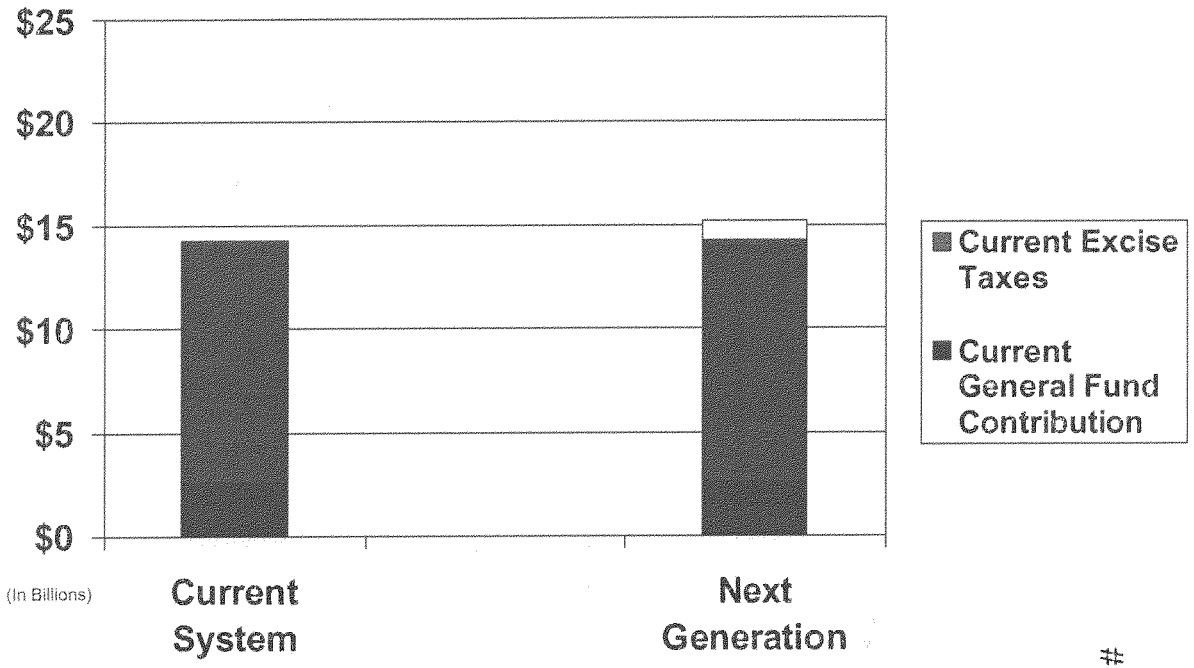
2003
2004
2005
2006
2007 *
Fiscal Year
* as passed by the House & Senate
Source: FAA

Funding Requirements



FAA FY 2007 CR Level

#4

The GA fuel tax is the most simple and efficient mechanism for reflecting system use and generating revenue to support the aviation system.

	GA FUEL TAX	USER FEES
Government Perspective	Prepay for Use No Bureaucracy to Administer Keeps Focus on Safety	[illegible]
User Perspective	Easy to Understand No Processing Costs/Burden Fair For All Users	[illegible]
Policy Perspective	Linked to Use Simple Congestion Deterrent Pro-Environment	Linked to Use Complicated Approach to Congestion Environmentally Neutral

Statement of Phil Boyer, President

Aircraft Owners and Pilots Association

before the

Committee on Transportation and Infrastructure's
Aviation Subcommittee
U.S. House of Representatives

concerning

The Federal Aviation Administration's
Financing Proposal

March 21, 2007

Good morning my name is Phil Boyer, and I am President of the Aircraft Owners and Pilots Association (AOPA) representing more than 410,000 pilots and aircraft owners – two-thirds of all the pilots in the United States. In fact, 70% of the world's licensed and active general aviation pilot population resides in America, which makes comparisons of our air transportation system to other countries almost impossible. As I appear before you today, I am expressing the views of our membership, your constituents, in every Congressional district in the country.

As pilots flying in the United States we experience first hand the safest and most efficient air transportation system in the world. Our network of 5,200 public use airports, complemented by the more than 13,000 privately owned landing facilities is a unique national resource. Because AOPA members are involved in personal and business aviation, the majority using their aircraft in the way each of us use our personal automobiles, they place a high level of importance on the government's involvement in supporting this system. These individual pilots and aircraft owners are the only segment of aviation to pay for the aviation excise taxes out of their own pockets, like we do for automobile gas, and as you might imagine, are extremely concerned with the administration's proposal for reauthorizing the Federal Aviation Administration (FAA).

Administration Has Manufactured the Funding Crisis

For over the past two years I have personally participated in and watched with great disappointment as the FAA "manufactured this crisis." Even the title of their proposal, "Next Generation Air Transportation System Financing Reform Act of 2007" would have one believe that it is designed to be the financial solution to a problem identified, costed out, and in need of funding. From our perspective, this is nothing less than the government backing away from a world-renowned air transportation system and setting in motion the steps towards privatizing the Air Traffic Control (ATC) system. In spite of all the FAA rhetoric you have heard, we intend today and over the coming debate to prove that the existing financing mechanisms generate more than is needed for modernizing the ATC system, referred to as Next Generation Air Transportation System (NextGen).

The FAA proposal does this by imposing user fees for ATC services, huge fuel tax hikes of 50-cents per gallon on general aviation and empowering the FAA Administrator with virtual carte blanche authority to establish and raise the fees outside of Congressional control. It also creates what could end up as an airline dominated advisory board with unprecedented power over decisions about fees and investments in the nation's air transportation system. There is nothing in the FAA's proposal that helps define the ATC system of the future and identify what investments by the government and the aviation industry are needed to achieve this modernization.

User Fees Are Not the Way to Fund the Aviation System

My request to you Mr. Chairman and members of the Subcommittee, reject the calls for user fees for any segment of aviation and the almost quadrupling of

general aviation fuel taxes. Then, we can all get on with the real issues at hand through a productive, meaningful discussion on how to strengthen the nation's airports and modernize air traffic control – the plan, design, implementation -- that enables the U.S. to continue its global aviation leadership position. Amazingly, these are points on which almost all of us agree need to be accomplished. With user fees off the table, we can move forward on the real issues. Rest assured I am not indicating that status quo is an option. Our concern is that unneeded and expensive to collect user fees for any aviation segment places "the camel's nose under the tent." And, as we have seen in foreign countries, there is a trickle down effect that in a relatively short period of time charges all users for segments of the air traffic system.

User Fees Harmful to Aviation/Affect Safety
The catch phrases and carefully placed words in the FAA proposal would lead one to believe they have satisfied general aviation's desire to pay through a fuel tax. But, there is the insertion in their language of the word "primarily through the fuel tax ..." While user fees are attributed to the airlines and other commercial aviation users, the FAA proposal subjects a general aviation pilot flying into class B airspace "congested airspace" to a user fee. ATC user fees stymie general aviation around the world with huge costs to operate aircraft and most importantly, insert cost considerations into critical safety decisions. For example in Germany, general aviation pilots face penalties when they are unable to complete a non-precision instrument approach at a general aviation airport as originally planned because of deteriorating weather conditions. The penalty, when combined with a landing fee, to fly a precision approach at an alternate air carrier airport could total $1,000 dollars. This is due to user fee pricing schemes and congestion management principals aimed at deterring general aviation pilots from using the services that end up affecting safety decisions.

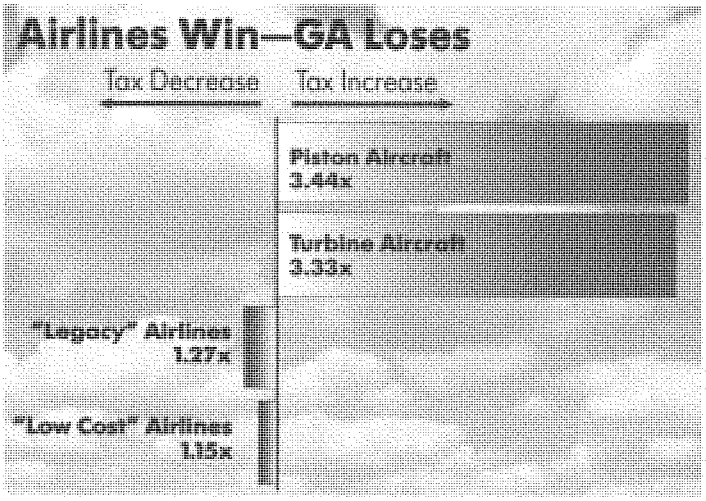
Another chilling illustration of the adverse affects of user fees comes from Australia. The country's Bureau of Transport and Regional Economics indicates that 20 years of user fees have contributed to a 28% decline in general aviation hours flown. Dick Smith, the former Chairman of the Australia's Civil Aviation Authority who actually endorsed the fees, recently observed, "basically, user pays (as we call it here) or the commercialization of Civil Aviation Safety Authority and Airservices, has been a disaster for general aviation in Australia and I believe the same will happen in the USA if it goes ahead."

User Fees Reduces/Eliminates Congress From Aviation Oversight
The process we are in right now works, and has worked for many inherently government functions. Congress is in charge, Congress holds hearings to listen to the industry and their constituents, and then passes legislation that holds them accountable – in fairness to all within their scope of responsibility. This is a prime reason AOPA adamantly opposes user fees for any segment of the aviation community. The proposal places control in the hands of the FAA and the airlines by diminishing, and ultimately eliminating, Congressional oversight of the nation's

air transportation system. Another "catch phrase" - "off setting collections" - this process and fee setting procedure outlined in the FAA proposal gives unprecedented power to the FAA Administrator and the Air Transportation System Advisory Board. The association representing the major carriers has repeatedly called for reduced Congressional involvement and oversight. The FAA proposal is a big step towards this ultimate goal.

General Aviation Big Loser in FAA Proposal
In addition to the ATC user fees, AOPA members are very concerned about the tax on aviation gasoline increasing from the current 19.4 cents per gallon to 70.1 cents per gallon, and jet fuel escalating from 21.8 cents per gallon to 70.1 cents per gallon. The proposal is a major shift of costs from the air carriers to general aviation.

The legacy airlines would see the amount of money they submit to the government decrease by $1.7 billion per year, a 27% reduction. For the low-cost carriers, the decrease is $286 million, a 15% drop. In comparison, general aviation would see a tax increase of 344% as is illustrated by this graphic.



Nine out of ten AOPA members have told us that if the tax on aviation gasoline is increased by 50-cents per gallon, they will reduce or curtail their flying. AOPA members have shared thousands of letters sent to members of Congress expressing strong concerns over the Administration's proposal.

> For example, 64-year old student pilot, Wendy Tyson of St. Augustine, Florida wrote, "I was horrified to learn of the outrageous fuel tax increase..."

John Bailey, Sioux Falls, South Dakota explained, "Last Spring, at the age of 49 I fulfilled a lifelong dream of earning my pilots license. What I found is that not only do I enjoy flying but it has turned out to be a very valuable tool in my business as we have customers in all parts of South Dakota and other states as well. The FAA's plan, by dramatically raising costs for private pilots, will kill general aviation as we know it."

Peter Radding, Charleston, South Carolina and Board member of Angel Flight/Mercy Southeast underscores the harmful impact of the proposal on community service flights, "I donate my time and aircraft expenses for Angel Flight/Mercy flight Missions where *patients without financial resources* are provided transportation *free of charge* to clinics far from home. In many cases, the clinics offer the patient a "last chance." In other cases, children with rare medical conditions are transported to children's clinics where unique medical procedures and treatments are available. Often the patients live in rural areas (small airports) and are transported to/from large cities (large airports) in which the clinics reside. The proposed tax increases will greatly weaken the volunteer network's ability to respond in numbers and in frequency."

A student pilot from Eastlake, Ohio wrote, "The measures proposed could cause the end of my flying career, even before I get started. General aviation would become cost prohibitive to me and my family."

Airline pilot Jesse L. Krull, of Harpers Ferry, West Virginia pointed out the importance in training pilots, "While I currently fly for the airlines, it's through general aviation (GA) that I gained the training and experience needed to get that first airline job. Others use GA in many different ways. In addition to business and personal travel, it is used for medical evacuation, weather and traffic reporting, agricultural application, disaster relief, natural resource management, surveying and mapping, and more. Many of these services will no longer be affordable if the FAA's funding plan is approved."

Current Financing System Works

The FAA falsely asserts that a new financing system is needed to pay for NextGen. Despite claims by the FAA that the current financing system is unstable and unpredictable, the FAA budget has grown from $13.5 billion in FY 2002 to $14.9 billion in FY 2007. In fact, in several of those years, Congress appropriated more funding than the FAA requested. My counterpart with the airlines on this panel, Mr. James May, and I agree on many things including the continuing need to modernize the air transportation system. He and I co-chair the industry council, which provides input and oversight to the Joint Planning and Development Office (JPDO) multi-agency project. With huge involvement and enthusiasm in seeing to it that NextGen happens, neither of us at this time could

spell out the technologies nor the all-important modernization costs that would be required. To date, all we have is a $1 billion a year back-of-the-napkin estimate. The FAA has yet to explain in detail what the future system entails, how much it will cost, what the benefits are, and when investment is needed. However, to their credit, the FAA does have more accurate cost estimates - $4.6 billion for the next five-years under the less long-term Operational Evolution Partnership.

From our perspective there is no funding crisis. The current system of aviation excise taxes combined with a general fund contribution will be more than sufficient to support the FAA's future funding needs and pay for modernization. In fact the Office of Management and Budget data reveals that the FAA can support aviation investments. Both the Government Accountability Office and the Congressional Budget Office have testified that ATC modernization can be accomplished under the existing FAA financing structure. Likewise, the Department of Transportation Inspector General has stated that the current tax system can fund the FAA, and increase spending for NextGen as long as there is a general fund contribution.

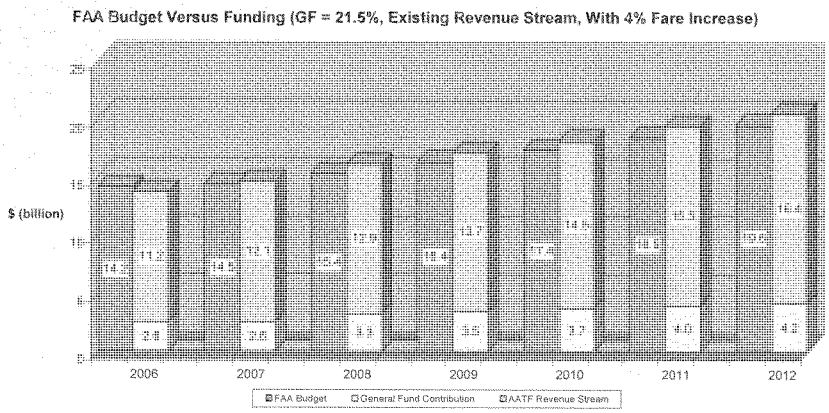
The changes proposed by the FAA are unnecessary to keep the U.S. aviation system the safest and most efficient in the world. To our shock when the FAA proposal finally emerged last month, after pleading the need for more dollars to fund system and insisting the way to get there was user fees the Administration's own plan for the next fiscal year provides less money than staying with the current taxes, some $600 million less!

As the following chart illustrates, even if each year:

- FAA's budget increases by 6%
- Airport funding remains strong (3.7 billion)
- Operations costs rise by 3%
- FAA Facilities & Equipment (ATC Modernization) spending is increased $1billion

The FAA still ends a five year reauthorization time frame with $7.1 billion uncommitted balance in the Aviation Trust Fund. This occurs even though the FAA would have access to $20 billion in funds for ATC modernization.

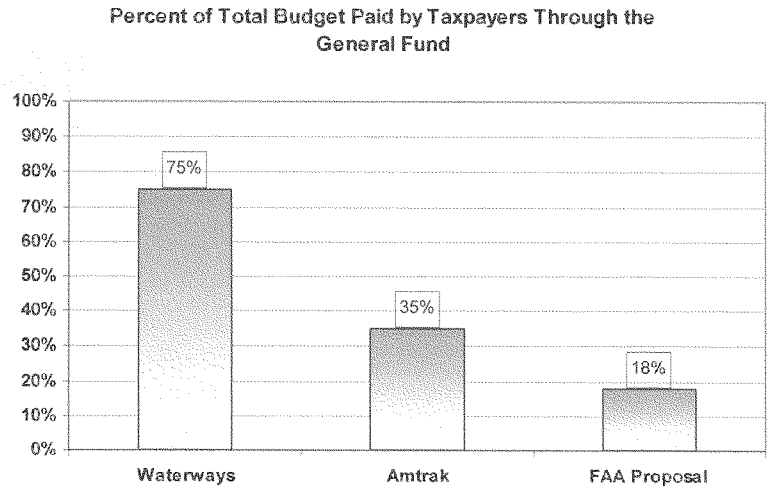
$20 Billion Available for ATC Modernization



Aviation National Asset Deserves Federal Investment

One of the important baseline assumptions we have used is a robust General Fund contribution at 21.5% annually (essentially the average from the last four years). Since 1969, just prior to establishing the FAA's Airport and Airway Trust Fund, Congress recognized that a general fund contribution is necessary. Nearly 40 years ago, they observed that, "there are others who are indirectly benefited by air transportation because of the non-aviation employment which air transportation generates." Yet, the FAA's proposal recommends decreasing the traditional levels of support for the aviation system from general taxpayers. It's illogical to back away from the economic engine that our country's robust aviation system powers. The direct and indirect benefit of aviation to America represents 9% of our gross domestic product.

The use of general fund investment in transportation is consistent in other areas of the federal budget. For example, the waterway system receives 75% of its funds from general taxpayers. Amtrak, which accounts for 25 million passengers, receives more than 35% from the general fund. This clearly illustrates the disparity in treatment of aviation, which carried more than 700 million passengers in 2005 and under the FAA's proposal would receive a general fund contribution of 18%. The Administration's plan reduces this further in the future.



Fiscal Responsibility Can Come From Reduced Costs
AOPA has shown a commitment to reducing the costs of services utilized by the general aviation community and at the same time look for ways to improve safety by enhancing the quality of FAA services. This includes the FAA contract with Lockheed Martin for Flight Service Station modernization and operation. This agreement saves taxpayers $2.2 billion over ten-years and more importantly promises dramatic changes for pilots through a modernized system with call center standards and other performance based criteria. AOPA has also worked closely with the FAA in reducing obsolete or unnecessary ground navigational aids.

Airports Critical – Funding Should Not be Cut
While not the topic of this hearing an alarming element of the FAA proposal is the cut in airport funding. We all know how important it is to have alternate airports when flying in bad weather, yet the Administration is asking for nearly a $1 billion reduction in the grant program. And, the most important airports for general aviation, airports in small communities would lose an entitlement of $150,000 annually, which has kept many open and economically sound. This is incomprehensible if we are to have a viable air transportation network for the nation.

Other Fees Raise Questions
The FAA is also proposing new or significant increases in various fees for aircraft and airman registration. For example, the fee for registering an aircraft is proposed to increase from the current rate of $5 to $130. AOPA is conducting an

analysis of these to compare them with similar charges imposed on automobiles and boats to determine the scope of what the FAA is proposing. The Association objects to the principle being advanced by the FAA that revenues from the fees would pay for 10% of the FAA's safety oversight budget. Safety oversight is clearly a function that should be paid for from the general fund.

Let me conclude with a number of key assumptions and principles:

- The United States has the safest and most efficient air transportation system in the world, moving more aircraft and more people than the rest of the world combined.

- Excise taxes, not user fees, are the appropriate and cost-efficient way for all aviation users to support the system.

- Congress' direct management and oversight of FAA spending and programs should not be changed.

- National transportation assets vital to the United States economy require a level of support from general tax revenues. The General Fund contribution to FAA operations should be maintained at the historical average of 21.5% of the FAA budget

- Airports are as critical to the aviation transportation system as on- and off-ramps are to our federal highway system. Federal airport funding should be sustained at no less than the current levels ($3.7B).

What can we do to sustain and improve the U.S. air transportation system?

> **<u>Reject the calls for user fees for any segment of aviation</u> and the almost quadrupling of general aviation fuel taxes. Then, we can all get on with the real issues at hand through a productive, meaningful discussion on how to strengthen the nation's airports and modernize air traffic control – the plan, design, implementation -- that enables the U.S. to continue its global aviation leadership position!**

Thank you for the opportunity to appear before this Subcommittee.

U.S. House of Representatives
Committee on Transportation and Infrastructure

Aviation Subcommittee
March 21, 2007

The Federal Aviation Administration's Financing Proposal

Good morning. Mr. Chairman, Representative Petri, and Members of the Subcommittee, my name is Roger Cohen. I am three months into my tenure as President of the Regional Airline Association (RAA). RAA represents 42 U.S. regional airlines transporting 97 percent of all regional airline passengers. On behalf of those regional airlines, I thank the Committee for this opportunity to share our perspective on FAA reauthorization.

While the regional airline industry has changed dramatically over the past half century, one element remains unchanged: our members' commitment to providing safe, convenient, and affordable airline service to communities large and small across the United States. Regional airline service links together more than 600 U.S. communities. At more than 70 percent of these communities, regional airlines provide the *only* source of scheduled airline service. Our member airlines serve every corner of this country; from the Grand Canyon to Key West; to and from statehouses in Montgomery, Springfield and Charleston, and university homes in Gainesville, Champaign and Charlottesville. Without regional airlines, communities like these would have no link to the nation's air transportation system.

Congress, particularly this Committee, has overseen the creation of a national aviation system with a long history of treating all air travelers even-handedly. In doing so, you've demonstrated a tremendous commitment to an air transportation network serving cities large and small and extended the benefits of airline deregulation nationwide. Maintaining this even-handed treatment of all passengers and cargo traveling in air commerce is at the foundation of the Regional Airline Association's perspective as Congress this year considers the reauthorization of the Federal Aviation Administration and related programs.

The Next Generation Air Transportation System Financing Act of 2007, the FAA's proposal for FAA reform and reauthorization, would bring significant changes to FAA operations, as well as to the financing of its Airport and Airways Trust Fund. While we applaud FAA's people for their efforts in tackling the difficult issue of FAA financing and the transition to the Next Generation Air Transportation System, RAA has deep concerns over several elements of the proposal. We ask Congress, before adopting the proposal or any of its elements, to examine its unintended but potentially significant consequences for small and medium-sized communities. In doing so, RAA urges Congress to consider five objectives for FAA reauthorization:

I. Preserve today's excellent network of scheduled service to small and medium-sized communities *without* penalizing regional airlines for use of smaller aircraft.

Just as there is no standard-sized American community, regional aircraft come in all shapes and sizes: from hundreds of turboprops seating 10-19 passengers each to a growing fleet of more than 1500 regional jets with advanced avionics, capable of carrying up to 100 passengers each. While aboard these jets and advanced turboprops, passengers enjoy flight attendant service, snacks and meals, and quick and easy boarding and deplaning. Moreover, there's not a single "middle seat" on the entire regional airline fleet.

In response to this substantial regional airline growth, some industry stakeholders have sought to blame current and anticipated congestion problems on regional airlines and regional aircraft. Seeking to compensate for a wholesale failure to modernize the ATC system and increase capacity at congested airports, these stakeholders are now proposing congestion pricing formulas that would manage demand as a solution to capacity shortfalls at our nation's most congested airports. Proponents of congestion pricing often refer to this approach as being "market-based," because it effectively penalizes smaller carriers, unable to amortize the increased fees over a 19, 32, 50 or 70 seat aircraft, and prices the communities they serve *out* of the market.

The FAA's proposal addresses airport capacity shortfalls by imposing premium fees at hub airports during congested periods. Unfortunately, this strategy of constraining demand penalizes passengers from smaller communities who rely on smaller aircraft utilized by regional airlines for their access to the nationwide air transport network. This is fundamentally unfair, since passengers at these small communities pay the same exact aviation taxes and fees as other travelers. The FAA should not expect airline passengers to shoulder higher ticket prices or lose their travel options because it failed to modernize and expand the airport and airway system.

In most cases, regional airlines operate under code-sharing agreements, which are collaborative relationships with one or more mainline carriers ranging from simple marketing agreements to full ownership. Under these code-sharing agreements, airlines can "rightsize" aircraft to individual routes, adjusting schedules and size of aircraft to provide passengers more convenient flights to additional destinations. This arrangement is cost-efficient, flexible, and passenger-friendly because it allows airlines to tailor aircraft size precisely to a variety of markets, offering greater frequency and lower capacity on shorter routes to and from smaller communities. This in turn contributes to more efficiency and higher load factors on mainline flights. Given the need to keep aircraft size in line with market demand, deployment of smaller, regional aircraft is critical to the continued service to smaller communities with few or no other transportation options.

Regional airlines also play a critical role in connecting passengers at small and medium-sized communities to the nation's hub airports to the benefit of all travelers. This simple concept, "network feed," grants passengers in smaller communities access to the nation's

hub airports and lowers costs for all travelers by increasing the number of passengers on major airline routes. Unfortunately, congestion pricing models currently under consideration could interrupt this important hub feed. In doing so, these proposals not only disenfranchise passengers at the smallest communities, they ignore the critical role regional airlines play in fostering a healthy national air service network by transporting passengers at regional airports to the nation's hub airports.

The FAA proposal, and any proposal which treats commercial airline passengers differently based on size or type of aircraft, airports utilized, or the level of air traffic during specific time periods, discriminates against passengers from smaller markets. Further, the proposal undermines the notion of a national system of commercial aviation. Regional airlines provide 14,000 flights daily. To ignore the crucial service regional airlines provide in smaller communities by dismissing regional airline flights and passengers as a mere "blip" on a radar screen represents more than an oversimplification. Instead, such proposals represent a failure to treat passengers equally, regardless of the point at which they access the system or how many passengers are seated onboard alongside them.

Given the need to keep aircraft size in line with market capacity, deployment of smaller, regional aircraft is critical to the continued service to smaller communities with few or no other transportation options. Beyond the damage demand management schemes pose for small and medium-sized community air service, such schemes are inconsistent with our shared, long-term goal of building and maintaining a healthy and vibrant national air transportation system. Instead, demand management offers a harmful, simplistic short-term answer to a long-term, complicated problem.

We pledge to work together with Congress on our common goal of modernization but ask that you ensure regional airlines – and their passengers in medium and small communities throughout the United States – are not disenfranchised in the process.

II. Facilitate FAA's transition to NextGen air traffic system improvements after quantifying the new system's costs and benefits while first maximizing efficiencies from the existing system.

RAA strongly supports transitioning to the Next Generation Air Transportation System Modernization (NextGen) and will continue to work with Congress, the Administration and all other aviation stakeholders to achieve the safety and capacity benefits of the NextGen air traffic system. Prior to embarking on any new system, however, RAA feels strongly that Congress must provide oversight and guidance to FAA in identifying and improving efficiencies of the current system. This includes a difficult but necessary examination of streamlining and consolidation of FAA facilities where appropriate.

Airlines have made great strides in bringing costs in line with market realities, and now we expect our colleagues in the public sector, while keeping safety the top priority, to continue to control and reduce costs. Before a move to a new system is undertaken, we

urge Congress to query FAA on the specifics of this new system. We ask that FAA outline the manpower and equipment requirements needed to operate the new system as well as to quantify and justify the costs necessary to obtain and maintain a new system. Most importantly, we urge Congress to quantify the air traffic benefits of the new system, particularly those related to safety, as well as the new system's efficiency improvements.

Finally, we urge Congress to require any new financing mechanism to come with a governance structure allowing for meaningful industry oversight and input. The governance board outlined in the FAA's proposal recognizes the agency's desire to incorporate user input, but without defined authority, users would lack real input into the creation of the system they are financing.

III. Non-airline users of the ATC system should bear a proportionate share of total system costs, which more accurately reflects their use of and reliance upon a safe and efficient national system.

RAA recognizes the growing demand for air travel and knows FAA must continue to adapt its practices and implement the necessary technology to meet the demands of this growth. Among these challenges will be balancing the costs of delivering this aviation infrastructure on a rational and equitable basis.

The distinctions between aviation sectors appear to be blurring, with passengers of the growing number of fractional ownership and corporate business jet fleets obtaining access to similar air transport services as airline customers. These fractional and corporate aviation passengers today pay far less than airline customers do to access the national system. Therefore, we support the FAA's first step in endorsing a cost-based funding mechanism that extends beyond the airlines currently funding the system and includes non-commercial airline users that impose significant costs on the ATC system.

Currently, airlines and airline passengers pay $19 billion annually to fund the nation's airways and airports, more than 90% of the user-paid total. The general public, military, news and service organizations, recreational fliers and particularly business and corporate aviation — whose access to the national system in many ways mirrors that of regional airlines — should pay commensurately for both the underpinnings of the national system as well as their usage of it.

IV. Protect robust airport funding dedicated to tangible safety and capacity benefits, with greater user input into airport expenditures, and reject Passenger Facility Charge Increases that will jeopardize service to small communities.

As you know, the Passenger Facility Charge, or PFC, was originally authorized by the federal government to give local airport authorities the ability to fund capacity improvements like runways, taxiways, and navigational aids. Unfortunately, efforts to implement such capacity improvements have been delayed more by a lack of political

consensus within local communities than by a lack of funds. Moreover, a number of projects funded by the PFC have done little to improve airport efficiency or to deliver direct benefits to the airline or the air traveler.

The current approval process, while imperfect, permits airline participation in determining the merit of projects to be funded by PFCs. While many regional airlines have voiced objections to projects that have nevertheless proceeded, making this input less than meaningful, efforts disguised as "streamlining" the PFC approval process would curtail user input even further and should be rejected.

Further, the Administration's proposal to raise the PFC cap would present an immediate and significant disadvantage to air travelers in smaller communities. As you know, airline segment fees have a disproportionate impact on short haul travel, because the tax is the same regardless of the length of the segment. Regional airlines are especially vulnerable to this tax, because the short haul nature of regional airline flights often results in a greater number of flight segments for each passenger and therefore a significantly higher tax per passenger. Potential air travelers may decide to drive to nearby cities rather than pay the higher fares in instances where they have that option. Others may decide not to fly at all. The corresponding reduction of passengers traveling in the event of a PFC increase could eventually lead to the elimination of service along previously profitable routes.

Finally, RAA opposes proposals allowing the use of PFC revenues for non-airside projects – a particularly egregious proposal when airport capacity shortfalls are so significant that demand management scenarios are being seriously considered. Instead, RAA believes federally-authorized investments in local airport projects should directly target NextGen capacity improvements, earn formal support from the users at the specific airport, and otherwise protect the Federal government's longstanding interests in maintaining a national network of safe and efficient airports.

We understand that expenditures are outpacing receipts in the airport and airways trust fund. Therefore, each stakeholder in the aviation industry must work to ensure that the FAA is adequately funded and that airport expansion and ATC modernization continue at an acceptable pace while rejecting new taxes on the airline industry.

V. Congress should uphold its promise to smaller communities as part of the Airline Deregulation Act of 1978.

In closing, I would like to raise the issue of the Essential Air Service program with this Committee, but not as an afterthought. I was a young PR representative for TWA reporting on the hearings when Congress debated whether to deregulate the nation's airlines. As part of that debate, Congress made a pledge to communities that they would not be abandoned – that because of their size they would not lose all access to the national transportation network. That promise held that, provided communities met reasonable program requirements, they would not lose service after airline deregulation.

Every Congress since then has kept that promise and we are hopeful that you will continue to recognize the estimated 140 communities across the U.S. that depend on that EAS promise. Congress should not allow DOT to halve or eliminate the program, nor should Congress fail to authorize and appropriate funds for a mandatory, real-time rate adjustment tool that DOT must use in the face of significant increases in carrier costs during the lifetime of a contract.

Without adequate EAS funding, the vast majority of the cities in the program would lose service entirely. EAS airlines would disappear, airline workers would lose their jobs and EAS-reliant communities could fall off the national aviation system map.

Thank you for the opportunity to testify today. This concludes my prepared statement. I would be happy to answer questions at the conclusion of the panel.

United States Government Accountability Office

GAO

Testimony
Before the Subcommittee on Aviation, Committee on Transportation and Infrastructure, House of Representatives

For Release on Delivery
Expected at 10 a.m. EDT
Wednesday, March 21, 2007

FEDERAL AVIATION ADMINISTRATION

OBSERVATIONS ON SELECTED CHANGES TO FAA'S FUNDING AND BUDGET STRUCTURE IN THE ADMINISTRATION'S REAUTHORIZATION PROPOSAL

Statement of Gerald L. Dillingham, Ph.D.
Director, Physical Infrastructure Issues

GAO-07-625T

GAO
Accountability·Integrity·Reliability
Highlights

Highlights of GAO—07-625T, a testimony before the Subcommittee on Aviation, Committee on Transportation and Infrastructure, House of Representatives

Why GAO Did This Study

Recently, the administration submitted a proposal for reauthorizing the Federal Aviation Administration (FAA) and the excise taxes that fund most of its budget. FAA's current authorization expires in 6 months. The proposal calls for major changes to FAA's funding and budget structure that are intended to address concerns about the long-term revenue adequacy, equity, and efficiency of FAA's current funding structure and to provide a more stable, reliable basis for funding a new air traffic control system that FAA is developing (at an estimated cost of $15 billion to 22 billion through 2025) to meet forecasted increases in air travel demand. The proposal would introduce cost-based charges for commercial users of air traffic control services, eliminate many current taxes, substantially raise fuel taxes for general aviation users, charge commercial and general aviation users a fuel tax to pay primarily for airport capital improvements, modify FAA's budget accounts to align with specific FAA activities, and link the portion of FAA's budget that comes from the Treasury's General Fund with public benefits FAA provides.

This statement offers GAO's observations on the proposed changes in FAA's (1) funding and (2) budget structure and is based on GAO's analysis of FAA's proposal and a recent GAO report on FAA funding options.

www.gao.gov/cgi-bin/getrpt GAO-07-625T

To view the full product, including the scope and methodology, click on the link above. For more information, contact Gerald L. Dillingham at (202) 512-2834 or dillinghamg@gao.gov.

March 21, 2007

FEDERAL AVIATION ADMINISTRATION

Observations on Selected Changes to FAA's Funding and Budget Structure in the Administration's Reauthorization Proposal

What GAO Found

Funding Structure: The current funding structure has supported FAA as FAA's budget has grown, and it can continue to do so to fund planned modernization. Excise tax revenues are forecasted to increase if the current taxes are reauthorized without change and thus could support additional spending. If necessary, Congress can obtain more revenue by increasing the excise tax rates or the General Fund contribution to FAA's budget, although the nation's fiscal imbalance could make such an increase difficult. FAA is concerned because revenues from the current funding structure depend primarily on ticket prices and passenger numbers, which are not well linked to FAA's workload and costs. The proposed new funding structure would link revenues more closely with costs to ensure that revenues rise with increases in FAA's air traffic control and safety activities. According to FAA, cost-based user charges would also be more equitable and could create incentives for more efficient use of the system by aircraft operators. How well FAA's proposed funding structure, if enacted, would achieve these goals is uncertain because it depends on two unknowns—the soundness of a new FAA cost allocation methodology and the extent to which the proposed structure links revenues to costs. Also uncertain are the adequacy of FAA's proposed fuel tax rate to collect anticipated revenues, the implications of a proposed advisory board, and the impact of a proposal to give FAA limited debt-financing authority. Furthermore, GAO notes, user charges would reduce Congress's role in setting revenues.

Budget Structure: Modifying FAA's budget accounts is consistent with FAA's emphasis on aligning revenues and costs, but may present implementation issues, in that some FAA activities may be difficult to categorize. More specifically, the proposed restructuring could allow FAA to better identify funding options that link revenues and costs and may improve transparency by showing how much is being spent on specific FAA activities. However, some activities, such as those related to safety, may not lend themselves to placement in discrete categories. Linking the General Fund contribution to public benefits is appropriate, but since some activities may provide both public and private benefits, judgment rather than a precise calculation may determine the contribution.

Concluding Observations: The administration has introduced a complex proposal for funding FAA that GAO believes deserves thoughtful consideration. While not necessary to provide more money for FAA, the proposed structure may address some of the concerns raised by the current structure if its cost allocation is sound. Because FAA's cost allocation model is new, further analysis and more time may be needed to determine whether it can adequately support a cost-based funding structure for FAA. Timely reauthorization of funding for FAA for at least the next year is, however, critical to prevent a lapse in funding for most FAA activities, regardless of the action taken on the proposed changes.

Mr. Chairman and Members of the Subcommittee:

We appreciate the opportunity to participate in this hearing today to present GAO's observations on major changes to the Federal Aviation Administration's (FAA) funding and budget structure that are included in the administration's recently submitted reauthorization proposal. FAA operates one of the safest air transportation systems in the world. This system is, however, under growing strain as the skies over America become more crowded. Demand for air travel has increased in recent years, with over 740 million passengers flying in fiscal year 2006 and 1 billion passengers expected to fly in 2015, according to FAA estimates. Already, this increasing demand for air travel has led to an increase in flight arrival delays, which are now approaching the record levels set in 2000, when one in four flights reached its destination behind schedule. The system is also expected to absorb a growing variety of aircraft, from the jumbo Airbus A380, which can hold more than 500 passengers, to very light jets, which might greatly increase the number of aircraft in the sky while transporting six or fewer passengers on any given flight. FAA is therefore developing a modernized air traffic control system, called the Next Generation Air Transportation System (NextGen), to meet the forecasted increases in air travel demand. The administration's reauthorization proposal serves as a blueprint for funding FAA as it begins its transformation to NextGen.

According to FAA, the changes to its funding and budget accounts that the administration has proposed are intended to provide a more stable and reliable funding structure to pay for NextGen. FAA also says that the proposed changes would improve the revenue adequacy, equity, and efficiency of its funding and better link revenues with the costs that users of the National Airspace System (NAS) impose on the system. These funding changes include introducing user charges for commercial aircraft based on the cost of the air traffic control services they receive; eliminating many current taxes; substantially increasing the fuel taxes general aviation operators pay; charging both commercial and general aviation a fuel tax to pay for airport capital improvements, the Essential Air

Service (EAS) program,[1] and air traffic system research and development; modifying FAA's budget accounts to align with FAA's activities or lines of business; and linking the contribution to FAA's budget from the General Fund of the U.S. Treasury to the public benefits FAA provides.[2] These changes would begin in fiscal year 2009. If implemented, the changes would alter the basis for funding FAA, in part by recovering the costs of services provided by FAA's Air Traffic Organization (ATO) in accordance with the cost assignments in a recently issued FAA cost allocation study. These changes would also redistribute the funding burden among user groups, increasing the share general aviation would contribute. FAA has stated that currently general aviation is not paying its fair share of the costs for services that it uses. Some stakeholders, such as general aviation, question whether all of the proposed changes are necessary, or even desirable, saying that the current funding structure has supported FAA adequately in the past and can generate more revenue in the future if Congress chooses to increase appropriations for aviation. These stakeholders also state that the current distribution of funding for FAA costs among aviation users is reasonable.

The current authorization for FAA and for the excise taxes that fund most of FAA's budget expires at the end of September of this year. Regardless of the action taken on the proposed changes, timely reauthorization of funding for FAA for at least the next year is critical, because the uncommitted balance[3] in FAA's principal funding source, the Airport and Airway Trust Fund (Trust Fund),[4] is low relative to recent levels.[5]

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[1]The EAS program, established after airline deregulation in 1978, is designed to ensure that small communities that received passenger air service before deregulation continue to have access to the nation's air transportation system.

[2]Appropriations from the General Fund supplement appropriations from the Airport and Airway Trust Fund as necessary to pay for budgeted FAA programs.

[3]The uncommitted balance represents money against which there is no outstanding budget commitment or budget authority to spend.

[4]Excise tax revenues are deposited in the Trust Fund, from which they can be appropriated by Congress to fund FAA.

[5]The Trust Fund's uncommitted balance at the end of fiscal year 2006 was less than $2 billion. At the end of fiscal year 2001 it was $7.3 billion.

In my statement today, I will present GAO's observations on the proposed changes in FAA's (1) funding and (2) budget structure, including the proposed method of determining the General Fund contribution to FAA's budget.

My remarks are based in part on work we did for a report we issued last year that analyzed (1) FAA's current funding structure—both its advantages and the concerns that FAA and others had identified about its long-term revenue adequacy, equity, and efficiency—and (2) several funding options to assess how those options might address those concerns.[6] For that report, we reviewed relevant literature, examined FAA data and forecasts, and interviewed officials from FAA and other government agencies, representatives of aviation industry groups, and academic and financial experts. In addition, for this statement, we analyzed selected funding and budget elements of the administration's reauthorization proposal and FAA's newly released cost allocation study, focusing on their implications for revenue adequacy, equity, and efficiency, and discussed them with FAA officials and representatives of aviation industry groups. We conducted our work from February to March 2007 in accordance with generally accepted government auditing standards.

Summary

- **Funding Structure**: The current funding structure has supported FAA as FAA's budget has grown, and it can continue to fund planned modernization. Trust Fund revenues are forecasted to increase if the current excise taxes are extended without change and therefore could support additional congressional spending on aviation. If necessary, Congress can obtain more revenue by increasing excise tax rates or the General Fund contribution, although the nation's fiscal imbalance could make such an increase difficult. Nonetheless, FAA is concerned about the long-term revenue adequacy, equity, and efficiency of its current funding structure, and its proposed new funding structure is intended to address these concerns by linking revenues more closely with costs. By more closely linking revenues with workload and

[6]GAO, *Aviation Finance: Observations on Potential FAA Funding Options*, GAO-06-973 (Washington, D.C.: September 29, 2006).

costs, FAA states that it will be better able to pay for future air traffic demands, for example the transition to NextGen, which is estimated to cost between $15 billion to $22 billion through 2025.[7] It is uncertain how effective FAA's proposed cost-based funding approach, if enacted, will be in addressing these concerns. Its effectiveness depends on how accurately FAA's new cost allocation methodology assigns costs and on how closely the proposed approach adheres to the principle that there should be a direct link between a user's revenue contribution to funding FAA and the costs the user imposes. Stakeholders have raised questions about both of these considerations. Also uncertain are the equity of the tax burden commercial and general aviation would incur for airport capital improvements, the adequacy of FAA's proposed fuel tax rate to collect anticipated revenues, the implications of a proposed advisory board, and the impact of a proposal to give FAA limited debt financing authority. In addition, FAA has not taken into account a potential reduction in demand that could result from a fuel tax increase and could lead, in turn, to less fuel tax revenue than anticipated. The implications of an advisory board that has some influence but limited authority in setting user fees and the advantages of debt financing are unclear.

- **Budget Structure:** FAA's proposal to modify its budget accounts is consistent with its emphasis on aligning revenues and costs but may present implementation issues in that some FAA activities may be difficult to categorize. More specifically, the proposed restructuring could allow FAA to better identify funding options that link revenues and costs and may improve transparency by showing how much is being spent on each line of business. However, some activities, such as those related to safety, may not lend themselves to placement in discrete categories. Linking the General Fund contribution to public benefits is an appropriate way to recognize that users are not the only beneficiaries of a safe air transportation system. Judgments, however, will still be necessary, since many activities that create public benefits, such as safety, also benefit users.

[7]FAA is working through the Joint Planning and Development Office with other government agencies to design NextGen. The Joint Planning and Development Office is responsible for NextGen cost estimates.

Background

Although there have been fluctuations in its funding sources, FAA is primarily supported by the Trust Fund (82 percent), which receives revenues from a series of excise taxes paid by users of the NAS. These excise taxes are associated with purchases of airline tickets and aviation fuel, as well as the shipment of cargo. These Trust Fund revenues are then available for use subject to appropriations. In addition to these revenues, in most years, General Fund revenues have been used to fund FAA. About $2.6 billion was appropriated for fiscal year 2006 from the General Fund for FAA's operations. This amount represents about 18 percent of FAA's total appropriation.

The Trust Fund was established by the Airport and Airway Revenue Act of 1970 (P.L. 91-258) to help fund the development of a nationwide airport and airway system. The Trust Fund provides funding for FAA's two capital accounts—the Airport Improvement Program (AIP) and the Facilities and Equipment (F&E) account—which provide grants to airports and funds for modernizing the air traffic control system, respectively. The Trust Fund also provides funding for the Research, Engineering, and Development (RE&D) account and supports part of FAA's Operations account. To fund these accounts, the Trust Fund is credited with revenues collected from system users through the dedicated excise taxes. In fiscal year 2005,[8] the ticket tax was the largest single source of Trust Fund revenue, followed by the international departure and arrival tax, the passenger segment tax, and fuel taxes (see table 1 for a description of current taxes).

The administration's reauthorization proposal would change FAA's financing system from one based mainly on excise taxes to one based more on cost-based charges. Under the proposed system, funding for ATO would come primarily from user charges on commercial aircraft and fuel taxes on general aviation aircraft.[9] In addition, contributions from the General Fund would be appropriated to FAA to cover ATO costs of providing services to military and other public aircraft, flight service stations, and a few other

[8]Fiscal year 2005 is the last year for which complete tax data are available.
[9]FAA would also receive authority to impose a fee for use of congested major airports that would apply to both commercial and general aviation aircraft.

services.[10] Funding for AIP, EAS, and part of RE&D would come from an equal fuel tax on both general and commercial aviation and a tax on arriving international passengers. Funding for Safety and Operations would include some fees, but mostly General Fund contributions. The reauthorization proposal would also create an advisory board and give FAA limited borrowing authority.[11] Table 1 compares elements of the current and proposed funding structure for FAA.

[10]Military and public aircraft include flights for government purposes, such as those used by the Departments of Defense, State, and the Interior. These aircraft are internationally defined as state aircraft that are exempt from paying fees and taxes. A flight service station is an air traffic facility that provides weather briefings and flight planning services, largely to general aviation pilots. Other services that FAA proposes to exempt from fees include, but are not limited to, air ambulances, aviation safety regulation and oversight, and the operation of air traffic control towers at airports with fewer than 100,000 passenger boardings per year.

[11]Other provisions in the reauthorization proposal address funding during the transition to a user-based funding structure and the creation of a reserve fund to be available in case future revenues fall short of expectations.

Table 1: Elements of the Current and Proposed FAA Funding Structure

Current FAA funding structure	Proposed FAA funding structure
7.5 percent tax on ticket price of domestic airline tickets.	Eliminated.
$3.30 per-passenger tax on domestic passenger flight segment.	Eliminated.
Not applicable.	User fee for jet and turboprop commercial aircraft. Fees for en route and oceanic air traffic services may be based on distance traveled or other factors consistent with U.S. treaties and international agreements. A user fee for (1) operations conducted in terminal airspace may be based on aircraft weight and (2) takeoffs and landings at airports with more than 100,000 passenger boardings annually.
Not applicable.	Congestion fee for landings and takeoffs by all aircraft at congested large-hub airports based on time of day and day of week. Daytime fees could differ from nighttime fees.
6.25 percent tax on shipping price for transportation of domestic cargo or mail.	Eliminated.
$0.043 per-gallon tax on domestic commercial aviation fuel.	$0.136 per gallon tax on domestic commercial aviation fuel to fund AIP, EAS, and RE&D account.
$0.193 per-gallon tax on domestic general aviation gasoline.	$0.70 per-gallon tax on both domestic general aviation gasoline and jet fuel, with $0.564 per gallon to fund air traffic control services and $0.136 per gallon to fund AIP, EAS, and RE&D account.
$0.218 per-gallon tax on domestic general aviation jet fuel.	
$14.50 per-passenger tax for international passenger arrivals and departures.	$6.39 per-passenger tax on international passenger arrivals and departures to fund AIP, EAS, and RE&D account.
7.5 percent tax on award value of frequent flyer awards.	Eliminated.
$7.30 per-passenger fee for passenger service between the continental United States and Alaska or Hawaii or between Alaska and Hawaii.	Eliminated.
Minimal aircraft certification and registration fees set below the cost of providing the service.	Aircraft certification and registration fees to fund additional activities and tied to the cost of providing service.
General Fund contribution.	General Fund contribution.
No debt financing authority.	$5 billion in Treasury debt financing authority for NextGen-related capital needs for fiscal years 2013-2017.
Management Advisory Council reviews and makes recommendations on FAA management, policy, spending, funding and regulatory matters affecting the aviation industry.	Air Transportation System Advisory Board established to make recommendations on setting of user fees.

Source: GAO analysis.

The administration's proposal also calls for changing FAA's budget structure by establishing two new budget accounts—(1) Air Traffic Organization and (2) Safety and Operations—to align with FAA's lines of business and proposed funding. These two new accounts would replace the Operations and F&E accounts. The proposal retains the AIP and RE&D accounts. See table 2 for a comparison of the current and proposed FAA budget structure.

Table 2: Current and Proposed FAA Budget Accounts

	Current budget account	Proposed budget account
Account name	**Operations**	**Safety and Operations**
Activity funded	Aviation safety Commercial space transportation FAA overhead ATO salaries and expenses	Aviation safety Commercial space transportation FAA overhead
Funding source	Trust Fund (about 68 percent) General Fund (about 32 percent)	User fees (about 32 percent) Trust Fund (about 4 percent) General Fund (about 64 percent)
Account name	**Facilities and Equipment**	**Air Traffic Organization (ATO)**
Activity funded	Air traffic modernization	Air traffic modernization ATO salaries and expenses
Funding source	Trust Fund (100 percent)	Trust Fund (11 percent) User fees (74 percent) General Fund (15 percent)
Account name	**Airport Improvement Program**	**Airport Improvement Program**
Activity funded	Airport capital development	Airport capital development
Funding source	Trust Fund (100 percent)	Trust Fund (100 percent)
Account name	**Research, Engineering, and Development**	**Research, Engineering, and Development**
Activity funded	Research on aviation safety, capacity, and environmental issues	Research on aviation safety, capacity, and environmental issues
Funding source	Trust Fund (100 percent)	Trust Fund (about 88 percent) General Fund (about 12 percent)

Source: GAO analysis of data from the *Budget of the United States Government Fiscal Year 2008* (Washington, D.C.: Feb. 5, 2007).

In January 2007, FAA released a new cost allocation study.[12] This report sets forth a methodology for assigning air traffic costs to user groups on the basis of aircraft type. The two principal user groups are the high-performance group, which includes all fixed-wing turbine engine aircraft operations, and the piston aircraft group, which includes piston engine fixed-wing aircraft operations and helicopters. According to FAA, this cost allocation methodology is based on the assumption that high-performance users generally

[12]Federal Aviation Administration, *FY2005 Cost Allocation Report* (Washington, D.C.: Jan. 31, 2007).

compete for the same air traffic control resources and their operations are more time-sensitive than piston aircraft operations, requiring more complex air traffic equipment and procedures. Piston aircraft operations, on the other hand, tend to be less time-sensitive and typically rely on less complex equipment. Differences in the speed and cruising altitudes of the two aircraft types also affect their en route costs.

Observations on Proposed Changes to FAA's Funding Structure

The current funding structure, with some modifications to the excise taxes and tax rates and changes in the levels of General Fund contributions, has successfully funded a growing FAA budget. Trust Fund revenues are projected to increase substantially at current excise tax rates. If, to fund the additional costs of NextGen or for other reasons, Congress chooses to increase spending on aviation beyond what can be paid for at current excise tax rates, it can obtain additional revenue through the current funding structure by increasing excise tax rates, the General Fund contribution, or both, although the nation's fiscal imbalance could make such an increase difficult. Nonetheless, because some factors that drive tax revenues, such as ticket prices, are not well linked to FAA's workload and costs, FAA has been concerned about the long-run revenue adequacy, equity, and efficiency of its funding.[13]

Some of the administration's proposed changes for funding FAA, such as establishing direct user charges for commercial aviation and substantially increasing fuel taxes for general aviation are intended to link FAA's revenues more closely with its costs. For other elements of FAA's budget, however, it is not possible to establish a direct link between revenues and costs. For example, because AIP expenditures are not the direct result of costs imposed by users of the NAS, the proposal to fund AIP through equal fuel taxes on all aircraft operators can best be evaluated on equity grounds. Better alignment of FAA's revenues and costs can address some of the concerns about the current funding system that derive from the lack of connection between some key drivers of current FAA

[13]Revenue adequacy refers to the ability of FAA's funding system to produce revenues commensurate with workload changes over time. Equity refers to the fairness of the distribution of costs to aviation users. Efficiency refers to incentives that encourage the efficient use of the NAS.

revenues, such as ticket prices, and FAA's workload and costs. However, the effectiveness of the proposed funding structure in linking costs with revenues depends critically on how well FAA's new cost allocation method assigns costs to users and on how closely the proposed funding structure adheres to the principle of cost-based funding, and questions remain about both considerations.[14] Furthermore, FAA's method for estimating the fuel tax rates needed to collect its intended level of fuel tax revenue may have underestimated the tax rates needed by not accounting for possible reductions in fuel consumption due to the higher tax rates. The implications of some of the other proposed changes, including one creating an advisory board that can make recommendations on fee setting and another authorizing limited authority for FAA to use debt financing, are uncertain.

FAA's Current Funding Structure Has Kept Up with Demand for Many Years and Can Provide Funding to Cover the Development and Implementation of NextGen

Congress has used the current funding structure—excise taxes plus a General Fund contribution—to fund FAA for many years. As the number of air travelers has grown, so have excise tax revenues. Even though revenues fell during the early years of this decade as the demand for air travel fell, they began to rise again in fiscal year 2004, and FAA estimates that if the current taxes remain in effect at their current rates, revenues will continue to increase. While retaining the basic structure for funding FAA, Congress has at times changed the mix of excise taxes and some of the tax rates. For example, when the taxes were most recently reauthorized in 1997, Congress added the passenger segment tax while reducing the passenger ticket tax rate from 10 percent to 7.5 percent.[15] Congress has also appropriated varying amounts of General Fund revenues for FAA during the past 25 years, ranging from 0 to 59 percent of FAA's budget and averaging around 20 percent since fiscal year 1997. The fluctuation in the amount of the General Fund contribution occurs because the contribution is based on the incoming Trust Fund

[14]Cost-based funding attempts to establish a more direct link between a user's payment for services and the costs the user imposes on a system.
[15]At that time, Congress also increased the international departure tax from $6 to $12 per person, applied this tax to international arrivals, and added the frequent flyer tax and the Hawaii/Alaska passenger taxes.

revenues that are available to fund the Operations account after revenues have been allocated to fund the F&E, AIP, RE&D accounts. Therefore, fluctuations in the Trust Fund revenues and FAA expenditures require different levels of General Fund contributions.

As air traffic grows and FAA embarks on modernization through NextGen, Congress may appropriate additional funds to FAA to fund new investment and to maintain a safe and efficient airspace system, although there is considerable uncertainty about how much NextGen will cost. FAA estimates that NextGen will cost between $15 billion to $22 billion through 2025. However, funding NextGen does not mean that the current funding structure needs to be changed. According to projections prepared by the Congressional Budget Office (CBO),[16] revenues obtained from the existing funding structure are projected to increase substantially. Assuming that the General Fund provides about 19 percent of FAA's budget, CBO estimates that through 2016 the Trust Fund can support about $19 billion in additional spending over the baseline FAA spending levels CBO has calculated for FAA (the 2006 funding level, growing with inflation) provided that most of that spending occurs after 2010. How far this money will go to fund modernization is subject to a number of uncertainties—including the future cost of NextGen investments, the volume of air traffic, the future costs of operating the NAS, and the levels of future appropriations for AIP, all of which may influence funding for FAA.

However, if the desired level of spending exceeded what was likely to be available from the Trust Fund at current tax rates, Congress could make further changes within the current structure that would provide FAA with additional revenue if Congress believed that larger FAA appropriations were appropriate—for example, if FAA experienced increased workload demands as a result of increased demand for air traffic services. Congress could raise more revenue from airspace system users for NAS modernization or for other purposes by raising the rates on one or more of the current excise taxes. Congress could also provide more General Fund revenues for FAA, although the nation's

[16]Congressional Budget Office, *Financing Investment in the Air Traffic Control System* (Washington, D.C.: Sept. 27, 2006).

fiscal imbalance may make a larger contribution from this source difficult. Thus, it is necessary to look at factors other than a need for more revenues to justify a major change in FAA's funding structure.

Funding Changes in Reauthorization Proposal Are Intended to Address Concerns about Long-term Revenue Adequacy, Equity, and Efficiency of Current Funding Structure

FAA has expressed concern that revenues from the current funding structure depend heavily on factors, such as ticket prices, that are not connected to FAA's workload and costs. According to FAA, under the current structure, increases in the agency's workload may not be accompanied by revenue increases because users are not directly charged for the costs that they impose on FAA for their use of the NAS. Revenues collected from excise taxes are primarily dependent on the price of tickets and the number of passengers on planes, while workload is driven by flight control and safety activities. This disconnect raises three key concerns about the current funding structure—its long-term revenue adequacy, equity, and efficiency. Moreover, these three concerns are supported by long-term industry trends and FAA forecasts of declines in inflation-adjusted air fares, the growing use of smaller aircraft, and FAA's 2007 cost allocation study. The administration has used these concerns as its rationale for proposing major changes in FAA's funding.

Many of the proposed changes for funding FAA contained in the administration's reauthorization proposal are intended to address the concerns about revenue adequacy, equity, and efficiency by linking FAA's revenues more closely with its costs. The proposal calls for a combination of methods for funding FAA, which we previously reported might best address concerns with the current system by providing a better link between revenues and costs than any option used separately.[17] For example, the proposal would eliminate all the excise taxes except the taxes on fuel and the tax on international passengers. The ATO, the largest part of FAA's budget, would then be funded by direct user charges on commercial aircraft—including air taxis, fractionally owned aircraft, and

[17]GAO-06-973.

aircraft providing charter service—that use the NAS, fuel taxes paid by general aviation users of the NAS (both turbine and piston), and General Fund revenues to cover the costs of exempt aircraft such as military and other state aircraft and flight service stations.

The proposal would also allow FAA to establish a fee for all aircraft using the nation's most congested airports. Based on the time of day or day of the week, the fee would be designed to increase efficient use of the NAS by discouraging peak-period traffic at congested airports and, thus, reducing delays. Under such a fee, cargo carriers could pay lower fees by operating at night than they would pay by operating at peak periods of the day, creating an incentive for some cargo carriers to switch daytime operations to nighttime. The fee could also create incentives for general aviation aircraft flying to and from metropolitan areas with congested airports to use other nearby airports instead.

The shares of ATO costs to be recovered from commercial and general aviation aircraft, respectively, and the General Fund contribution to cover the costs of exempt aircraft would be based on the results of FAA's cost allocation study. In addition, the proposal would authorize FAA to impose fees to pay for costs related to certain aircraft certification and registration activities that it conducts.[18]

Basing cost recovery for ATO only on cost allocation is a policy choice. In many other countries, cost recovery is based in part on cost allocation and in part on other principles, such as ability to pay.[19] For example, some countries charge a fee for en route services based on weight and distance; weight is included as a factor in charging formulas because many believe that it reflects an aircraft operator's ability to pay. Using additional principles for cost recovery could result in different distributions of the funding burden among user groups.

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[18]FAA issues certificates and registrations to aircraft owners as well as certifications of domestic and foreign repair stations that are authorized to perform maintenance on U.S. registered aircraft. Other certification fees include charges to flight schools, training centers, and maintenance technical schools and fees for training provided to foreign aviation authorities, among others.

[19]The ability-to- pay principle is a concept of tax fairness that states that those individuals with a greater financial capacity—measured by wealth, income, or other levels of well-being—to bear a tax burden should pay more in taxes than those individuals with a lesser financial capacity.

For one large area of FAA's budget, AIP, it is not possible to establish a direct link between revenues and costs because AIP expenditures are not the direct result of costs imposed by users of the NAS. FAA distributes AIP grants on the basis of congressional priorities established in authorizations and appropriations. Accordingly, equity would appear to be the best criterion to use in evaluating the administration's proposal to fund AIP through a fuel tax of 13.6 cents per gallon on commercial and general aviation operators and a tax of $6.39 per passenger on the use of international travel facilities.[20]

According to an FAA official, the decision to establish equal tax rates for commercial and general aviation operators was made to achieve fairness and simplicity. One way to evaluate the fairness or equity of funding AIP in this way would be to compare the distribution of the funding burden among user groups with the distribution of the grants funded by AIP.[21] With all aircraft being charged the same fuel tax rate, according to FAA forecasts for fiscal year 2009, commercial aircraft operators would pay about 88 percent of the fuel tax revenues collected primarily to fund AIP, while general aviation operators would pay 12 percent. However, under the current AIP program, about one-third of AIP grants would go to airports with no commercial service, and some additional grants would go to airports where general aviation traffic makes up a substantial share of the aircraft operations.[22] Thus, under the administration's proposal, commercial aviation users would appear to be paying for a large share of the benefits that come from capital spending at general aviation airports. This result is no different from what happens today; commercial aviation users currently pay for a large share of these benefits, since the largest share of the Trust Fund comes from passenger ticket taxes.

Some portion of these benefits may accrue to commercial aviation users if capital spending at general aviation airports keeps general aviation traffic from using congested commercial airports. However, most of the benefits from capital spending at general aviation airports would likely go to users of those airports or their surrounding

[20]The fuel tax and the international passenger tax would also pay for EAS and for part of the RE&D account.
[21]Other ways to evaluate the equity of funding AIP in this way might lead to different findings.
[22]This allocation of AIP grants among airport types might change if the AIP provisions of the reauthorization bill are adopted.

communities—or to the general public to the extent a national system of airports that includes general aviation airports creates public benefits. In that case, funding those benefits by fuel taxes paid by commercial aircraft may raise equity issues. An alternative approach that would be consistent with a policy choice to charge general aviation users less than the cost of the benefits they receive from AIP grants would be to use General Fund revenues to fund part of AIP.

Concerns about the Soundness of the Cost Allocation Methodology and Adherence to Principle of Cost-Based Funding May Limit Proposal's Ability to Address FAA's Key Concerns

A better alignment of FAA's revenues and costs can address revenue adequacy, equity and efficiency concerns, but the ability of the proposed funding structure to link revenues and costs to address these concerns depends critically on two things—first, the soundness of FAA's cost allocation system in allocating costs to users and, second, how closely the proposed funding structure adheres to the principle of cost-based funding.

FAA's new cost allocation study was released at the end of January, so we and others have had only a short time to review it. However, we, as well as industry stakeholders, have raised a number of concerns about the study and its cost allocation methodology. For example, FAA divides NAS users into two groups: high-performance aircraft, such as jets and turboprop aircraft, and piston aircraft. According to FAA, dividing users this way creates two principal groups whose flights impose substantially different costs on FAA. High-performance aircraft which fly at higher altitudes and speeds, and normally use Instrument Flight Rules, are "controlled" through en route airspace and for landings and takeoffs by air traffic controllers. Therefore, they impose higher costs on FAA than piston aircraft which fly at lower altitudes and often use Visual Flight Rules, under which they are not "controlled" through en route airspace but can use air traffic control services for landings and takeoffs.

However, FAA did not conduct a statistical cost analysis to determine whether high-performance aircraft of different types might impose sufficiently different costs on the system to warrant dividing NAS users into more than two groups. For example, differences in aircraft weight[23] could affect terminal airspace costs even though they may not affect en route costs. Although there may be no effect of aircraft weight on en route costs, FAA officials told us that the administration's reauthorization proposal requests authority to set terminal airspace user fees based in part on weight because they believe that larger aircraft require greater separation, thus imposing greater terminal airspace costs. Under FAA's cost allocation methodology, fixed costs[24] are assigned to the group that is the primary user of the air traffic control services that generate those costs. Accordingly, it might be more consistent to divide high-performance aircraft into subgroups before FAA allocated the fixed costs of air traffic control services used by aircraft in all groups to the group that is the primary user of that service.[25]

Creating only two principal groups resulted in the allocation of some portion of the fixed costs to general aviation jet aircraft, because the high-performance group, which FAA defines to include general aviation jet aircraft, is the primary user of services that are responsible for most fixed costs. If instead, for example, FAA had created three principal aircraft groups—piston, heavy high-performance, and light high-performance—and if the heavy high-performance group was the primary user of services that are responsible for most fixed costs, then the fixed costs would have been allocated only to that group. The effect of this change in methodology would likely have been that general aviation turbine users would have been allocated a smaller share of total ATO costs and a lower fuel tax rate would have been needed to collect their share of FAA's revenues.

[23]We cite weight only as an example. Statistical cost analysis might identify other factors that could be relevant in dividing aircraft into principal groups that impose different costs on the NAS.
[24]Fixed costs refer to the costs associated with a product or service that remain constant when the level of output changes.
[25]According to FAA, one potential concern with dividing the high-performance group into smaller groups by weight is that the dividing point would be arbitrary and could result in large differences in costs assigned to aircraft that do not differ much by weight but do fall near the dividing line, yet on opposite sides.

Because a sound cost allocation methodology is central to the successful application of cost-based funding, more time may be needed for FAA to further analyze the differences among aircraft types that lead to differences in the costs they impose on the NAS. More time may also be needed for a fuller analysis and discussion of FAA's cost allocation methodology, after which, perhaps, a wider consensus might be reached on FAA's cost allocation methodology. At the request of this Committee, we are continuing to review FAA's cost allocation methodology.

In addition to our concerns about the cost allocation methodology, we have identified some instances in which the reauthorization proposal does not strictly adhere to the principle of cost-based funding. For example, FAA has made what it terms a policy decision to not apply the congestion charge for using terminal airspace near large, busy airports to all aircraft that fly through that airspace. Aircraft flying near busy airports and using the same airspace but not taking off or landing at these airports would not be charged, even though such flights would use air traffic control services provided by the same approach control centers. FAA officials told us that they made this decision because the approach control centers would not exist if they were not serving traffic at the busy airports. In addition, they said, FAA wanted to create incentives for general aviation aircraft to avoid flying to or from the busy airports and to use other nearby airports instead. Although that rationale could provide a justification for allocating the fixed costs of such centers to users of the busy airports, allocating all of the variable costs to users at those airports is a deviation from a cost-based approach. While such policy decisions on pricing may be appropriate in some instances for various reasons, they create deviations from the principle of cost-based funding that may limit the ability of the administration's proposal to address concerns about the disconnect between revenues and costs associated with the current funding structure.

Proposed Fuel Tax Rates May Not Yield the Revenue to Produce Anticipated Fuel Tax Revenues

The proposed fuel tax rates, although much higher than current rates, may not yield the revenue that FAA expects to collect from fuel taxes. FAA estimated the tax rates necessary to collect from general aviation operators the share of ATO costs allocated to them and from both commercial and general aviation operators the revenue needed to fund the proposed level of $2.75 billion for AIP, EAS, and the portion of the RE&D account to be funded through fuel taxes (less the share paid by international passengers). FAA officials confirmed for us that in performing these estimates they did not take into account possible reductions in fuel purchases due to the increase in the tax rates. Although we do not know by how much such purchases would decline, conventional economic reasoning, supported by the opinions of industry stakeholders, suggests that some decline would take place.[26] Therefore, the tax rate should be set taking into consideration effects on use and the resulting impact on revenue. FAA officials told us that they believe that these effects would be small because the increased tax burden is a small share of aircraft operating costs and therefore there was no need to take its impact into account. Representatives of general aviation, however, have said that the impact could be more substantial.

Even if there is no change in fuel purchases due to higher tax rates, FAA's forecasts suggest that fuel tax revenues might be less than the proposed spending to be funded by those tax revenues.[27] Furthermore, we observe that the administration's proposed spending for AIP is substantially below the levels at which Congress funded the program in recent years. If Congress were to adopt the proposed funding structure but fund AIP at

[26]FAA could use variations in fuel prices over time, such as the big increase in 2005 due to crude oil price increases, to estimate the decline in fuel purchases likely to result from fuel tax increases of the magnitude proposed. We recognize that in making such estimates FAA would need to take into account the effect that other factors such as the state of the economy that can have on fuel purchases.

[27]For example, FAA's fuel consumption forecasts for fiscal year 2009 imply fuel tax revenues for the Trust Fund of about $2.2 billion, and about $0.5 billion is forecasted to be collected in tax revenue from international passengers, for a total of about $2.8 billion (differs from components because of rounding). However, proposed AIP obligations for that year are about $2.9 billion and spending for EAS and RE&D to be funded from these revenues will increase that amount.

the same level as this year, fuel tax rates would need to be raised above the proposed level to obtain enough revenue to fully fund AIP without resorting to alternative funding sources, such as the General Fund or drawing down the Trust Fund balance.

Proposal to Create an Advisory Board Has Uncertain Implications While Proposal Authorizing Limited Borrowing Authority Is Unlikely to Have a Major Impact

The proposed creation of an advisory board raises questions about the influence that NAS users would have on fee setting and the impact that such a board would have on congressional oversight. According to the reauthorization proposal, the advisory board would be able to recommend user fee amounts to the FAA Administrator, who would have the final decision in setting fees. If the advisory board objected to the fee, the Administrator would be required to publish a written explanation in the Federal Register. Aviation stakeholders could appeal the fee to the Secretary of Transportation but there would be no judicial review of the Secretary's appeal decision.[28] According to a recent report by the Congressional Research Service, the FAA Administrator would have substantial discretion in how much to use the advisory board's expertise.[29] Congress would have no role in setting fees, whereas under the current system, Congress sets the tax rates. The combination of these elements raises the issue of how to ensure the appropriate level of congressional oversight.

The authorization of limited borrowing authority (up to $5 billion) for FAA in the administration's proposal seems unlikely to have a major effect on FAA's ability to pay for capital investment associated with moving to NextGen, because the payback period is relatively short. With a maximum payback period of 5 years, the advantage of matching the time period for paying for a capital investment with the time period in which the benefits of that investment are realized is unlikely to be achieved. As a result, the advantage of this type of borrowing compared to appropriations also funded by Treasury

[28]Appeals would need to be based on evidence that the fees (1) are not based on appropriate costs, or (2) do not fairly allocate costs among users or (3) are unreasonably discriminatory to a particular category of users or (4) are not in accordance with the agency's strategic business plan.
[29]Congressional Research Service, *Federal Aviation Administration Reauthorization: An Overview of Selected Provisions in Proposed Legislation* (Washington, D.C.: Mar. 14, 2007).

debt is less clear. In either case, user fee collections could offset the borrowing. However, it is possible that having FAA borrow from the Treasury with a relatively short time period for repayment could serve as a way to tighten and make more explicit the link between the borrowing and the fees that are the source of repayment—and could ensure that the fees were set at a level sufficient to provide the needed funds.

Limiting FAA's authority to borrow from the Treasury and collecting revenue from user fees, as proposed, is preferable to giving FAA direct access to capital markets or repaying debt with appropriations or new borrowing. The Treasury can borrow at lower interest rates than FAA could achieve by going to the capital markets because Treasury securities are considered risk-free, since they are backed by the federal government. We have recommended that only those agencies that would be able to repay their borrowing through revenue collections be granted authority to borrow. In addition, we have reported that debt financing raises issues about borrowing costs that are particularly important in light of the federal government's long-term structural fiscal imbalance. Mandatory federal commitments to health and retirement programs will consume an ever-increasing share of the nation's gross domestic product and federal budgetary resources. Accordingly, any program or policy change that may increase costs requires sound justification and careful consideration before adoption.

Observations on Proposed Changes to the Budget Structure and on the Method for Determining the General Fund Contribution

The reauthorization proposal to align FAA's budget accounts with FAA's lines of business has advantages and disadvantages. Such a restructuring is consistent with FAA's emphasis on aligning revenues and costs and could allow FAA to more specifically distinguish those funding options that provide a better links between costs and revenues. For example, an ATO account dedicated to the operation, maintenance, and upgrade of the NAS could better enable the agency to charge for direct usage of the NAS. In addition, such a system could show the costs attributable to each line of business, thereby supporting the agency's internal financial management. However,

some FAA activities may not be clearly divisible into discrete categories. For example, one new account—the Safety and Operations account—includes safety-related activities. Nonetheless, there could be some ambiguity in how safety activities are defined and in how their costs should be allocated between aviation users which benefit directly from a safe air traffic control system and the public which receives general safety benefits.

Linking the General Fund contribution to FAA's budget, as the administration is proposing, would explicitly recognize that users of the system are not the only beneficiaries of it. Such an approach allows for a "bottom up" calculation of the General Fund contribution that is based on the different public benefits that FAA provides, such as safety and use of the NAS by federal agencies. This approach is different from the current one, which bases the General Fund contribution on how much money is left in the Trust Fund to fund the Operations account after Trust Fund revenues for that particular year have been allocated to fund the F&E, AIP, and RE&D accounts. An approach that links a General Fund contribution to public benefits is consistent with the principle of public finance that public benefits should come from the General Fund and not from user contributions. This should not, however, be viewed as a precise determination. Some aviation activities, such as safety, benefit both users and the nonuser public. Others, such as a national airport system that includes small airports that receive federal grants, may be seen as a benefit solely to the users of those airports, to their communities, or to the broader public. In addition, such a change in the method of determining the General Fund contribution may result in an increase or a decrease in that contribution, which would have implications for how aviation activities are funded.

Concluding Observations

The administration has introduced a complex proposal for funding FAA, and we believe that it deserves thoughtful consideration. Adopting this proposal is not necessary to provide more money to FAA if Congress thinks that additional spending on aviation is needed to address air traffic increases and new investment demands, including NextGen, because additional funding can be provided within the current structure. However, given

the current federal fiscal imbalance, appropriating additional funds to aviation may be difficult. Furthermore, the proposal may address some of the concerns that FAA and other stakeholders have raised with the current funding structure, such as equity, but only if the cost allocation from which the cost-based funding is derived is sound. FAA's cost allocation methodology is new and has raised issues, suggesting that further analysis and more time may be needed to reach a consensus as to whether it is sufficiently sound to support a cost-based funding structure for FAA.

In the meantime, the taxes that currently provide most of the revenue for FAA are scheduled to expire at the end of the current fiscal year. Given the relatively low uncommitted balance in the Trust Fund, a lapse in tax revenues could affect the funding of most FAA activities. Thus, timely reauthorization of the current tax revenues to avoid a tax lapse is critical even if Congress chooses to continue its consideration of the administration's proposal or other alternatives for funding FAA beyond this fiscal year.

Mr. Chairman, this concludes my prepared statement. I would be pleased to respond to any questions that you or other Members of the subcommittee might have.

Contacts and Acknowledgments

For further information about this testimony, please contact Gerald L. Dillingham at (202) 512-2834. Other key contributors to this testimony include Jay Cherlow, Ed Laughlin, Maureen Luna-Long, Maren McAvoy, Jennifer Kim, and Elizabeth Eisenstadt.

United States Government Accountability Office
Washington, DC 20548

07-0986

June 22, 2007

The Honorable Jerry F. Costello
Chairman
Subcommittee on Aviation
Committee on Transportation and Infrastructure
House of Representatives

Subject: *Response to Question for the Record; Hearing on the Federal Aviation Administration's Financing Proposal*

Dear Mr. Chairman:

This letter responds to your June 1, 2007, request that we address a question that you submitted for the record related to the March 21, 2007, testimony entitled *Observations on Selected Changes to FAA's Funding and Budget Structure in the Administration's Reauthorization Proposal*. This response is based upon our ongoing work and matters discussed during that testimony. FAA provided comments to us on a draft of this response, which we have considered and incorporated as appropriate.

If you have any questions or would like to discuss the response, please contact me at (202) 512-2834 or dillinghamg@gao.gov.

Sincerely yours,

Gerald L. Dillingham, Ph.D.
Director,
Physical Infrastructure Issues

Enclosure

(197018)

Enclosure

Response to Post-Hearing Question for the Record
"Observations on Selected Changes to FAA's Funding and Budget Structure in the Administration's Reauthorization Proposal"
Subcommittee on Aviation
Committee on Transportation and Infrastructure
U.S. House of Representatives
Hearing held on March 21, 2007

Question for Dr. Gerald L. Dillingham, Director
Physical Infrastructure Issues
U.S. Government Accountability Office

Question for the Record Submitted by Chairman Jerry F. Costello

Question:
The subcommittee believes that an important element of the fairness of FAA's assignment of air traffic control service costs to user groups is whether the assigned costs reflect the relative use of those services by various user groups. Has GAO's study of FAA's cost assignment methodology determined whether the assignment of costs to the high-performance and piston user groups reflects use of the services by those groups?

Answer:
No. The objectives of our on-going review of FAA's cost assignment methodology are to determine how costs are assigned to user groups and identify matters regarding the data, methods and assumptions used. Thus, we are focusing on understanding these interrelated components of FAA's overall methodology and FAA's process for applying them to estimate the assignment of costs to users. Our review was not designed to evaluate whether FAA's methodology can reasonably assign the costs of services to the users of those services. Doing so would have involved, among other things, testing the validity, reliability and suitability of FAA's data, methods and assumptions.

During our review of FAA's methodology and the fiscal year 2005 cost allocation results we noted that FAA's methodology lacked certain analyses and documentation. Without this additional analysis and documentation an independent party assessing the methodology FAA used would be precluded from readily determining whether the costs as assigned reasonably reflect the services received by various users.

FAA made two sets of assumptions in developing its cost assignment methodology that we found were not sufficiently supported. The first assumption was that different types of aircraft and aircraft operations have different effects on FAA's workload and the associated costs for air traffic control services, and that engine type is the primary indicator of these differences. FAA grouped aircraft based on their engine type (piston or turbine) and evaluated and pooled costs based on these two groups. FAA supplied data to support that there is a bright line between turbine and piston users, in

particular noting that turbine aircraft generally fly under instrument flight rules, while piston aircraft generally do not, and that turbine aircraft fly at different speeds and altitudes and under different operating conditions than piston aircraft. FAA then further allocated each pool of costs to commercial, general aviation, government and tax-exempt operator types. This allocation to subgroups of operators is based on the presumption that all types of aircraft operators with the same type of engine contributed to the group's costs in the same proportion as their share of distance flown (for en route services) and number of terminal operations (for terminal area services in each of three sub-groups based on airport size).

However, as discussed during my March 21 testimony on the administration's reauthorization proposal, different types of operators, with different aircraft types and operations, might impose different costs on the air traffic control system. For example, FAA did not quantify the relationship between other differences among aircraft types and operations and the costs of providing air traffic control services to support its assumption that differently-sized turbine aircraft contribute similarly to the costs incurred at a given category of facility. FAA has said that its analysis to date does not indicate that aircraft weight is a significant driver for cost allocation purposes and that separating terminal facilities based on airport size effectively allocates less cost to the lighter aircraft that tend to use smaller airports. While its assumption may have merit as it relates to en route services, FAA's proposal to charge for terminal area services based on the weight of the aircraft and time of day at certain congested airports is tacit acknowledgment that engine type alone may not be the only significant driver of its workload and costs at all facilities.

The second set of assumptions relates to how certain shared costs were assigned to the turbine and piston user groups. According to FAA officials, input from FAA subject matter experts (SME) was used to help determine how shared costs were allocated to the two user groups. FAA performed regression analyses to corroborate the SME input on these matters. However the results of some of the analyses either differ from SME input or are inconclusive, and when differences arose FAA relied on the judgment of the SMEs rather than the results of the regression analyses. In addition, as of the date of this response, FAA provided only limited information on SME interviews and this information does not include how decisions on final cost assignments were reached. FAA officials told us that the results of the SME meetings are documented primarily in spreadsheets, but acknowledged that the link between SME input and final cost assignment decisions was not well documented. Nevertheless, FAA officials recently told us that they will provide us access to these spreadsheets and copies of SME interview memorandums and e-mails.

We also identified two matters with respect to FAA's allocation of certain overhead and other miscellaneous costs. First, FAA allocated certain indirect labor costs to both user groups even though FAA's methodology had assigned some of the related equipment and direct labor costs to a single user group. An FAA official told us that changes already made to its accounting and allocation practices will significantly improve treatment of such related costs. Second, although FAA's cost accounting system (CAS) had already allocated overhead and other miscellaneous costs to the types of services provided to users, FAA chose to aggregate these costs into a single pool and then reallocate the entire pool proportionally among service types and both user groups. FAA officials said that they made this decision because relying on the cascading overheads within CAS could reduce transparency and because the overhead allocations in CAS are for a different purpose.

Enclosure

However, FAA designed CAS to allocate costs to the facilities that provide services to users so that managers could use this cost information when making operational decisions. Further, FAA's method for allocating overhead and other miscellaneous costs shifted costs among types of services, user groups, and types of aircraft operators as compared to the CAS allocations. Therefore, we believe that retaining the allocations already established by CAS has merit. FAA officials told us that, although making these changes is unlikely to make a material difference in the cost allocation results, they are considering increasing reliance on the CAS cost distributions for future user group cost studies.

UNITED STATES HOUSE OF REPRESENTATIVES COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE

The Federal Aviation Administration's Financing Proposal

March 21, 2007

STATEMENT OF EDWARD P. FABERMAN

Executive Director

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UNITED STATES HOUSE OF REPRESENTATIVES
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE

The Federal Aviation Administration's Financing Proposal
March 21, 2007

STATEMENT OF EDWARD P. FABERMAN
EXECUTIVE DIRECTOR, AIR CARRIER ASSOCIATION OF AMERICA

Good morning. Chairman Oberstar, Ranking Member Mica, Subcommittee Chairman Costello, Ranking Subcommittee Member Petri, and Members of the Committee, I am delighted to be here today to talk about the future of the nation's aviation system and proposed funding mechanisms to support that system. My name is Ed Faberman and I am Executive Director of the Air Carrier Association of America ("ACAA"), an organization that represents smaller but growing low-fare carriers. As Department of Transportation ("the Department"), Federal Aviation Administration, and General Accountability Office studies have recognized, these are the carriers that are increasing market demand and generating millions of dollars in economic benefits.

The Administration's *Next Generation Air Transportation System Financing Reform Act of 2007* proposal ("Proposal") addresses critically important issues, but also raises significant questions. The ACAA's primary thoughts regarding the Proposal are:

- Funding requirements should be fairly assessed to all operators in the system and to the General Fund;
- Congestion charges must not be allowed to further block access and competition;
- Passenger facility charges should not automatically increase, as those charges disproportionately impact low fares;
- Distribution of access at capacity-strained airports like LaGuardia should promote competition and must not further limit competition; and
- The Air Transportation System Advisory Board must include a representative of low-cost carriers.

This Committee has played an active role in urging the Administration to ensure that the nation's air traffic system includes the latest technology to minimize delays, further improve safety, and expand travel options for passengers and communities throughout the country. In her remarks at the signing of the U.S.-Canada Open Skies Agreement on March 12, 2007, Secretary of Transportation Mary Peters emphasized the importance of a more flexible and efficient air transportation system, noting that it is "key to our futures" because "economic prosperity depends in large part on our ability to move goods and people as efficiently and quickly as possible." The objective of this Proposal should be to "move goods and people as efficiently and quickly as possible" *and* at low fares! As the Committee well understands, expanding travel opportunities benefits local and national economies. We are very appreciative of all of the Committee's efforts in this regard. The promotion of aviation and competition has opened many doors to additional competition and has expanded travel options for consumers.

The ACAA supports the efforts of the FAA and DOT in setting modernization as a priority. It is essential that the nation's air traffic system be upgraded to meet growing demand and ensure the smooth operation of the system, while promoting maximum travel opportunities for passengers in communities throughout the country. As the system reliability and flight times improve, demand and economic benefits will continue to grow.

The Proposal cannot be viewed in a vacuum. We are not operating in an environment where costs are stable – rather, costs continue to rise. In addition to fuel costs, security and facility costs continue to increase as well. The cost for smaller airlines is higher at many airports than for other operators because smaller carriers do not have dedicated facilities and often struggle to get the facilities they need to operate efficiently. The proposed mechanisms for generating capital must allow for maximum competitive opportunities and further the dream of deregulation. The Department has taken steps to open skies around the world – now is the time for them to accomplish the same results in the United States, where many doors have not been opened.

The issues that follow are of particular concern to the ACAA.

I. Low-Fare Carriers and the ACAA

Low-fare air carriers are managing to stay successful in today's airline industry, continuing to grow and enter airports of all sizes despite the major changes and consolidation that have taken place in the industry in the past decade. The March 16, 2007 Aviation Daily noted that for the first two months of the year, "Network Carrier Total Available Seat Miles" were up less than 1%, while "Low-Cost Carrier Total Available Seat Miles" were up a full 8%. Having said that, there are a number of low-fare carriers who have gone out of business and very few new low-fare airlines have emerged in the last few years. Southwest is the largest of the low-fare airlines, but it has been in existence for several decades. Newer low-fare carriers hold about 7% of national operations.

The ACAA is dedicated to bringing affordable airfares to all American travelers. Our members include low-fare carriers and airports focused on bringing low-cost travel options to the American consumer. These efforts are taking place all across the country, but especially in small communities who reap incredible benefits when low-fare options are available in their communities.

II. Potential Funding Mechanisms

The ACAA urges Congress to take appropriate steps to ensure that all stakeholders fairly participate in funding the system. The modernization goals will be expensive but they are absolutely necessary to support system growth for all. However, the costs associated with these efforts cannot be borne by the air carriers alone. First, the government must consider and review all possible cost-cutting measures. Since the nation's air traffic system is a national system that benefits travelers, communities, manufacturers, the entire travel and tourism industry, and business expansion, General Fund contributions must at least be maintained at existing levels. The burden of funding the system cannot be placed only on air carriers, especially given the importance of air service to the economic development and growth of all segments of the aviation system and the industry's impact on growth of the national economy.

The ACAA is concerned about the broad authority granted in the Proposal, which would allow the Administrator to establish and increase user fees on any basis at any time. The Proposal allows the FAA to increase fees on its own initiative, with very little oversight. Therefore, we cannot endorse that approach as it currently stands. There must be oversight over any changes that will increase costs.

III. Congestion Charges

The ACAA has concerns about the implementation of a congestion charge, as neither the purpose nor the effectiveness of such a charge is clear. Congestion fees assessed must apply to all operators who use the nation's largest and most congested airports, whether general aviation or commercial aviation.

Additionally, the cost-based congestion charge in the Proposal has no restrictions and seems limitless. For example, if the FAA determines that a congestion charge should apply at LaGuardia Airport ("LGA") or Chicago O'Hare Airport (both dominated by the nation's largest carriers), would the proposed congestion charges be assessed to all carriers, even those who are limited to a handful of flights? Any congestion charge the FAA decides to issue should be imposed on those carriers actually *causing* the congestion. It would be inappropriate to charge a small carrier or any operator with a small number of flights the same charge as a carrier operating hundreds of flights at the "congested" airport. Low-cost carriers make up less than 5% operations at O'Hare, 8% at Washington Reagan National Airport ("DCA"), and approximately 10% at LGA. With such small percentages, it is clear that smaller carriers are not causing the congestion that is the subject of these charges. To address congestion issues and to place some responsibility on carriers that operate hundreds of flights at an airport (including many flights in one market), in the past the ACAA has called for the authorization of delay-free operations so those carriers who are not crowding an airport or airspace are not penalized by typical delays. Low-cost carriers are already blocked from many airports and their operations are severely restricted in others. If congestion charges are imposed on carriers with only a few operations, it may close the door to access completely.

As to general aviation costs, we are not proposing that they be increased for less congested airports or that aircraft at small, uncongested airports should face any new

charges. Additional general aviation charges should only apply at congested airports which have experienced significant increases in large corporate and private jet activity – adding to congestion, to costs, and to delays. Currently the general aviation carriers at congested airports contribute equally to congestion, but pay a great deal less in taxes and fees, as shown in Exhibit A. At congested or "closed" airports, general aviation aircraft should pay fees identical to those paid by air carriers.

IV. Passenger Facility Charges

Passenger Facility Charges (PFCs) cannot be analyzed in a vacuum, because they are not the only fees or costs the airlines must absorb. Over the past several years, the industry has seen significant increases in airport fees and security fees to fund various security systems and staffing shortages. All of these increases in fees, taken as a whole, impact the ability of carriers to provide the low fares necessary to generate system growth. Automatically increasing PFCs by more than one third (from $4.50 to $6 or $7) is a large increase. This change has a greater impact on low-cost carriers, as their low fares mean this increase is an even more significant change than it is for large carriers with higher fares.

This charge essentially acts as a penalty on those operators who operate larger aircraft. Why penalize a flight with 120 passengers as opposed to a flight with 50 passengers? The increase in regional jets does help to expand options, but it also has an impact on funding. Increasing the PFCs does not solve this problem, and only pushes the burden of funding on to a limited number of operators, as shown in Exhibit B. While a minimal increase in the PFC might help improve airport facilities and operations, it also could have a very real impact on travel, because many travelers rely on low fares to travel. If low fares increase 10-20%, as they might with the proposed PFC increase and other costs, many families and other travelers will not be able to fly as frequently. This will result in less revenue for the airlines and less funding coming to the government. The ACAA also is concerned that this increase in PFCs is being taken too lightly and is becoming a trend that will only get worse in the future.

V. Congestion Pricing at Capacity-Strained Airports Like LaGuardia

ACAA appreciates that the Proposal addresses LGA. However, it is essential that the Department be directed to put a strong focus on promoting competition and new entry. The Proposal fails to sufficiently acknowledge the importance of taking competition into consideration when allocating operating authorizations at LGA. Low-cost carriers currently have less than ten percent of the slots at LGA. Why would a carrier with so few daily departures need to pay a congestion charge? Improving the level of competition at the airport must always be a key consideration in the allocation of operating authorizations and should be discussed as more than a passing reference to the regulations. The Department should have the same open skies priorities for American travelers as for European or Canadian travelers, and the effort to improve access should be as strong domestically as it is internationally. The government has been looking at how to expand operations at LGA for several years now, yet to date few new options have been created.

VI. Air Transportation System Advisory Board

The Air Transportation System Advisory Board, while a valuable concept that appears to include representation from all parts in the industry, does not require a representative of low-cost carriers. These carriers are important players in the industry and represent an aviation interest not covered by any of the eight members described in the Proposal. It is of utmost importance that low-cost carriers be represented on the Air Transportation System Advisory Board. Furthermore, the ACAA questions how effective the Board will be if it is comprised of individuals who have no affiliation to the industry segment they represent. It should not be necessary that Board members be completely devoid of any aviation affiliation in order to serve.

VII. Conclusion

The ACAA applauds this Committee for holding these hearings and is prepared to work with the Committee and the Administration to craft a Bill that will effectively serve the airline industry and its consumers today and in the future. This Bill is critical for the future of the entire industry and the growth of the nation's economy, whose success is

closely correlated with the transportation system. It is an important beginning, but is far too indefinite to be accepted as it currently stands. There are too many questions left unaddressed and too many unknown impacts.

While our dream is to have a high tech system, the cost of that dream cannot be so high that fare choices become a nightmare. The *true* dream is to create a high tech, safe, and secure system that maximizes consumer choices and ensures that low fares are available to all. The concerns noted above, as well as those outlined by various other parties, must be thoroughly discussed and significant revisions must be made before this dream becomes a reality. The ACAA therefore applauds this Committee for holding these hearings. This is only the first step! We look forward to working with you on this and all matters.

Thank you very much.

EXHIBIT A

COMMERCIAL AND GENERAL AVIATION TAX COMPARISON

	Air Carrier	General Aviation
Passenger Capacity	138	9
Assumed Load Factor	80%	33%
Number of Passengers Carried	110	3
Average Fare	$ 90.00	
FAA FUNDING		
Passenger Ticket Taxes		
Federal Excise Ticket Taxes	$ 1,094.50	
Fuel Excise Tax		
Fuel Consumption Gallons	1,800	560
Tax Rate	$ 0.044	$ 0.244
Total Fuel Tax	$ 79.20	$ 136.44
Total FAA Funding Per Flight	**$ 1,173.70**	**$ 136.44**
TSA FUNDING		
Security Fee	$ 2.50	
Number of Passengers	110	3
Total Per Flight	$ 275.00	
Total TSA Funding Per Flight	**$ 275.00**	
AIRPORT FUNDING		
Passenger Facility Fee	$ 4.50	
Airport Security Fee	$ 0.12	
Total Per Passenger	$ 4.62	
Number of passengers	110	3
Total Per Flight	$ 508.20	
Landing Fees	$ 325.48	
Total Airport Funding Per Flight	$ 833.68	
TOTAL TAX AND FEES PAID PER FLIGHT	**$ 2,282.38**	**$ 136.64**

EXHIBIT B

EXAMPLE COSTS OF OPERATING LARGE AIRCRAFT

	Carrier using Regional Jets	**Carrier using large aircraft**
Landing Fees	45,000 x $6.45 = $290.25	130,000 x $6.45 = $838.50
Excise Tax (7.5%)	30 pax x $150 fare x .075 = $337.50	110 pax x $100 fare x .075 = $825.00
PFC/Segment/($6.10)	30 pax x $6.10 = $183.00	110 pax x $6.10 = $671.00
Totals	**Total fees = $810.75**	**Total fees = $2334.50**

ATA TESTIMONY

Federal Aviation Administration Financing Proposal

Statement of James C. May
President and CEO
Air Transport Association of America, Inc.
before the
Subcommittee on Aviation
of the
House Committee on Transportation and Infrastructure

March 21, 2007

AIR TRANSPORT ASSOCIATION

"The stakes are enormous; the public-interest considerations are clear; and the need for prompt, decisive action is undeniable."

Congress, in the coming months, has the singular opportunity to lay the foundation for a truly 21st century air traffic control (ATC) system that will safely, efficiently and equitably meet the growing needs of system users; and thereby benefit those who rely on air transportation, the communities that airlines serve, the innumerable industries that depend on air service and our nation's economy.

All who are interested in the future of civil aviation in our nation are witnessing a historic convergence of factors that will shape aviation for decades to come – the closely approaching deadline to enact reauthorization legislation for the Federal Aviation Administration (FAA), the undisputed imperative to modernize the ATC system, and the well-recognized need to return to an ATC funding mechanism that matches the costs that users impose on the system with the fees that they pay for ATC services. The inescapable reality is that the ever-growing demand of passengers and shippers for air transportation cannot continue to be met by an ATC system that was introduced in the mid-20th century and that relies on a decades-old funding scheme that has strayed far from its original intent.

The stakes are enormous; the public-interest considerations are clear; and the need for prompt, decisive action is undeniable.

Overview

The benefits of a modernized and equitably funded ATC system will be considerable and widely distributed throughout our society:

- **Safety** – Will provide more precise information about aircraft locations, both in the air and on the ground, and will enable aircraft to constantly know one another's locations.
- **Passengers and Shippers** – Will ensure needed growth in capacity to satisfy customers' expanding demands for air service.
- **ATC System Users** – Will enable the ATC system to continue to accommodate all users – general aviation, corporate aviation, airlines and the military – and to do so more efficiently than today; careful project justification will assure stakeholders that modernization projects are necessary and their costs are contained.
- **FAA** – Will assure a stable, predictable revenue stream, thereby enabling the orderly and efficient transformation of the ATC system.
- **Equity** – Will assure that each user pays its fair share but no more, unlike today where airlines pay for 94 percent of Airport and Airway Trust Fund (AATF) revenues but only account for 69 percent of all flights.
- **Environment** – Will reduce aircraft emissions through fuel conservation that more efficient flight paths and separation standards will achieve.
- **Communities** – Will promote air service to communities, large and small, and the economic benefits that flow from being linked to the air transportation system.
- **U.S. Economy** – Will assure that the economy continues to benefit from air transportation's ability to move people and goods quickly and economically.

WHAT WE'RE *NOT* SAYING

Rhetoric sometimes does not coincide with reality in the ongoing debate about FAA reauthorization legislation. We want to make a few preliminary points to set the record straight:

- **We are *not* saying that piston-powered general aviation aircraft should pay the same as turbine-powered aircraft.** Piston-powered general aviation aircraft generally fly at different altitudes than turbine-powered aircraft and therefore often impose no or few demands on ATC system resources. Any funding mechanism should reflect that difference, just as it can reflect the difference between daytime and nighttime operations.

- **We are *not* saying that small communities should be left to fend for themselves.** Small communities have unique air service needs. Reauthorization legislation should recognize those needs in its funding and Essential Air Service (EAS) program provisions.

- **We are *not* saying that Congress should end its role of guiding the direction of the air traffic control system.** We are not trying to strip Congress of its role of overseeing ATC funding decisions. On the contrary, we are upholding Congress' historic view that funding should be cost based.

- **We are *not* saying that the air traffic control system should be privatized.** The ATC system must be modernized and its funding mechanism reformed but the FAA should continue to be the supplier of air traffic control services. Modernization and reform should not be equated with privatization.

- **We are *not* saying that airlines should control who has access to the nation's airspace.** Instead, we are saying that unless the system is modernized and a sound funding mechanism for it is created, capacity constraints will increasingly limit the access of all users – general aviation, corporate aviation, airlines and the military.

THE INDISPENSABLE ROLE OF THE AIRLINE INDUSTRY IN THE U.S. ECONOMY

The U.S. airline industry is not simply an important sector of the national economy; its services fuel our entire economy. Air transportation is an indispensable element of America's infrastructure and our nation's economic well-being. Individuals, businesses and communities depend on the national air transportation system. U.S. airlines transport more than two million passengers on a typical day and directly employ 550,000 persons to do so; they provide just-in-time cargo services; they are the backbone of the travel and tourism industry; and airlines link communities throughout our nation and to the world.

Moreover, the airline industry is the foundation of the commercial aviation sector, which is comprised of airlines, airports, manufacturers and associated vendors. U.S. commercial aviation ultimately drives $1.2 trillion in U.S. economic activity and 11.4 million U.S. jobs. By any measure, the U.S. airline industry is a valuable national asset and its continued economic health should be a matter of national concern.

We also recognize how critical air service is to the small communities of our nation. For that reason, we firmly support the continuation of a strong Essential Air Service program. Any reauthorization needs to include such a continuation.

This key element of our nation's infrastructure cannot sustain its vital role of transporting people and goods if the government infrastructure that it depends upon, the ATC system, becomes an impediment. Air transportation risks becoming a wasting national asset if three of its most distinguishing characteristics – speed, dependability and efficiency – are encumbered by an increasingly obsolescent ATC system.

Today's Air Traffic Control System Is Shortchanging Our Future

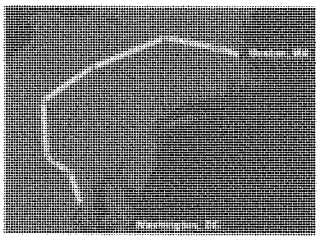
The current system is based on 1950s architecture. It was cutting edge during the era of Ozzie and Harriet but not today. Although the ATC system in the past has served users well, this outdated infrastructure cannot meet the operational needs of 21st century civil aviation. It will not be able to serve the needs of passengers and shippers, private pilots, and corporate aircraft or accommodate the ongoing introduction of unmanned aerial vehicles.

The current ATC system relies on a series of ground-based platforms. Navigational aids, radar and controllers are all terrestrial. They are linked to form a very complex network system that supports airways, through which aircraft fly. The system was designed to create point-to-point routings, which by their very nature are finite. Its components reflect that paradigm.

Airways, unfortunately, increasingly resemble many highways – they have become saturated. What we have come to realize is that the ground-based system that supports point-to-point airways cannot produce substantial new capacity. We have no choice but to introduce new technology to generate needed capacity.

Obsolescent ATC technology and the operating procedures that are tied to them mean that many aircraft routings – for airline, corporate and general aviation aircraft – are inefficient and will become increasingly so as we move further into the new century. Because of these inherent technological limitations, today's ATC system cannot – and never will be able to – take full advantage of available technology or integrate and fully exploit emerging technology. Potential capacity enhancements and efficiency improvements, so critical to meeting growing air traffic demand and responding to environmental concerns, will remain unrealized unless the ATC system is promptly and thoroughly transformed.

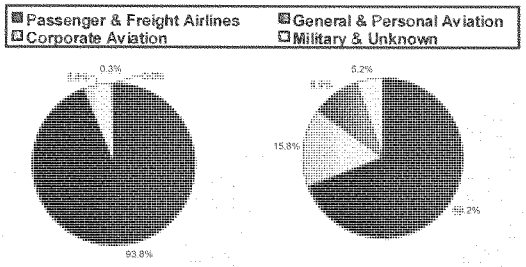
Today's System is Inefficient



Aircraft frequently zigzag between ground beacons to navigate – an inefficient process that wastes time and fuel while generating excess emissions. This route was flown by an ATA member airline in December 2005 from Washington, D.C. to Boston. This route is about 35 percent longer than the direct route. Weather was not a factor in this situation. This type of flying happens regularly in the National Airspace System (NAS).

Imperiling needed improvements is the fact that the ATC system's funding mechanism is a relic of 1970. Such an artifact has no place in the 21st century. It was created when corporate and general aviation aircraft were insignificant users of the system. This is no longer so. Today corporate and general aviation consume 26 percent of the system's services but contribute only 6 percent of Trust Fund revenues.

As Secretary of Transportation Peters said recently, "Under the current tax structure, it is clear that taxes paid by different user categories do not generally reflect the costs those users impose on the system."[1] Corporate aircraft will use an even greater proportion of system resources in the future as thousands more business aircraft and very light jets (VLJs) are introduced. Funding for a modernized ATC system must reflect that changed – and changing – reality.



Airlines pay 94% of Trust Fund revenues... **...but only account for 69% of all flights**

What Delays Cost Today

Airlines schedule their flights based on demand; i.e., when people want to fly and when cargo needs to be delivered. Airlines don't create that demand, customers do. Aviation infrastructure must respond to what consumers want.

The Department of Transportation has estimated that in 2005 the cost of delays to U.S. airline passengers was $9.4 billion. The cost to airlines is also tremendous. Every minute of flight delay experienced in 2005 imposed an estimated $62 in direct costs on airlines. The 94.1 million cumulative delay minutes in 2005 therefore generated $5.9 billion in costs to the airline industry and a total projected cost to the U.S. economy of $15.3 billion. Expressed differently, 2005 delays cost $484 *per second.*

ATC system capacity must be dramatically expanded – and soon. Flight delays, as noted above, are bad today and they will get worse. The current system cannot handle what is coming. ATC system users and the ultimate beneficiaries of aviation services – travelers, shippers, businesses and communities – need an air traffic control system that can make the most of contemporary technology.

"Airlines don't create that demand, customers do. Aviation infrastructure must respond to what consumers want."

[1] Feb. 14, 2007, letter of Secretary Peters transmitting the proposed Next Generation Air Transportation System Financing Reform Act of 2007 to the Senate at p. 3.

THE NEED FOR IMMEDIATE ACTION

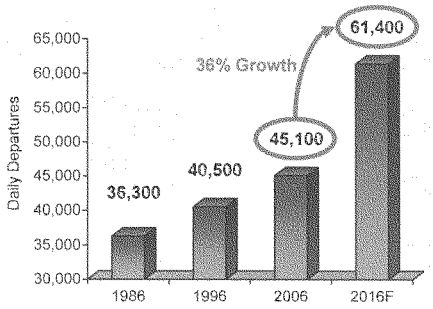
Secretary of Transportation Peters only five weeks ago said, "The current aviation system simply cannot handle future traffic increases without major delays, making system transformation necessary."[2] The Secretary's assessment is indisputable. The nation's airways will become more and more congested as increasing demand, particularly from rapidly rising numbers of corporate and VLJ aircraft, overwhelms existing capacity.

The best estimates inform us that, without prompt and thorough modernization, the ATC system will progressively asphyxiate. More and more airports and more and more airspace will become congested, increasingly choking civil aviation in our country. Gridlock will become a common word in aviation parlance.

Numbers starkly tell the story. The FAA projects that one billion passengers will be enplaned in 2015, up from nearly 750 million enplanements in 2006. That projection reflects an unabated demand for air transportation – no "breathing spell" is forecast. The FAA also predicts that 10,000 corporate aircraft, including traditional business jets, turboprops and VLJs, will be added to the fleet between 2007 and 2017. This will significantly shift the proportion of air carrier to business aircraft using ATC services. It will also generate extraordinary new demands for those services. Instrument flight rule operations – the most significant source of demand on the ATC system – are projected to rise by 36 percent, from roughly 45,000 per day to over 61,000 per day, in the next decade. That new burden will be on top of an ATC system that today is displaying unmistakable evidence of strain. To place this in some perspective, that strain is evident on days when at any given time, on average, only 6,000 aircraft are flying in the ATC system.

Change Required to Meet Growth

FAA Projects 36% increase in daily flights in 10 years



Source: FAA Aerospace Forecasts

[2] Feb. 14, 2007, letter of Secretary Peters transmitting the proposed Next Generation Air Transportation System Financing Reform Act of 2007 to the Senate at p. 1.

"If the government does not embark on the necessary transformation of the ATC system, it risks becoming the regulator of inconvenience."

The existing ATC system cannot absorb that anticipated demand. It suffers from fundamental structural limitations, principally attributable to the system's reliance on ground-based navigation, radar and communications facilities. The result is that the current system is not scalable; the system cannot be expanded to meet upcoming demand. It is not the system to meet the future growth of civil aviation – airline, corporate or general aviation.

The ominous consequence of all of this is that delays are forecast in 2014 to increase by 62 percent over 2004 levels. That level of delays will be intolerable. Such an increase will have profound repercussions on airlines, ATC operations and airline customers, and will ripple across our economy. The effect on the total U.S. economy is likely to be immense. The Joint Planning and Development Office has estimated that the cost of failing to meet future airspace demand could approach $40 billion annually by 2020.[3]

The nature and extent of these anticipated delays need to be understood. An increase in delays of that magnitude will mean that airspace and airports that have not experienced chronic delays will routinely experience them in the future. It will not simply be that afflicted airports will get worse, the affliction will spread.

Schedule reliability will be the immediate casualty of such a surge in delays. Not only will flights be delayed, connections will be missed and chronically delayed flights will be cancelled. Service unpredictability at a level not previously experienced could materialize. Passengers and shippers and those who rely on the transportation of those people and products will suffer, and their suffering will worsen month by month, year by year. Industries and communities dependent on civil aviation, whether for scheduled airline service or general aviation operations, will be similarly affected.

Today's System Cannot Handle Future Demand

"We project that if traffic grows as expected, by 2014, delays in the U.S. will increase 62 percent over 2004 levels. These projected delays will cost the airlines at least $2 billion in extra costs that will seriously erode profits needed for future fleet and infrastructure expansions."

Russ Chew
Former Chief Operating Officer
FAA Air Traffic Organization
Sept. 28, 2006
ICAO Congested Skies Conference

While customers will not accept such a result, neither will airlines nor the FAA. Both airlines and the FAA will reconfigure their operations to respond to worsening ATC system performance. It will certainly not be business as usual if gridlock begins to cascade through the system. Sooner or later, access to airline services and ATC services will be limited in some way or ways. If flight schedule reliability deteriorates, airlines will stretch out their schedules and flight connection times. That, of course, will make airline operations less efficient and more costly. It also will diminish the attractiveness of air transportation and some customers will look for substitute means of transportation, thereby exposing airlines to further financial distress. Were ATC operational performance to worsen, the FAA would predictably explore measures to ration demand on the system. We have experienced that before with the High Density Airport Rule and its progeny, and in the aftermath of the Professional Air Traffic Controllers Organization (PATCO) strike during the first half of the 1980s. We do not want to repeat that experience.

If the government does not embark on the necessary transformation of the ATC system, it risks becoming the regulator of inconvenience. That is not the role that any of us wants it to assume.

[3] GAO, *Next Generation Air Transportation System* at p. 16 (GAO Report No. 07-25, Nov. 13, 2006).

The Solution – Technology and Fair Funding Will Prevent Gridlock

A satellite-based air traffic control system will provide the means to reduce delays and congestion that otherwise will occur. The benefits of a technologically up-to-date ATC system that is equitably financed will be extensive and will be widely distributed throughout the user community. Equitable financing must be based on four complementary principles: cost-based usage fees; a robust general fund contribution; innovative financing, such as bonding authority; and the realization of savings from FAA Air Traffic Organization (ATO) efficiency improvements.

A Modern Air Traffic Control System: We Can Do It

Air traffic control system modernization is neither novel nor revolutionary. It is being accomplished elsewhere in the world. We can do the same.

ATC service providers in other nations have recognized the need to replace antiquated ground-based systems. They have taken steps to transform those systems to satellite-based, digital air traffic management systems that ensure safety, generate added efficiency and produce additional airspace and airport capacity. Large and small countries have done so. For example, Fiji introduced a GPS-based air navigation system more than a decade ago. Australia, Canada, China, France, Germany, India, Switzerland and the United Kingdom are implementing next-generation ATC systems.

The Alaska Capstone Program, Required Navigation Performance (RNP) terminal arrival and departure routings at Atlanta and Dallas/Ft. Worth, and RNP instrument approach procedures at airports that have challenging approaches, such as Juneau, Palm Springs and Reagan National in Washington, D.C., have given us a preview of what more extensive application of new technologies can deliver for system users in this country. A broadly modernized air traffic control system will enable all types of aircraft to take full advantage of Area Navigation Procedures (RNAV), RNP and Automatic Dependent Surveillance-Broadcast (ADS-B). This will make flying safer and far more efficient.

The Safety Benefits

Increases in system capacity are understandably cited in discussions about the benefits of ATC system modernization. Improvements in safety, however, are what should first and foremost command our attention. Some of those improvements have already been accomplished; others are plainly attainable. A sharp drop in aircraft accidents in Alaska has occurred since the Capstone Program, which relies on ADS-B, was introduced earlier in this decade. Widespread use of ADS-B in the future will enable aircraft locations to be more precisely identified. This will be very helpful while aircraft are airborne but will also be useful in ongoing efforts to reduce runway incursions while on the ground.

The Capacity Benefits

Capacity improvement is another core reason for ATC system modernization. New technology will enable aircraft to be unshackled from the ground-based, point-to-point navigation systems and associated analog communications systems under which they have operated for over three-quarters of a century. New technology will also enable the more precise spacing of aircraft. The ability to fly outside of existing point-to-point airways and improved precision will enable aircraft to operate more efficiently in airspace, whether it is en route or terminal area. That newfound efficiency will translate into added capacity. It also means, as noted above, the ability to use satellite-based instrument approach procedures at some runways that today have limited or no availability in instrument meteorological conditions – another important capacity enhancement.

The wider use of digital communications, which will be an integral element of the modernization effort, will relieve congested voice communications channels, increasing the capacity to transmit quickly and accurately air traffic control information. This will mean a more orderly transmission of critical information, which will benefit both pilots and controllers, especially during peak workload periods. Furthermore, wider use of digital communications will diminish the possible blocking of voice

communications between pilots and controllers in high-volume situations that can occur today, which is an increasing safety concern.

The Environmental Benefits

In addition, routing efficiency improvements will yield significant environmental benefits. Experts estimate that modernization of U.S. airspace management could result in 12-15 percent improved environmental performance. We have already seen such benefits. For example, the introduction of more precise RNP arrival and departure procedures in the Atlanta terminal area is projected to eliminate 483 million tons of CO_2 annually.

All of these benefits can be achieved; they are being achieved elsewhere in the world. To build a modernized ATC system, however, we need a modern funding system.

Funding – Doing It the Right Way

An equitable funding system must be a properly calibrated combination of four mutually reinforcing sources: cost-based usage fees, a robust general fund contribution, innovative financing authority – such as bonding – to pay for expanding capital needs, and cost savings from improved ATO efficiencies.

First and foremost, the funding system must embrace, once again, the cost-based principle that animated Congress' decision to create the Trust Fund in 1970. That essential predicate, from which we have gone astray, is discussed more fully below. In addition, the various public-interest demands on FAA resources require a significant general fund commitment. Without that commitment, private-sector users will underwrite public-sector-imposed costs. That would perpetuate, in another form, the inequitable cross-subsidization of the current system. Moreover, the accelerating financial demands of ATC modernization, especially the need for substantial new capital investments, mean that the FAA must receive financing authority that has the capacity to meet those needs. Financing of an undertaking of this magnitude, with predictably compressed capital needs, should not be confined to an inherently limited pay-as-you-go funding arrangement. Bonding authority is one obvious solution; other innovative solutions should be explored. Finally, although different in nature from the foregoing sources, efficiency-produced cost savings are critical. Stakeholders' financial contributions must translate into demonstrable improvements in system efficiency.

This funding strategy will enable the FAA to finance fairly, responsively and flexibly the expense of ushering in a 21st century ATC system.

Funding – The Need to Return to Our Roots

Much of the funding predicament that we face today is because the user-pay principle that Congress embraced decades ago has been abandoned. When it comes to funding the ATC system, therefore, we need to return to our roots.

When Congress in 1970 enacted the Airport and Airway Trust Fund, the funding structure was based on two bedrock principles: user-pays financing and cost-based financing. At that time, airlines were the principal users of the system. They, as a result, were responsible for much of the ATC system costs. Funding of the Trust Fund was consequently mostly through the ticket tax. That made sense nearly four decades ago. It reflected a relationship between use and payments. That relationship is what Congress intended when it enacted the 1970 legislation.

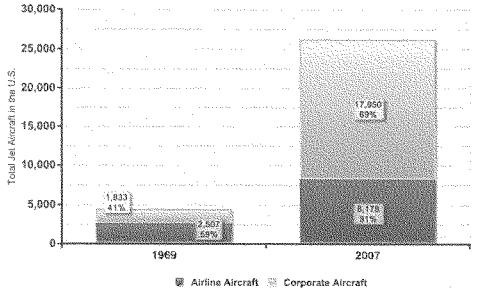
Corporate Aviation Has Grown Dramatically

Congress in 1970 created a cost-based funding mechanism that mirrored the composition of air transportation. Times have changed. When the Trust Fund was created, there were 2,500 commercial aircraft and only 1,800 corporate aircraft using the system. Today there are 8,000 commercial aircraft and nearly 18,000 corporate planes. But airline passengers still pay 94 percent of all aviation taxes/fees while corporate fliers pay just 6 percent. The Trust Fund has not evolved to reflect this change in who is using the ATC system. As a result, travelers who fly on commercial airlines subsidize those who fly on corporate planes. The chart that follows shows this dramatic shift in the makeup of system users.

"The Trust Fund has not evolved to reflect this change in who is using the ATC system. As a result, travelers who fly on commercial airlines subsidize those who fly on corporate planes."

Times are Changing in Aviation

The jet fleet has changed since the inception of the Trust Fund



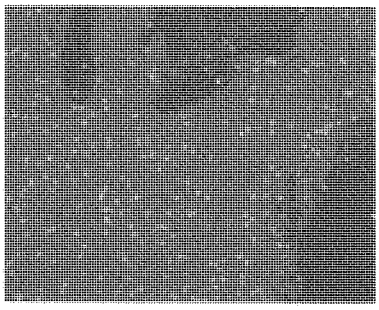
Furthermore, business aircraft frequently fly during peak travel hours and often use the same airspace as the nation's airlines; many times they are consuming the premium services of the ATC system. The magnitude of that demand is substantial. For example, on an average day there are 238 IFR operations at Teterboro Airport. This compares with an average of 301 IFR operations by Continental Airlines at nearby Newark Airport. These corporate users are not merely putting incidental demands on the system, as the following depiction graphically demonstrates.

A Blip is a Blip

- ***Primary and secondary airports use the same airspace***
- ***Planes in the same airspace impose the same costs on the system***

Commercial Passenger & Cargo Flights

Non-military ATC System Users



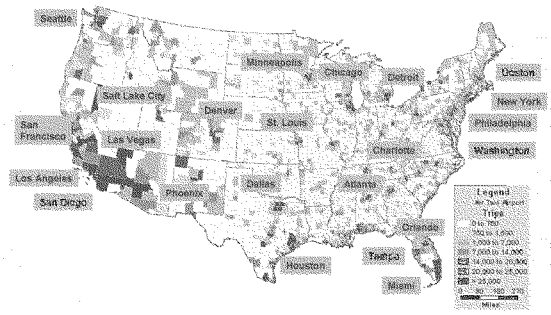
Snapshot taken on Wednesday, March 7, 2007, 11:30 a.m.

The business aviation industry is projected to grow even larger over the next decade with the introduction of next-generation aircraft called very light jets (VLJs) that in many instances will be able to fly at the same altitudes as airline aircraft. Not surprisingly, according to FAA data, business aviation is the fastest growing segment of the aviation industry. Indeed, there have been well-publicized reports of investors' plans to order vast numbers of VLJs to create new air-taxi services. This will be pure commercial usage of the ATC system. In no way will it resemble the recreational pilot flying from a general aviation airport on a Saturday afternoon.

As the depiction that follows clearly indicates, VLJ operations are forecast to be more concentrated than is commonly understood. They will not simply be operating between low-activity airports, in low-activity terminal airspace or underutilized en route airspace. VLJs and their brethren, corporate aircraft, will consume increasingly scarce ATC system resources.

"There is no correlation today between revenue collected and services consumed. Airlines pay for 94 percent of Trust Fund revenues but only account for 69 percent of all flights."

New VLJs to Serve Major Markets



Forecast of annual originating VLJ air-taxi trips by county in 2017

Source: CRA International with Calculations by Virginia Polytechnic Institute. Paid for by Eclipse Aviation.

The Principle of Equitable Funding Has Been Forsaken

When the Trust Fund was established in 1970, the airline industry was regulated and ticket prices were set by the government. In general, those government-set ticket prices reflected the cost of operation. As a result, generating revenue through a tax on ticket prices made sense – it ensured that Trust Fund revenues were linked to the cost of operating the air transportation system. Congress recognized at that time that this cost-based financing principle was equitable because:

> "a ticket tax is geared to charge an equitable tax related to the distance traveled and the cost per mile of air operation, since ticket prices for short flights are more per mile than long-line flights and the tax is proportional to the price of the ticket." [4]

Today, ticket prices are based on market competition and have absolutely no correlation to the cost of services. As a result, the largest source of Trust Fund revenue has absolutely no link to the cost of maintaining and upgrading the aviation system. The symmetry on which the Trust Fund was based has evaporated.

A "Fundamental Disconnect Between the Existing Tax Structure and the FAA's Workload"

There is no correlation today between revenue collected and services consumed. Airlines pay for 94 percent of Trust Fund revenues but only account for 69 percent of all flights. The result of this inequity is that airlines, and ultimately their customers, are heavily subsidizing other users of the system. As Secretary of Transportation Peters has very forthrightly said, there is a "fundamental disconnect between the existing tax structure and the FAA's workload…." [5]

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[4] *Report of Committee on Ways and Means*, reprinted in 1970 U.S.C.C.A.N. 3084.

[5] Feb. 14, 2007, letter of Secretary Peters transmitting the proposed Next Generation Air Transportation System Financing Reform Act of 2007 to the Senate at p. 3.

By way of illustration, a Cessna Citation X corporate jet aircraft would contribute an estimated $306 to the Trust Fund when it flies from New York to Los Angeles. An airline's Boeing 757-200 aircraft flying the same route would contribute an estimated $2,660 to the Trust Fund. Both are high-performance aircraft; both fly at the same altitude, in the same airspace; and both place comparable demands on the air traffic control system. Yet, there is an eight-to-one difference in payment for ATC services.

Airline Flight vs. Corporate Jet Flight

Contributions to the Airport and Airway Trust Fund

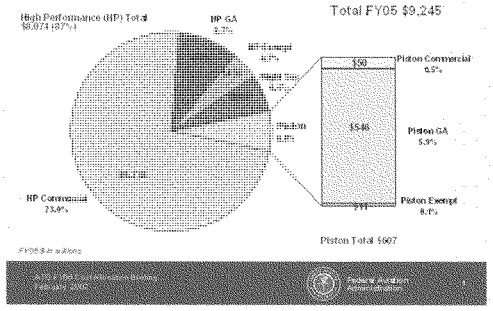
New York – Los Angeles

Commercial Boeing 757	Corporate Jet Cessna Citation X
AATF Contribution: $2,660	**AATF Contribution: $306**

This breathtaking disparity does not tell the whole story. Over time, the foundation of the Trust Fund has badly eroded. Today's funding structure does not assure sufficient future revenues, even for the current ATC system. The worrying trend this decade has been the continuing draw down of the Trust Fund. That, obviously, is unsustainable. In fact, the General Accountability Office (GAO) has pointed out that past trends and future projections indicate that the "revenue collected under the current funding system has fallen and will continue to fall relative to FAA workload and costs…." [6]

ATO – Cost Allocation of FY2005 ATO Appropriation

(Weight, Size and Purpose of Flight Do Not Drive Costs)



[6] GAO, *Aviation Finance - Observations on Potential FAA Funding Options at p. 11* (GAO Report No. 06-973, Sept. 2006).

Allocation Detail of FY2005 ATO Costs ($ in millions)

Based on Proposed Methodology			FY 2004 Taxes Paid	
Commercial	$6.749	73%*	$8.934	94%
Turbine GA	$0.897	10%	$0.300	3%
Piston GA	$0.610	7%	$0.038	0%
Fractionals/135			$0.328	3%
Public Users	$0.435	5%		0%
Flight Service Stations	$0.564	6%		0%
Total	$9.255	100%	$9.579	100%

* Includes Fractionals, Air Taxis, Charters

Moreover, today's funding structure does not assure a stable revenue stream. That is because the average ticket price is lower today than it was at the beginning of this decade or, adjusted for inflation, than it was in 1970 at the outset of the Trust Fund. Revenue stability and, therefore, predictability will be essential to the successful modernization of the ATC system. The Trust Fund as presently constituted simply does not assure the wherewithal to sustain the system in the future.

Again, ATC system service providers elsewhere have confronted this issue and satisfactorily responded to it. They have found this to be a straightforward issue. ATC systems throughout the world have implemented cost-based funding arrangements to ensure an adequate, stable revenue stream to fund their modernization efforts. This has occurred in Australia, Canada, France, Germany, New Zealand and the United Kingdom.

In the United States, several independent commissions and studies have examined how best to meet FAA financing needs. Their common and long-standing conclusion has been that reform is urgently necessary. For example, before the last Trust Fund reauthorization in 1997, Congress established the 21-member National Civil Aviation Review Commission that former Transportation Secretary Norman Mineta chaired. The Mineta Commission unanimously recommended that FAA revenues be more closely linked to the cost of providing services. As it stated:

> "The Commission recommends that the FAA adopt a cost-based revenue stream to support its air traffic system activities including capital investments. At the same time, funding for aviation security, safety, and government use of the air traffic system should be provided by the federal government's general fund." [7]

Four years before that report, the National Commission to Ensure a Strong Competitive Airline Industry, which former Virginia Governor Gerald L. Baliles chaired, concluded that the existing federal budget process, "provides neither a stable, predictable source of revenue nor the ability to leverage that revenue…." [8]

More recently, the Government Accountability Office has said that "[a]viation experts and stakeholders agree that the incomplete implementation of these recommendations and additional factors could limit FAA's ability to fully address long-standing NAS [National Airspace System] modernization problems."[9]

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[7] *National Civil Aviation Review Commission Report* at p. I-2 (1997).
[8] *Change, Challenge and Competition* at p. 8 (1993).
[9] GAO, *National Airspace System –Transformation Will Require Cultural Change, Balanced Funding Priorities and Use of All Available Management Tools* at p. 16 (GAO Report No. 06-154, Oct. 14, 2005).

For well over a decade, independent authorities have told us that the funding of FAA air traffic services must be changed to reflect contemporary reality. The necessary path has been described to us, many times. We need to follow it.

Funding – The Financial Benefits of Returning to Our Roots

A user-pay/cost-based funding arrangement would produce three principal benefits:

- **Lower Costs; Increased Efficiency** – A recent General Accountability Office report noted that the current financing system does not create any incentive to control costs and improve efficiency because use and cost are unrelated. Right now, consumers of FAA ATC services have little or no motivation to rationalize their consumption of those services. User consumption of services and user payment for services are no longer linked. Reestablishing that link will rationalize decision making about use of the system and, in turn, economize the way the government provides services. The result will be more efficient use and provision of FAA services.

- **Revenue Stability** – The Trust Fund's uncommitted balances have fallen by more than 70 percent over the past five years.[10] That is a disturbing development and calls into question the ability of the Fund to support ATC modernization. A return to cost-based financing would generate a stable revenue stream to fund modernization.

- **Equity** – Under the current funding system, two aircraft operators can pay very different amounts even if they use the same services and impose the same costs on the FAA. This is unjustifiable. Charging aircraft operators based on their use of the system would create a more equitable funding system and ensure that all users are paying their fair share.

Funding – The Need for Effective Oversight

The principle of equitable funding is not synonymous with writing a blank check. Any change in the financing of the ATC system should only occur if basic oversight issues are addressed. Some of these are knotty but they can and must be resolved.

Congress' role in policy decisions about funding should not be supplanted. We regard that as a given. Indeed, we look forward to Congress exercising that role.

Stakeholders, however, must have a central role in decisions affecting the funding and deployment of ATC system improvements. Their decision-making role must reflect their contribution to that funding. We recognize the sensitivity of this issue. But we firmly believe that a usage-fee funding arrangement cannot be allowed to become an open spigot. Cost containment will be vital to successful system modernization. Modernization projects must be carefully justified, user vetted and held to budget.

AIRPORT FUNDING

Without question, airports must have sufficient funding to meet increasing passenger and traffic demands. To ensure airports can deliver appropriate services, airlines now pay more than $14 billion annually in airport expenses – through landing fees, rates and charges, passenger facility charges, and the Airport Improvement Program (AIP). These payments are on top of the billions of dollars airlines and their passengers contribute to the Trust Fund each year to fund programs other than the AIP.

Despite these significant contributions, even higher airport charges and related taxes have been proposed. We are told that these higher taxes are necessary to meet "airport needs" but experience tells us that these needs are often more accurately described as "airport wants." We, of course, agree that in many cases these expenses are justifiable but without a process to sort the projects with merit from those that are simply nice to have, we risk significant waste of limited resources. Unfortunately, rather than addressing this problem, the administration's proposal suggests a whopping 67 percent increase in the passenger

[10] GAO, *Aviation Finance - Observations on Potential FAA Funding Options* at p. 1 (GAO Report No. 06-973, Sept. 2006).

facility charge (PFC) to as high as $7.50 per enplanement, from the current $4.50 maximum per enplanement, while diminishing the already minimal level of input and control by any party other than the airport involved. Such a significant jump cannot be objectively justified nor can the reduction in oversight by the airlines or the FAA be explained.

The administration's bill also proposes a tripling of the airline fuel tax to fund the AIP. The airlines' new contribution would generate approximately $1 billion in funding for noncommercial airports, which have no contact whatsoever with the airline industry, are of no consequence to our customers, and for which no rational reason exists to justify such an expense to commercial aviation. While the airlines are committed to paying fairly for the services they consume and the facilities they use, there is no justification for requiring them to subsidize corporate and general aviation. If noncommercial airports need federal funding, the source of that funding must be found elsewhere.

When someone next asks why the airline industry so often finds itself in financial peril, we would respectfully submit that it starts with policy decisions like those underlying the current and proposed AIP. It is past time for change.

A modernized funding structure requires cost-based financing of both the ATC system and airport programs. Absent such a link, commercial airlines and their customers will continue to pay more – much more – than their fair share.

ADMINISTRATION'S PROPOSED FAA REAUTHORIZATION LEGISLATION

The administration's legislative package contains a usage-fee proposal that is a welcome first step in reforming the funding of the FAA. Nonetheless, as noted below, more needs to be done.

The proposed usage fee/tax system is based on the FAA Air Traffic Organization cost allocation study. That study clearly recognized that airlines and their passengers grossly overpay today. It concluded that "high performance commercial" users (i.e., turbine aircraft operated in scheduled service, as on-demand charters or under fractional ownership) generated only 73 percent of system costs, although these same users today contribute 94 percent of the revenue that goes to the Trust Fund. The graph and table on page 13-14 summarize the FAA's cost allocation. This is a very important recognition of the actual costs that users impose on the system.

Unfortunately, one matter that the administration's legislation falls short on is the key issue of airport funding. As previously noted, airlines and their customers finance an enormous amount of airport costs. We therefore are vitally interested in how in the future airports will be funded and how capacity improvement projects will be approved, especially those funded through the PFC program. As we also noted, ATA's members oppose proposals that would increase the PFC to up to $7.50 per enplanement.

The administration's airport-related proposals would not provide airlines a meaningful role in critical decisions about capacity and funding and would virtually eliminate FAA oversight of them. Airlines and airports need to have a close, collaborative relationship in determining what capacity projects are initiated, project scope and cost, ongoing operations and maintenance costs, and how these various costs are paid for. Disappointingly, the administration's legislation does not recognize these necessary principles.

Our reactions to several of the propositions in the administration's proposed legislation are described below.

- **Usage fee Authority (§201)** – We support a cost-based approach to funding FAA services and the creation of associated borrowing authority but more needs to be done to make the administration's proposal conform to such an approach.
    - On the positive side, the administration's proposal moves to correct the unfairness of the current funding system through the introduction of a cost-based funding system. Permissible fee factors are identified, although a formula is not specified and thus remains up to the FAA to establish.

The bonding authority included in the proposal will facilitate the needed modernization of the air traffic control system, although the short repayment period could put substantial upward pressure on usage fees.

- On the negative side, the proposal is silent about how to assure that costs are appropriately contained. This is a very basic issue that needs to be resolved. Furthermore, no judicial review of FAA usage-fee determinations would be permitted. This is a significant shortcoming. In addition, recognizing weight as a permissible factor in determining some usage fees, which the proposal would, is unjustified. Weight is not a legitimate proxy for the costs that an aircraft imposes on the system. The authority to impose fees for operations in terminal airspace for large hub airports ignores the significant costs that corporate aircraft that do not operate at those airports impose in that airspace.

- **Air Transport System Advisory Board (§401)** – The industry supports the creation of a board that can have meaningful decision-making authority about key ATO issues, particularly those involving usage fees and bonding. Unfortunately, the administration's proposal does not give stakeholders a meaningful voice; the Board would merely be advisory and have no real authority. We realize that this is a contentious issue but it must be directly confronted and resolved. If you pay, you must have a real voice in how your money is spent.

- **Passenger Facility Charges (§301)** – Although described as a reform of PFC authority, the administration's proposal could impose an additional $2 billion in taxes on passengers while reducing airlines' voice in and the role of the FAA in the approval of PFC projects. Such changes are unjustified.

- **Airport Improvement Program (§302 et seq.)** – Although the administration's proposal would modernize parts of the AIP and would recognize the greater financial ability of large and medium hub airports to fund airport improvements, the proposal includes $1 billion in subsidies for noncommercial airports, most of which would come from airlines and their passengers. Given that the proposal makes no attempt to apply the "pay for what you use" principle to this program, the more than tripling increase of our jet fuel tax from 4.3 cents to 13.0 cents per gallon would be unacceptable.

- **Airport Privatization Program (§806)** – This proposal would increase to 15 the number of airports that could be included in the privatization program but would eliminate the requirement of carrier approval of such privatizations. We oppose that provision because of the possibility that the elimination of approval authority could result in transactions that financially disadvantage airport users, including airlines.

- **Facilities and Services Realignment and Consolidation Commission – "FAA BRAC" (§409)** – Under this proposal, a BRAC-like process for the realignment and consolidation of FAA facilities and services would be implemented. Effective containment of FAA Air Traffic Organization costs will depend in part on such consolidations. Given the controversy that facility consolidations can create, the administration's proposal is a sensible approach.

- **LaGuardia Airport Operating Authorization Allocations (§503)** – The airline industry has opposed the imposition of new costs at LaGuardia. The preponderant view in the industry is that the operational cap coupled with a reinstatement of the secondary market allowed under the previous buy-sell rule, although perhaps needing some improvement, is sufficient to manage congestion and provide for equitable allocation of access to the airport. The industry opposes any scheme under which the airport operator would be allowed to generate excess revenue and divert that revenue to projects that do nothing to address congestion or expand capacity at the airport.

- **Market-Based Mechanism Pilot Program at Congested Airports (§504)** – We oppose this proposal because the focus should be on improving capacity at high-volume airports rather than saddling passengers and shippers with far costlier service at the airports that they want to use.

- **FAA War-Risk Insurance Program Extension (§§701, 702)** – The industry supports the unchanged extension of both the FAA war-risk insurance program, and the third-party liability cap and punitive damage prohibition. We oppose the administration's proposal to eliminate FAA "first dollar" coverage for such insurance.

We look forward to working with the Committee on these and other issues concerning FAA reauthorization legislation.

CONCLUSION

We need a truly 21st century air traffic control system that will safely, efficiently and equitably meet the growing needs of civil aviation and our national economy. And it needs to be funded the right way so that the revenue that is needed to keep our nation's air commerce vibrant and responsive to consumer needs can be provided fairly and predictably. We cannot permit inertia or parochial considerations to delay achieving that important transformation.

Before the Committee on Transportation and Infrastructure
Subcommittee on Aviation
United States House of Representatives

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FAA's Financing Proposal

Statement of

The Honorable Calvin L. Scovel III
Inspector General
U.S. Department of Transportation

Chairman Costello, Ranking Member Petri, and Members of the Subcommittee:

I appreciate the opportunity to be here today to discuss alternatives for financing the Federal Aviation Administration (FAA). This hearing is both timely and of critical importance given the expiration of the aviation excise taxes supporting FAA's programs at the end of fiscal year (FY) 2007 and potential future increases in FAA's workload and funding requirements.

Last month, FAA released a comprehensive proposal for reforming how it is financed that represents a significant change to the status quo. It calls for, among other things, a shift to user charges for air traffic services, changes to governance through the establishment of a new advisory board, and authority for the FAA to borrow beginning in FY 2013 to finance capital investments.

My testimony today makes the following points:

- There are important reasons to consider alternative financing mechanisms that have been well-documented in previous reports and commissions on reforming FAA. While airspace users pay for the system, the current financing mechanism bears little relationship to the services they actually use and whether they use them at busy or slack times. However, it's important to note that FAA's current financing mechanism could support both FAA's ongoing funding requirements and the potential cost of developing the next generation air traffic control system (NextGen), assuming revenue projections materialize.

- At the request of this Subcommittee, we examined the use of the National Airspace System (NAS) and who contributes to its congestion. Our work shows that general aviation activity accounts for a not insignificant amount of FAA's workload. Therefore, it is appropriate to consider this activity if the allocation of costs among users of the NAS is going to be included as part of any effort to move to a new financing system.

- FAA's cost accounting system can support the user fees envisioned by FAA. FAA's method for allocating costs among user groups, which underlies what each group would pay under FAA's proposal, is reasonable, although it reflects tradeoffs by the FAA. These tradeoffs result in fewer costs being allocated to general aviation and some air carriers than other possible methods.

- FAA's cost recovery proposal does not completely link costs and fees and, therefore, is not fully consistent with FAA's rationale for moving to user fees. However, there is more of a link between costs and fees under FAA's proposal than currently exists.

- How to best finance FAA is a policy call for the Congress. Nevertheless, FAA needs to continue to take steps to control costs regardless of whether it is funded in the future by excise taxes or user fees. In addition, FAA's proposed borrowing authority presents serious risks unless it is accompanied by strong controls. Finally, FAA will be challenged to implement its fee proposal, including the billing system, within the available timeframe.

FAA Faces Significant Near-Term Workload and Funding Issues

The current air traffic control system handles over 700 million passengers per year, a number that is projected to grow to over 1 billion travelers by 2015. This system must also be poised for the introduction of thousands of very light jets[1] over the same timeframe. This influx of new aircraft will strain the Agency's air traffic control systems and its inspection and certification workforces.

FAA plans to address this increased workload, at least in part, through the NextGen. NextGen is expected to shift today's ground-based air traffic control system to an aircraft-based system and to significantly enhance controller productivity through automation. This is a high-risk effort of unprecedented scope and complexity that also involves difficult policy questions as well as billion-dollar investments by FAA (new systems) and airspace users (new avionics).

These potentially significant increases in FAA's workload and cost requirements provide the backdrop against which Congress will need to evaluate alternate proposals for financing FAA.

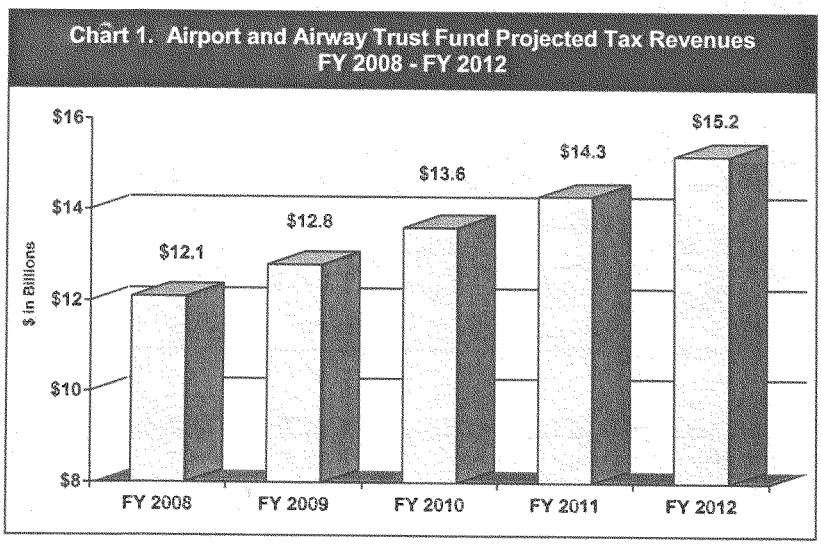
FAA's Current Financing System Could Satisfy Its Future Funding Requirement, but Other Alternatives Merit Consideration

The Airport and Airways Trust Fund Could Support FAA's FYs 2008-2012 Spending

FAA is currently funded from two sources: the Airport and Airway Trust Fund and the General Fund. The Airport and Airway Trust Fund collects revenues from ten aviation-related excise taxes, including taxes on airfares, fuel, and cargo. Almost 68 percent of Trust Fund tax collections come from the 7.5 percent ticket

[1] These are small, "affordable" aircraft that will carry up to six passengers. Priced as low as $1 million per aircraft, very light jet manufacturers anticipate that these aircraft will find a niche among corporate and private owners and as on-demand air taxi services. According to FAA, up to 5,000 very light jets will vie for airspace by 2017.

tax and the segment tax. As shown in Chart 1 below, if the current aviation excise tax system remained in effect, FAA projects that Trust Fund tax revenues would steadily increase from $12.1 billion in FY 2008 to $15.2 billion in FY 2012.



The General Fund has historically been used to pay for portions of FAA's budget, with contributions towards the Agency's overall budget ranging from a low of 0 percent in FY 2000 to a high of 59 percent in FY 1984. Over the past 4 years, the General Fund has contributed approximately 20 percent towards FAA's overall budget.

In FY 2006, approximately 81 percent ($11.2 billion) of FAA's funding was provided from the Airport and Airway Trust Fund; the remaining 19 percent ($2.6 billion) was appropriated from the General Fund. However, with critical modernization and capacity-enhancing projects on the horizon, there are concerns as to whether the current funding structure could support the Agency's financial needs.

To answer this question, we analyzed FAA's Trust Fund revenue projections (based on the current rates) against the Agency's budget projections. In our analysis we made assumptions regarding how FAA's budget would be financed with Trust Fund revenues. First, we assumed that current authorization language that finances FAA's budget would remain in effect. This means that the Trust Fund would contribute the estimated amount of tax and interest revenue earned in

a fiscal year, with the General Fund making up the difference. Second, we assumed that the Trust Fund would earn $400 million annually in interest on its cash balance, a conservative estimate as compared to previous years.[2]

As shown in Table 1 below, the current financing system could meet FAA's budget requirements with a lower General Fund contribution than is currently appropriated. FAA's budget projections include funding for NextGen costs, which FAA estimates will total approximately $4.6 billion over the next 5 years.

Table 1. FAA's Budget and Funding Sources FYs 2008 – 2012 ($ in Millions)

	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
FAA's Budget Projections	$14,077	$15,028	$15,661	$16,186	$16,645
Estimated Trust Fund Tax and Interest Revenue* (% of Budget)	$12,495 (89%)	$13,210 (88%)	$13,957 (89%)	$14,743 (91%)	$15,563 (93%)
General Fund Contribution (% of Budget)	$1,582 (11%)	$1,818 (12%)	$1,704 (11%)	$1,443 (9%)	$1,082 (7%)

* Assumes $400 million in interest revenue.

As the above table shows, FAA's budget projections fund the Airport Improvement Program (AIP) at $2.75 billion in FY 2008, $2.9 billion in FY 2009, and $3.05 billion in FYs 2010 through 2012. This is significantly less than the $3.7 billion AIP was authorized in FY 2007. Consequently, we analyzed whether the current financing system could support the agency's funding requirements if AIP was at or above current authorized levels. Under this scenario, while the General Fund contribution would increase it would make up a lower percentage of FAA's overall funding than the 20 percent the General Fund has contributed over the past 4 years.

Alternative Financing Mechanisms Merit Consideration

Supporters of the current excise taxes argue that the taxes have successfully funded FAA in the past, are easy to collect, are familiar to air travelers and industry, and are difficult to evade. Others argue that the current system is unfair, inequitable, and inflexible. This inflexibility may increase the likelihood that the

[2] The Trust Fund earned $429 million in interest in FY 2005 and $495 million in interest in FY 2006.

current system will be unable to generate sufficient revenues to meet FAA's future long-term funding needs.

FAA further argues that because the excise taxes are not related to costs, they do not provide incentives to its customers to use FAA services efficiently or to FAA to operate efficiently. For example, under the current system, there is no incentive for air carriers to transport the same number of passengers on a few larger planes than on many smaller planes from and to the same destinations even though the few larger planes would impose less costs on FAA. Over the last 20 years a number of blue-ribbon panels have also urged that FAA be funded by user fees.[3] Concerns such as these led FAA to propose a new system to finance its operations, a system built upon cost-based user fees.

FAA's Alternative Would Replace Many Aviation Excise Taxes With User Fees and Change Governance Structure

Financing. FAA proposes to fundamentally alter how users of its air traffic control services are charged for those services. Beginning in FY 2009, operators of turbine commercial flights would pay user fees instead of the current excise taxes to cover their share of the Air Traffic Organization (ATO) budget. Separate fees would be charged for oceanic, en route, and terminal services. The terminal user fee would differ for large and medium hub airports and could vary based on the weight of the aircraft, time of day, or day of the week for congested airports.

General aviation and all operators of piston powered flights would pay primarily their share of the ATO budget through an increased gas tax. However, they would also pay the terminal fee if they landed or took off from a large-hub airport, although few actually use these airports. The General Fund would pay for public use of the airspace, including military use, and for other costs "in the public interest," such as Flight Service Stations (FSS) and airports with low passenger boarding levels.

In addition, both commercial operators and general aviation would pay the same gas tax to fund AIP and Essential Air Service (EAS). Neither commercial operators nor general aviation would pay for most FAA safety functions, which would be funded overwhelmingly by appropriations from the General Fund. However, user fees would be charged for 25 specific services in the areas of certification and registration, such as, aircraft registration and issuing an airman's certificate or special aircraft registration number.

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[3] The blue-ribbon commissions include the Transportation Research Board (1991), the Baliles Commission (1993), the National Performance Review (1993), and the Mineta Commission (1997).

Finally, FAA would be authorized to borrow, beginning in FY 2013, up to $5 billion from the U.S. Treasury to finance capital investments. All borrowing would have to be repaid by the end of FY 2017.

Governance. FAA also proposes to fundamentally alter the current decision-making process for setting fee levels. A new Air Transportation System Advisory Board (Board) would provide NAS users a significant role in deciding how the user fees would be set and how FAA funds are spent. The 13-member Board would be comprised of the FAA Administrator, a representative of the Department of Defense, 3 representatives of the public interest, and 8 representatives of specific stakeholder groups. Among other functions, the Board would make recommendations regarding the development and adoption of specific user fees. The FAA Administrator retains decision-making authority and can accept or reject any of its recommendations. The Administrator's decisions can be appealed only to the Secretary. Congress would have no direct role in determining how user fees would be structured or their levels.

Specifically, the Board, either on its own initiative or in response to a proposal from the FAA Administrator, could make recommendations regarding the type and level of user fees to be collected. The Administrator then would either establish the fees as recommended by the Board or modify them and publish an explanation for the modification in the Federal Register.

As with the current excise taxes, FAA would not be able to spend the fees until they are appropriated by Congress. Unlike the current taxes, the fees would offset FAA's appropriations. As such, any increase in fees should translate into higher appropriations for FAA programs because the increased fees and appropriations would offset, resulting in no additional amount counting against the overall limits on appropriations.

Underlying this new financing system is a cost allocation methodology, which assigns costs to different user groups. The level of fees or fuel tax would be based on the costs assigned to the user group by this methodology. A threshold question prior to undertaking such a cost allocation is whether all user groups use FAA air traffic control services in a material manner and, therefore, impact FAA's costs.

Commercial Operators, General Aviation, and Public Users All Make Significant Use of FAA's Air Traffic Services

At the request of this Subcommittee, we examined the question of which groups use FAA services. We examined use of tower, terminal, and en route services both

by type of user (air carrier, non-carrier, and public)[4] and type of aircraft (jet, turboprop, and piston/rotor) at more than 600 air traffic control facilities. We also examined how each group contributed to congestion, as measured by the demand for air traffic services, at several of the most heavily used towers, terminal control areas, and en route centers.

Use of Tower Services. We found that in FY 2005, non-carrier operations[5] of piston and rotor aircraft were the largest users of tower services (40 percent), and accounted for 25 percent more activity than air carrier jets (30 percent) (see Table 2). Commercial carriers dominate activity at the largest one-third of towers, while non-carriers dominate at the remaining two-thirds. However, almost one-third of the 100 largest towers, such as Teterboro and Van Nuys, serve non-carriers almost exclusively.

Table 2. Tower Services Usage
Percent of Tower Operations by User Category and Aircraft Type

User	Jet	Turboprop	Piston & Rotor	User Total
Air Carrier	30%	4%	1%	35%
Non-Carrier (General Aviation)	12% (9%)	7% (5%)	40% (38%)	59% (51%)
Public Use	4%	1%	1%	6%
Aircraft Total	**46%**	**13%**	**41%**	**100%**

Use of Terminal Area Control Services and En Route Services. Air carrier jets were the largest users of terminal area control services (38 percent), as measured by instrument operations, although non-carrier piston and rotor aircraft were second at 29 percent (see Table 3). Air carrier jets were by far the largest users of en route control services (75 percent) as measured by mileage, with non-carrier piston and rotor aircraft accounting for only 4 percent of activity. Public use activity accounted for 6 percent of tower services and 7 percent of terminal approach control services.

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[4] Air carriers are certificated, scheduled, and charter airlines, usually operating jet and turboprop aircraft with greater than 30 seats. These users generally fly fixed routes, serve large metropolitan areas, and have specific time-of-day requirements. Non-carriers are general aviation and fractional ownership aircraft and on-demand taxi operators operating aircraft with less than 30 seats – usually much less. Non-carriers have fewer time-of-day requirements and rarely use large hub airports.

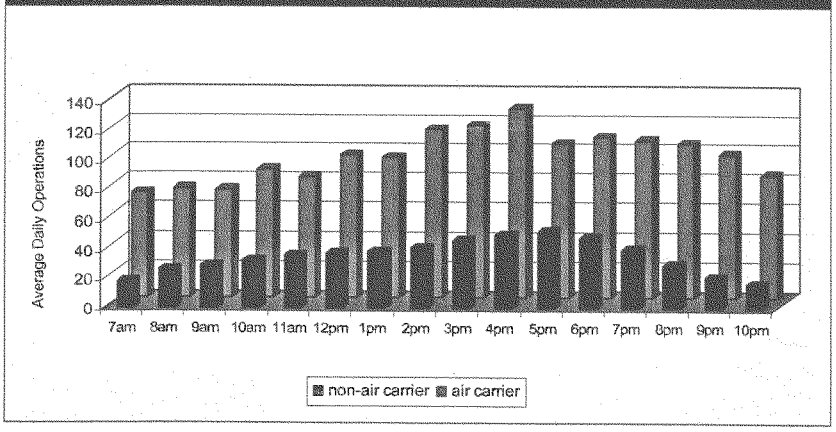
[5] An operation represents an aircraft handled by an air traffic control facility – in the case of a tower, a landing or takeoff; and in the case of a terminal area radar, an instrument approach or departure or other control within the terminal airspace.

Table 3. Terminal Area Control Services Usage
Percent of Approach Control Operations by User Category and Aircraft Type

User	Jet	Turboprop	Piston & Rotor	User Total
Air Carrier	38%	5%	1%	44%
Non-Carrier (General Aviation)	13% (7%)	7% (3%)	29% (22%)	49% (33%)
Public Use	4%	2%	1%	7%
Aircraft Total	**55%**	**14%**	**31%**	**100%**

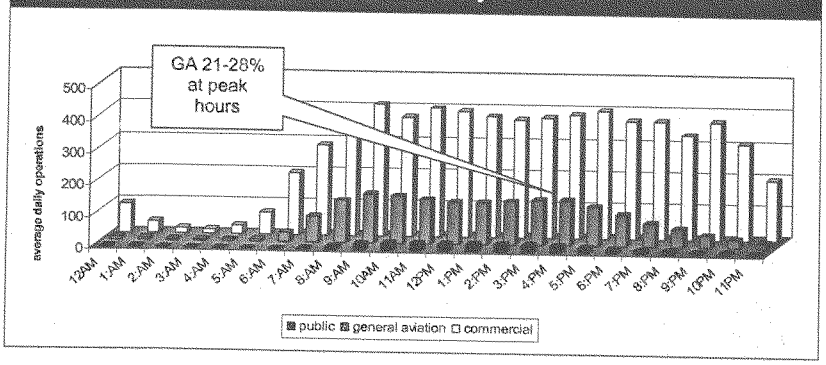
Congestion. We found that both air carriers and non-carriers contribute to congested airspace. Air carrier operations accounted for the largest segment of demand at the heavily used terminal area control facilities and en route centers we examined and exhibited a pattern of peak and off-peak demand. However, non-carrier (including general aviation) demand for terminal and en route services at these heavily used facilities was not insignificant and showed a similar pattern of peak and off-peak demand. For example, Chart 2 below depicts this usage pattern for the New York terminal control area. Non-carriers' use of terminal area control services was for instrument approach services to outlying airports -- their use of large-hub airports was minimal.

Chart 2. New York Terminal Control Area
Instrument Approach Operations by Hour of Day



As an additional example, Chart 3 below depicts the usage pattern for non-carrier use of en route services at the Atlanta en route center. In July 2005, non-carrier usage accounted for from 21 percent to 28 percent of demand during peak hours. Although not depicted in the chart, similarly, non-carrier usage accounted for from 17 percent to 23 percent of demand at the Cleveland center.

Chart 3. En Route Center Operations By Hour of Day Atlanta Center July 2005



Based on this analysis, we concluded that commercial operators', general aviation's, and public users' use of FAA's air traffic services is sufficient to warrant separate cost allocation categories. None of these groups had activity levels low enough to support a conclusion that they did not materially contribute to FAA's costs and should not be included in a cost allocation study.

FAA's Cost Allocation Methodology Is Reasonable, But Its Cost Recovery Plan Does Not Completely Link Costs and Fees

FAA's User Fees Proposal has Three Components: Cost Accounting, Cost Allocation, and Cost Recovery

Cost accounting is the process by which FAA's costs are assigned to a specific facility or activity, for example, an air traffic control tower. Cost allocation uses information from the cost accounting system to assign costs to groups of users of FAA's air traffic control services. Cost recovery addresses how the costs assigned to each user group will be collected.

We believe the cost accounting system can support user fees as envisioned by FAA, and the cost allocation methodology used by FAA is generally sound. However, the cost recovery methodology is not fully consistent with FAA's overriding goal of linking costs and fees to promote more efficient use of FAA services.

FAA's Cost Accounting System Can Support User Fees

The FAA's cost accounting system is sufficient to support user fees as FAA currently envisions them. Since 1996, FAA has spent over $66 million to complete the implementation of its cost accounting system. We have issued four assessments of FAA's system during this time period. Should the structure of these fees change, then FAA would need to consider the capabilities of the cost accounting system to support the new structure.

In FY 2006, FAA received a qualified opinion on its financial statements. We believe this would have no material impact on the integrity of user fee calculations because the amounts in question would not be used in those calculations. The qualified opinion was due to concerns over the Construction in Progress balances, as recorded in the financial accounting system. However, to calculate its user fees, FAA plans to replace acquisition-related costs, including asset depreciation expenses, with budgeted costs, which is how these funds are appropriated to FAA. Therefore, the amounts in question in the FY 2006 financial statements would not factor into FAA's calculation of user fees.

FAA's Cost Allocation Methodology

Cost allocation is a critical element of the FAA financing debate because it is the basis for determining the amounts that would be collected from each user group. Adding to the intensity of the debate regarding FAA's cost allocation methodology are the numerous policy decisions and judgment calls inherent in the process.

FAA's goal was to allocate costs in a manner that was simple, transparent, and repeatable. To accomplish this, it employed a three-step process. First, it assigned the costs from its cost accounting system for approximately 600 service delivery points to six service categories.[6] Each service category shares similar cost and operating characteristics.

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[6] These six categories were oceanic en route services, domestic en route services, large hub airports, middle activity airports, low activity airports, and flight service stations.

Second, FAA assigned costs within each service category[7] to either high-performance aircraft operators or piston aircraft operators. The high performance group includes all turbine aircraft, most of which are jets, that tend to require more complex air traffic control equipment and procedures because of the conditions under which they fly and the time sensitivity of their operations. The piston group includes gas-powered piston aircraft and helicopters, which generally fly slower and at lower altitudes and require less complex air traffic control services.

To accomplish this second step, FAA examined three types of costs, called tiers, and assigned the costs in each tier to the high-performance or piston user group based on separate criteria. The three tiers FAA used are:

- Tier 1 costs are those that could be assigned to one user group because they principally benefit a single user group and use by the other users does not result in a material incremental cost.

- Tier 2 costs are shared costs assignable to more than one user with a fixed and variable component. The fixed component was allocated entirely to the principal user (usually the high-performance users) and the variable component was assigned based on usage.

- Tier 3 costs are overhead and other costs that could not be assigned to a specific user group or allocated based on activity. These costs were allocated between high-performance and piston based on their share of the cost assigned to them under Tiers 1 and 2.

Third, FAA further subdivided costs within each user group by purpose of the operation: commercial, general aviation, and public use. This subdivision was based solely on usage — great circle miles[8] for oceanic and domestic en route services and operations for terminal services. The subdivision resulted in cost groupings for six user categories: high-performance commercial, high-performance general aviation, high-performance public, piston commercial, piston general aviation, and piston public.

Totaling these cost categories by purpose of the operation resulted in an allocation of 73.5 percent of FAA's FY 2005 costs to commercial users, 15.6 percent to general aviation, and 10.9 percent to public users.

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[7] FAA assigned all FSS costs to the public and, therefore, did not need to assign FSS costs based on aircraft type.

[8] The minimum distance between any two points on the globe.

FAA's Cost Allocation Results Reflect Two Key Decisions

FAA's cost allocation was driven by the answers to two key questions:

1. Should FAA have considered user's price sensitivity in its cost allocation?

2. What is the appropriate view of the NAS?

Price Sensitivity. Some users believe FAA should have used Ramsey pricing in its cost allocation to take into account user's price sensitivity for ATC services so that no one would stop flying as a result of those services costing too much (often referred to as being "priced out of the system"). Ramsey pricing is a method of allocating costs to achieve the greatest economic benefits for, in this case, FAA and its users. FAA used it in its 1997 cost allocation study[9] methodology and it has been frequently raised in the context of the current debate.

I would like to make three points about Ramsey pricing. First, Ramsey pricing is not designed to minimize the number of users priced out of the system, it is designed to maximize economic benefits.[10] Therefore, it is not necessarily true that had FAA used Ramsey pricing, fewer users would be priced out of the system.

Second, FAA does not have the data needed to properly use Ramsey pricing to allocate costs, that is, estimates of the sensitivity of each user group's demand to changes in price. We are unaware of any international source for the data either. In its 1997 study, FAA simply assumed values for these price sensitivities, it did not base them on empirical data.

Third, using Ramsey pricing may not shift costs among user groups much when compared with FAA's allocations. For example, Ramsey pricing could have an offsetting impact on different segments of the general aviation community. The price sensitivity of piston general aviation operators is likely to be high because the operators derive no economic benefit from their flights. Conversely, the price sensitivity of jet and turbo prop general aviation operators, which is used largely for business purposes, is likely to be lower because operators are already paying a premium for the service.

Different Views of the NAS. Air carriers view the NAS in terms of how to optimize the use of a scarce resource. As a result, in their view, each aircraft or

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[9] A Cost Allocation Study of FAA's FY 1995 Costs, March 19, 1997, prepared by GRA, Inc. for FAA Office of Aviation Policy and Plans.

[10] Some incorrectly use Ramsey pricing and ability or willingness to pay interchangeably. This leads to the mistaken belief that Ramsey pricing will tend to price fewer users out of the system than other allocation methodologies.

blip on the radar screen handled by a controller should be treated the same from a cost allocation standpoint. The general aviation community views the NAS as being built for the air carriers. As a result, in their view, they should not be charged for equipment, services, and system capacity needed to meet the needs of the air carriers.

The air carriers' view would lead to certain costs being allocated in proportion to use of the NAS while general aviation's view would lead to those costs being allocated to the user group for whom a facility was built or service instituted. FAA allocated costs consistent with the view advocated by the general aviation community.[11]

For example, FAA assigned all the costs of terminal area control (TRACON) services to the primary large hub airport within the terminal area based on their determination that the TRACON would not have been established if it were not for the large hub airport. This resulted in approximately $371 million in costs[12] being allocated to the users of the large-hub airport instead of to aircraft served by the TRACON but landing at a surrounding airport, or only transiting the terminal area airspace.

This had two effects. First, TRACON costs for high-activity, predominately general aviation airports, such as Teterboro, Phoenix Deer Valley, and Ft. Lauderdale Executive were allocated to air carrier users of the nearby large-hub airports -- LaGuardia, Phoenix Sky Harbor, and Ft. Lauderdale. Second, TRACON costs for flights at medium sized hubs were allocated to those using large hubs (Table 4). This may create a competitive advantage for medium-hub over large-hub airports due to their lower terminal fees.

[11] Specifically, if FAA determined that a facility was required to meet the needs of high-performance aircraft and the costs of the facility did not vary much because of its use by operators of other aircraft, then the entire costs of the facility was assigned to the operators of high-performance aircraft.

[12] Estimate based on FY 2006 data.

Table 4. Consequence of Allocating TRACON Costs Only to Large HUB Users		
Airline Flights Using These Airports	**Obtain Instrument Services From These TRACONS**	**The Cost of Which is Borne By the Users of These Airports**
Medium Activity Airport	TRACON/Terminal Area	Large Hub Airport(s)
Burbank	Southern California	Los Angeles/San Diego
Ontario	Southern California	Los Angeles/San Diego
Sarasota	Tampa	Tampa International
San Jose	Northern California	San Francisco
Santa Ana	Southern California	Los Angeles/San Diego
Sacramento	Northern California	San Francisco
Islip	New York	Kennedy/LaGuardia/Newark
Oakland	Northern California	San Francisco
Long Beach	Southern California	Los Angeles/San Diego
Houston Hobby	Houston	Houston Bush
Dallas Love Field	Fort Worth	Dallas/Ft. Worth

FAA's Cost Allocation Methodology Is Reasonable. FAA allocated costs in a manner consistent with its goals of simplicity, transparency, and repeatability. In theory, FAA could have chosen a goal of maximizing economic benefits by using Ramsey pricing, but could not have done so in practice. Therefore, we concluded that FAA's cost allocation methodology is reasonable.

We do not believe FAA's methodology would have been improved, as some have argued, by using aircraft weight as a proxy for Ramsey pricing. Aircraft weight is only a crude proxy for willingness to pay, which is itself a proxy for Ramsey pricing. The use of proxies or approximations for Ramsey pricing is problematic because inaccurate estimates of price sensitivities in Ramsey pricing can produce a worse outcome, from an economic perspective, than an accounting based cost allocation method.

The air carrier and general aviation views of the NAS serve different, but valid goals. Neither goal is right or wrong. However, by adopting the general aviation position, FAA's methodology significantly reduced the costs that would have otherwise been attributed to general aviation users.

FAA's Cost Recovery Proposal Does Not Completely Link Costs and Fees, Although That Linkage is Stronger Than Under the Current System

FAA's cost recovery proposal does not completely link the costs users impose upon the system and the charges paid by those users. Linking costs and fees is seen as a way to provide users with an incentive to use FAA service more

efficiently and for the FAA to operate more efficiently. This linkage has been one of FAA's primary rationales for moving to a cost-based user fee system. While this linkage is less than direct, it is stronger than the linkage that currently exists between costs and fees.

The weakening of this linkage results from two FAA decisions: (1) to permit weight to be an element in terminal, and perhaps, en route fees and (2) not to recover all the costs allocated to general aviation from those users. First, FAA's proposal explicitly permits weight to be a factor in setting the terminal user fees.[13] Weight could be a factor in setting en route fees because these fees would be based on "any other method that is consistent with the treaties and international agreements to which the United States is a party."

Weight is used internationally at this stage of the process as a proxy for a user's value of the service or willingness to pay for it. According to the International Civil Aviation Organization (ICAO), "...aircraft weight is considered to be a valid charging parameter for representing the value of service to users ...It may be assumed that the value of the service generally increases as aircraft payload increases..." As such, it attempts to introduce an aspect of fairness into the charges.

Second, FAA chose not to recover from general aviation operators either the costs of towers at airports boarding less than 100,000 passengers or flight service stations. Instead, it decided to recover those costs from the public through appropriations from the General Fund.

FAA's rationale for treating the costs of low-enplanement towers in this manner was to preserve the public's access to the Nation's transportation system through these low-enplanement airports. As a result, $650 million in costs[14] for these towers would be recovered from the general fund instead of the users of these facilities, that is, general aviation. However, these airports provide little access to the NAS and therefore, recovering these costs from the taxpayer is not in line with FAA's rationale. Of the 27 million operations at the nearly 300 airports for which the costs are at issue, only 2.5 percent were for air carrier flights in 2005.

FAA also chose to recover the $564 million in costs for FSS from the public, even though they almost exclusively serve general aviation aircraft. FAA's rationale was that it did not want to discourage the general aviation community from accessing the safety services provided by FSS. However, general aviation would

[13] FAA has told us that it expects weight would be used in setting these fees. However, since the Board would propose a fee structure for the FAA Administrator's approval, FAA can not say with absolute certainty at this time the fee would ultimately be structured.

[14] Estimate based on FY 2005 data.

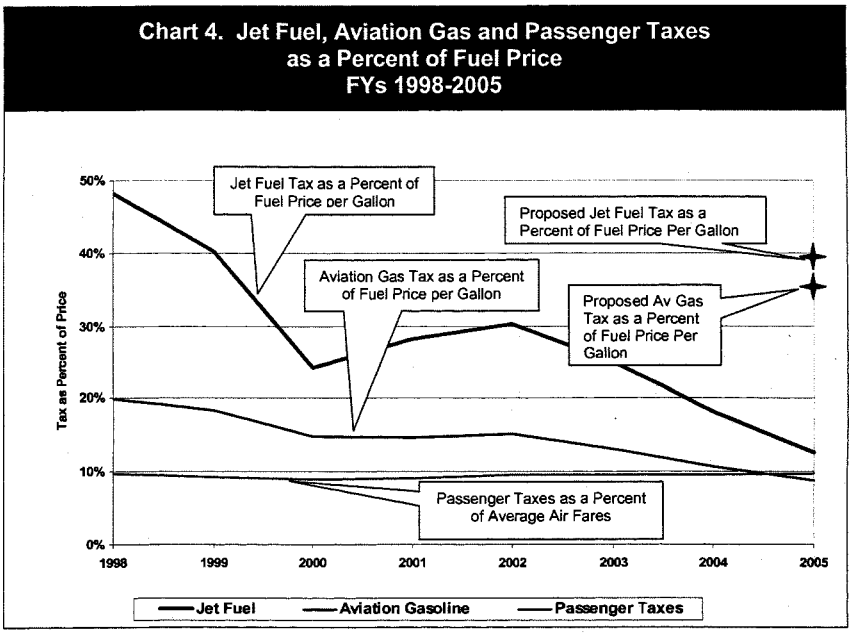
pay a flat gas tax to cover the costs of all services consumed by the general aviation community at large. Individual pilots would not pay a transaction based fee specifically for using FSS services. Any possible disincentive for using FSS services by having those costs included in the gas tax base would be minimal at best.

FAA's Proposal Will Reduce Air Carriers' and Increase General Aviation's Costs

Under FAA's proposal, in FY 2009, air carriers would contribute $10.1 billion in user fees and taxes, or 81 percent of the total fees and taxes collected, compared to the $11.8 billion, or 92 percent, they would contribute under the current excise tax system. Within this category, regional airlines, foreign airlines, and commercial freight carriers would contribute more in fees than under the current system. This is because the current system collects more revenue from larger rather than smaller aircraft, since it is based primarily on the number of passengers per aircraft (the ticket tax and segment fee).

General aviation's contribution would increase by 334 percent under FAA's proposal, from $414 million under the current excise taxes to $1,382 million. On a percentage basis, this is a dramatic increase, although, on an out-of-pocket or historical basis, the increase is less dramatic. For a general aviation piston aircraft that does not use an airport with user fees, the proposed 70 cents per gallon fuel tax would add $8.11 in out-of-pocket costs to the per hour flight cost. Similarly, a Learjet 35 would pay an additional $151.11 per hour, compared to a direct operating cost base of over $1,700 per hour.

On an historical basis, the fuel tax as a proportion of the cost of a gallon of gas dropped significantly since 1998 because the tax rate remained unchanged while the price of a gallon of gas increased (see Chart 4 below). FAA's proposed jet fuel tax rate would be significantly below the 1998 rate, when viewed in terms of the tax rate as a proportion of the cost of a gallon of gas, whereas the aviation gas tax rate would be higher.



The 70 cents per gallon gas tax in the FAA's proposal reflects the proposed $2.9 billion funding level for the AIP and $50 million funding level for the Essential Air Service (EAS) program included in the FY 2008 President's budget. If Congress were to increase AIP and EAS to an historical level of $3.9 billion, the FAA's proposed fuel tax would need to increase by 6.6 cents per gallon, thereby raising the total gas tax paid by general aviation from 70 cents to 76.6 cents per gallon.

Key Issues that Need Greater Attention

How to best finance FAA is a policy call for The Congress. Regardless of whether FAA continues to be funded through the current excise taxes or, in part, by user fees, it needs to do all it can to control costs. As we testified in February before this Subcommittee, a clear understanding of Agency requirements is essential, including how many controllers and safety inspectors it needs. Also, FAA needs to refine its cost estimates for NextGen and develop a strategy for how this extraordinarily complex effort will be managed and executed. Any business seeking to borrow $5 billion for capital expenditures would take these steps.

Getting Reliable Cost Estimates for NextGen and Developing Effective Transition strategies.

A major thrust of FAA's proposal focuses on ways to finance NextGen initiatives. FAA's most recent estimates suggest that the Agency will require $15.4 billion for capital projects from FY 2008 through FY 2012. This includes $4.6 billion for NextGen initiatives.[15]

As we noted in a recent report,[16] the transition to NextGen is an extraordinarily complex effort involving billion dollar investments from both the government (new automation and communication systems) and aviation industry (new avionics). The Joint Planning and Development Office's most recent progress report estimates the cost for airspace users to equip with new avionics to be in the $14 billion to $20 billion range over the long haul. While financing is a front and center issue, the overall execution and management of this effort is also important. We note that the bulk of NextGen funds from FY 2009 through FY 2012 will be allocated to developmental efforts, including demonstration projects.

Our work on a wide range of major acquisitions underscores the importance of understanding risks and getting a firm grasp of technical requirements. FAA needs to continue to refine costs for NextGen—for both the government and airspace users—and determine what reasonably can be expected over the next several years with the infusion of additional funds. Further, FAA needs to articulate a strategy for how it will mitigate past problems that led to massive cost growth, schedule slips, and performance problems with major acquisitions and successfully deliver new capabilities.

Borrowing Authority Poses Serious Risks

Borrowing authority provides a way to guarantee sufficient funding for appropriate long-term investments. It would allow project managers to make large investments based on predictable, stable levels of funding. Ideally, this would lead to capital expenditure decisions based on user needs and a rational cost-benefit tradeoff. In addition, the transition to borrowing produces a one-time period of reduced revenue needs — that is, lower taxes or user fees. From the airlines' standpoint, this transition produces a window of cost savings.

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[15] This includes $4.3 billion in capital funds and additional $300 million for Research, Engineering, and Development efforts.

[16] OIG Report Number AV-2007-031, "Joint Planning and Development Office: Actions Needed to Reduce Risks With the Next Generation Air Transportation System," February 12, 2007.

However, there is a significant risk associated with granting borrowing authority. In the absence of meaningful reform at FAA, the one-time influx of cash may simply allow inefficient investments to continue. In view of this, borrowing authority could saddle future users of the ATC system with a significant debt without seeing any real benefits. Additionally, it would require legislative changes and consideration of budgetary scoring issues and of the impact on the Federal deficit.

If any form of borrowing authority is granted, it is critical that: (1) there is a clear understanding of what investment the FAA would be borrowing money for (that is, long-term investments in order to meet future demand), (2) the borrowing is not simply a short-sighted vehicle to put off increased fees or taxes in the near-term, and (3) accountability and discipline is established to ensure cost control and efficient on-schedule implementation of capital investments.

Finally, under FAA's proposal, the authority to borrow would begin in 2013 with all monies to be repaid by 2017. With a maturity of only 5 years, FAA would be funding long-term investments with short-term borrowing, resulting in the need to repay the debt before the fruits of the investment could be realized. In addition, FAA's funding requirements 5 years from now are difficult to estimate, and in the case of NextGen, poorly defined. There is no clear evidence at this point that FAA needs an additional $5 billion for modernization and infrastructure projects in 2013.

Implementing FAA's Proposed System Would Be a Challenge

FAA's proposal provides 1 year for the Board to be appointed and reach agreement on a fee structure and fee levels, and for FAA to implement a billing system based on that fee structure. This timetable is ambitious, even if FAA employs the option of contracting the billing process with an outside vendor.

In sum, FAA is at a critical juncture with regard to how it is financed. Decisions regarding alternative funding mechanisms should be made with an eye toward FAA's projected workload and funding requirements. Excise taxes are one funding mechanism that could provide sufficient resources to support FAA's needs, but falls short in other regards. User fees is another alternative that is not without controversy — particularly, regarding how costs are allocated among users. FAA cost allocation methodology is generally sound, but several choices made by FAA distribute costs incurred by the general aviation community to air carriers or taxpayers.

Mr. Chairman, that concludes my statement. I would be happy to answer any questions you or other members of the Subcommittee may have.

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HELICOPTER ASSOCIATION INTERNATIONAL

TESTIMONY ON
FEDERAL AVIATION ADMINISTRATION
FINANCING PROPOSAL

COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE
SUBCOMMITTEE ON AVIATION
UNITED STATES HOUSE OF REPRESENTATIVES

MARCH 21, 2007

Matthew Zuccaro
President

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HELICOPTER ASSOCIATION INTERNATIONAL
TESTIMONY ON
FEDERAL AVIATION ADMINISTRATION FINANCING PROPOSAL

HOUSE TRANSPORTATION AND INFRASTRUCTURE COMMITTEE
SUBCOMMITTEE ON AVIATION
UNITED STATES HOUSE OF REPRESENTATIVES

MARCH 21, 2007

Good morning Mr. Chairman, and Members of the House Aviation Subcommittee. My name is Matt Zuccaro and I am the President of the Helicopter Association International.

I am honored to appear before you today and sincerely appreciate the opportunity to address this most important topic. I respectfully request that you accept my full written testimony into the official record.

HAI is a not-for-profit, professional trade association of over 2,600 members, inclusive of 1,400 companies and organizations. Member companies include helicopter and heliport operators, manufacturers, and industry support organizations. Unlike many other trade associations, operations conducted by HAI members are not limited to one type of specific flying or purpose. HAI members operate helicopters across a wide spectrum of uses, such as on demand charter, utility services, corporate support, public service, law enforcement, emergency services, agricultural, as well as private use.

It is my sincere belief that the financing program, as proposed by the administration with regard to future funding of the FAA, will have, as a major byproduct, an extremely detrimental economic impact on our members, with a resulting constraint and / or elimination of many helicopter operations such as those I have just noted.

In simple terms we have a situation where the current funding program for the FAA has a historical profile of being fair, adequate and equitable. and can, in fact, meet the future needs of the FAA, both in terms of operational, as well as developmental with regard to the NextGen system, which HAI actively participates in and supports.

The fact that the current funding system would be adequate to finance the Next Gen initiative has been acknowledged and/or supported by numerous agencies. When queried as to whether the existing funding system could do this, the FAA Administrator responded that is was possible.

The Inspector General at the Department of Transportation indicated that as long as Congress continues to provide a General Fund contribution to the FAA, the current funding system can pay for Next Gen modernization efforts.

The General Accounting Office indicated that the new proposed funding methodology could not pay for NextGen without the FAA's ability to borrow additional funds.

All segments of the aviation community appear to be unanimous in their strong opposition to the Administration's funding proposal, save one, the scheduled airlines. Should it be any surprise, since they would reap the most financial benefit from this proposal?

It is hard to conceive how one could support a program that significantly reduces the costs, to the very segment of the aviation community, namely the airlines, that place the highest demands on the system, while dramatically increasing the costs, to other segments, such as the helicopter community, whose utilization of the system is incidental, with little or no impact. All of this is being done under the stated need to fund FAA activities, along with NextGen, whose very makeup, technology, benefits, and costs are not yet known. The icing on the cake is the fact that the actual revenue to the FAA, under the proposed funding program, will be reduced by hundreds of millions of dollars, below the level of revenue provided by the current funding system.

Consider this, currently HAI members seeking initial certification as commercial operators, or similar certification services, are being advised by their local FAA offices that they can expect to wait 18 months to 2 years for an initial appointment with an FAA representative. If this is the level of service under the current funding program, one can only imagine what it would be with the FAA reducing it's revenue by several 100 million dollars, under it's proposed funding program.

It is important to note that the majority of HAI members are small businessmen and women, who operate in excess of 5,100 helicopters and fly more than 2.6 million hours per year. The vast majority of these operations are conducted at heliports, private facilities and remote locations, without utilizing the services of FAA Air Traffic Control, or the need to operate to and from airports.

In fact the very nature and capabilities of the helicopter, and the prime benefit of helicopter flight, is the capability to provide direct point to point transportation, eliminating the need to operate to and from airports. This is further enhanced by such helicopter industry initiatives as privately funded, point in space, off airport, instrument approaches.

Historically the helicopter industry has had to finance its own infrastructure, without Federal funding or support, inclusive of off airport operation and maintenance bases, heliports, communications networks, instrument approach procedures, flight following and other supporting services. This is due to the fact that the missions performed, operational altitudes, and locations of operations are outside the reach of the normal FAA ATC service area and airport infrastructure.

Some examples of this are offshore operations in the Gulf of Mexico, in support of oil exploration and production, where helicopter operators have spent untold millions of dollars providing their own infrastructure, since they cannot talk to, or be seen by FAA Air Traffic Control. Similar situations can be found in hospital based EMS helicopters, that operate in remote rural areas, where they accomplish their life saving missions. Utility helicopters which provide services on behalf of the greater good, such as firefighting, aerial application, logging, power line installation and maintenance, and geological seismic services, and corporate operators serving the off airport needs of headquarters, training, production and logistical facilities, all tend to operate outside the FAA infrastructure
It should be obvious that the helicopter community places the least demand on the Air Traffic Control and airport system. In fact the helicopter community is actually assisting the FAA in solving the

problems of airport and airspace congestion, and lack of capacity, by removing from the system those passengers and missions, that would otherwise be flown in airplanes, and diverting them to off airport, non ATC environments.

With the introduction of advanced helicopter technology, and such vehicles as the Civil Tiltrotor, vertical flight vehicles will be able to provide off airport, city center to city center transportation, thereby creating new capacity at currently congested airports.

HAI and its members are supportive of the NextGen initiative, and believe the accompanying technology, such as ADS-B can provide our segment of the industry, new capabilities accompanied by an enhanced level of safety in the off airport operating environment. I will take a moment to thank the FAA Administrator for her support and leadership in this area, but at the same time must respectfully disagree with her regarding the proposed funding methodology.

When requested to support such initiatives, the helicopter community has already stepped up the plate. This can be seen by our recent partnership with the FAA in the form of a Memorandum of Agreement. This partnership will facilitate the installation of ADS-B technology, in conjunction with enhanced weather reporting and communications capabilities in the Gulf of Mexico,. As part of our commitment to assist the FAA in the first phase of implementing ADS-B into the national airspace system, HAI members have agreed to provide in kind services, valued in excess of 100 million dollars over the life of the project. These in kind services include no cost helicopter transport for FAA staff and related project personnel, to the offshore platforms where the FAA ADS-B equipment will be installed. No cost space for the equipment upon those platforms, and our commitment to equip the helicopters with the necessary avionics.

It is interesting to point out that although the helicopter industry is the only industry segment partnered with the FAA in this initiative, and providing in kind services, other segments, such as the airlines, will also reap the benefits of the new ADS-B system in the Gulf of Mexico once installed.

HAI was recently the only international trade association to sign the new Memorandum of Agreement between industry and FAA, relating to the ADS-B initiative in the state of Alaska.

With the above in mind, it would seem appropriate that the helicopter community should be the one segment of the aviation community that should have the least economic burden placed on it in terms of supporting FAA funding and development of the NextGen system.

I would be remiss if I did not acknowledge our sincere appreciation and thanks to the men and women of the FAA and Air Traffic Control System who provide us valuable assistance and a safe operating environment in which we conduct our day to day operations. It is indeed not the individuals of these agencies that are the problem, it is the proposed funding system.

With the understanding that the current funding system of the FAA is working, let us not try to replace something that has been tested and proven, with something that has no logic, is widely opposed, and will most likely just increase costs, with an unknown result in terms of efficiency, fairness and productivity.

HAI and it's members stand ready to work with this committee, the FAA, and other industry stakeholders to create a funding system that will provide an appropriate, safe, efficient operating environment for all segments of the aviation community.

Thank you for your time, I will be more than happy to answer any questions you may have.

HEARING ON A REVIEW OF FEDERAL AVIATION ADMINISTRATION OPERATIONAL AND SAFETY PROGRAMS

Thursday, March 22, 2007,

HOUSE OF REPRESENTATIVES,
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE,
SUBCOMMITTEE ON AVIATION,
Washington, DC.

The Subcommittee met, pursuant to call, at 10:00 a.m., in Room 2167, Rayburn House Office Building, the Honorable Jerry F. Costello [Chairman of the Subcommittee] presiding.

Mr. COSTELLO. The Subcommittee will come to order. The Chair would ask all Members, staff, and everyone in the room to turn off their electronic devices or put them on vibrate.

Let me welcome our witnesses here, all of them. We have three panels today and we will hear from the first panel very shortly.

The Subcommittee is meeting today to hear testimony on a review of the Federal Aviation Administration's operational and safety programs. Today is an opportunity for the Subcommittee to hear from various stakeholders and those involved in the system their views, comments, and recommendations for the reauthorization.

Let me say that the Chair will impose the same procedures that we used yesterday at our hearing, since we have a number of witnesses. I believe we have 11 witnesses to hear from today. I hope we don't experience the number of roll call votes that we had on the floor yesterday.

One is that the Chair will give an opening statement, will call on the Ranking Member to give his opening statement or comments, and then ask all of the Members to submit their opening statements for the record.

Mr. Mica, I did not see you come in, but we certainly will recognize you.

Let me begin by giving my opening statement.

I welcome everyone here to the third Subcommittee hearing on the FAA's reauthorization. This hearing will provide a general review of issues associated with the FAA's operational and safety programs.

This hearing represents an opportunity for our panelists to discuss issues that they believe this Committee should consider in the FAA reauthorization. The first panel will include testimony from the FAA's workforce, including the controllers, represented by the National Air Traffic Controllers Association; air traffic technicians and aviation inspectors, represented by the Professional Airways System Specialist; and other FAA professionals, represented by the American Federation of State, County and Municipal Employees.

I have repeatedly stated that I am concerned about future staffing levels for the FAA's controller and safety inspector workforces. In particular, over the next 10 years, approximately 70 percent of the FAA's nearly 15,000 air traffic controllers will be eligible to retire. The FAA believes they could lose more than 10,300 air traffic

controllers by 2015 and they will need to hire approximately 11,800 controllers over the next 10 years to have enough recruits in the pipeline to meet the positions lost.

There is no question that the FAA's imposition of pay and work rules on the controllers' workforce has increased retirements. According to NATCA, veteran controllers are currently retiring at a rate of more than three per day since the end of the fiscal year 2006.

It is clear that the current contract negotiation process does not promote good faith negotiations and gives an unfair advantage to the FAA. I am committed to fixing this grossly unfair process during the FAA reauthorization bill.

In addition, it is not just NATCA that is affected by the FAA's interpretation of its authority to impose pay and rule works, it extends to the FAA's entire workforce. I look forward to hearing from PASS and AFSCME on the status of their respective contract negotiations with the FAA.

I am also concerned about the potential attrition in the FAA safety inspector workforce. I am told that over one-third of the FAA safety inspectors will be eligible to retire by the year 2010, and I was informed this morning and given a chart that, in fact, since the end of the last fiscal year in September, that we have already lost 77 inspectors. It is an alarming rate of 12 or 13 per month. So I am concerned about the staffing levels for the safety inspector workforce.

Last year, the National Research Council reported that the FAA lacks staffing standards for inspectors and recommended that the FAA undertake a holistic approach to determine its staffing needs. It is imperative that we make the investments in the FAA's workforce now so that they can meet the new challenges for maintaining the highest level of safety in this ever-changing aviation environment.

Their carrier workforce is also well represented here by the Air Line Pilots Association, the Association of Flight Attendants, and the International Association of Machinists. With the airlines largely back on track after September the 11th, it is time once again to turn our attention to the workplace and safety issues. I look forward to hearing about issues of concern to the pilots, flight attendants, and mechanics.

On our third panel today, we will hear from a diverse group, including a return visit from Dr. Dillingham of the Government Accountability Office, who, of course, was here with us yesterday and has been with us many times, to discuss issues related to safety, accommodating new users in the airspace system, airport congestion, and air traffic staffing and training.

With that, I want to welcome all of our witnesses here today, and I look forward to hearing their testimony.

Before I recognize the Ranking Member and the Ranking Member of the Full Committee for statements and comments, I would ask unanimous consent to allow two weeks for all Members to revise and extend their remarks, and to permit the submission of additional statements and materials by Members and witnesses. Without objection, so ordered.

At this time, the Chair would recognize the Ranking Member of the Full Committee, Mr. Mica, for his comment or statements.

Mr. MICA. Thank you. I will try to be brief. I commend you and our Ranking Member, Mr. Petri, for conducting this series of hearings which I think are vitally important to reauthorization and some very critical questions on how we fund a system for the future.

I think it is very important, too, that we have labor involved in some of these discussions so that we can move forward, and certainly labor I think is undoubtedly the largest percentage of our costs. Capital costs are just a fraction of what it does cost to run the system, so it is important that we include them in this process.

I am also particularly pleased to be here today. Just a few minutes ago I got a call from Secretary Peters and also learned on the wire that the European Union Transport Commissioners have approved the Open Skies Agreement, which is probably one of the most historic events in international agreements that the United States has ever engaged in relating to aviation. And I think that is also important in regard to this hearing because we have to have a system that will handle this additional business at least on our side of the Atlantic, and then the incredible potential this holds for expanding employment and aviation industry, opening markets in communities that have never had international service, and the benefits to consumers, which are absolutely unprecedented. So we will see lower prices, see more jobs, dramatic expansion of air activity on the international side between both sides of the Atlantic. So a pretty exciting day.

Yesterday, DOT announced the approval of Virgin America's request, which I think is also historic because I think they will inject a new level of competition that we have not seen before. So some exciting things, but we have to have the system available, ready to operate and meet the needs of the future traffic that we will see dramatically expanded by these events.

With those quick comments, I am going to stay for a few questions. I have read some of the testimony, but I thank you again for this hearing and allowing me to participate.

Mr. COSTELLO. The Chair thanks Mr. Mica for his comments and the Chair recognizes the Ranking Member of the Subcommittee, Mr. Petri, for his opening statement or comments.

Mr. PETRI. Well, thank you very much, Mr. Chairman. I would like to join you in welcoming the three panels that we have here as witnesses today.

Today's hearing is addressing FAA's operational and safety programs, and while the testimony will reflect a broad variety of issues that Congress will be considering during this reauthorization cycle, it is important to remember that we are conducting this hearing at a time when America's aviation system has been safer than at any other time in our Nation's history.

This remarkable safety record is not an accident, it has been achieved through sound policy and through continuous oversight and, of course, we can't stop where we are, we must continue to strive for further improvements.

So I look forward to learning more about the FAA's operations and its safety programs and yield back the balance of my time.

Mr. COSTELLO. I thank the Ranking Member for his comments Let me welcome our first panel of witnesses here today. As we said, we have 11 witnesses that are here to testify, and hopefully we will have all of you understand that we ask you to summarize your testimony. We have, I know, a number of questions and other Members who will be joining us.

Our first panel, let me introduce and welcome: Mr. Pat Forrey, president of the National Air Traffic Controllers Association; Mr. Tom Brantley, the President of the Professional Airways Systems Specialists; Mr. Tom Waters, President of American Federation of State, County and Municipal Employees Local 3290.

Gentlemen, the Subcommittee welcomes you here this morning and we would ask you to summarize your statements in five minutes or less, if possible, and we will have questions for you at that time.

The Chair recognizes Mr. Forrey for his opening statement.

TESTIMONY OF PAT FORREY, PRESIDENT, NATIONAL AIR TRAFFIC CONTROLLERS ASSOCIATION; TOM BRANTLEY, PRESIDENT, PROFESSIONAL AIRWAYS SYSTEMS SPECIALISTS (AFL-CIO); AND TOM WATERS, PRESIDENT, AMERICAN FEDERATION OF STATE, COUNTY AND MUNICIPAL EMPLOYEES (AFSCME) LOCAL 3290

Mr. FORREY. Thank you, Chairman Costello, Ranking Member Mr. Petri, Mr. Mica. I would like to thank the Members of this Committee for inviting me to testify today to review operational issues and safety programs at the FAA.

On behalf of the 19,000 aviation safety-related professionals that NATCA represents, I would like to praise both Chairman Costello and Chairman Oberstar for recognizing an urgent need to repair NATCA's current contract dispute with the FAA and for risking their political capital in an attempt to right the injustice that we unilaterally imposed upon aviation safety professionals in July of 2005, as well as America's air traffic controllers last September. You need to know that the men and women charged with keeping the skies safe for the flying public appreciate all that you do for them. Thank you very much, sir.

What these men and women are asking Congress for is not complicated. The workforce at the FAA simply wants a fair collective bargaining process. We want a process that includes the role for the agency, a role for Congress, and a role for an experienced arbitrator when the two sides cannot come to an agreement. Simply stated, we are looking for fairness.

I am here to tell you that for the men and women in control towers, TRACONs, and en route centers across the Country, there is considerable disillusionment, frustration, and distraction due to the effects that these unilaterally imposed work rules have had. The impacts of this situation are affecting the safety margins of the system. Yet, despite having their rights denied by the FAA, my membership continues to work as the safety professionals that they are and hopes that a congressional correction could be made that has already eluded us to this date.

Currently, there are tens of thousands of FAA employees working without a contract, and even though the FAA continually

makes reference to a contract, the truth is that air traffic controllers, engineers, test pilots, nurses, lawyers, and others represented by NATCA are working under imposed pay and work rules. This, sir, is not a contract.

Mr. Chairman, I want to be clear that this is not just a collective bargaining rights issue. The impact of the current situation is greatly affecting the agency, its employees, and, by extension, the safety of the entire aviation system. These unfair work rules have resulted in the increased early retirement of veteran controllers, the same controllers who safely landed 5,000 aircraft in just over two hours on September 11th. This acceleration of retirements has aggravated the already existing controller staffing crisis.

These oppressive work rules have also resulted in mandatory overtime to offset the understaffing, denial of sick leave and vacation time, an increase in stress and fatigue, and low morale among FAA employees. Today there are fewer controllers watching over more traffic, and the fatigue and stress is beginning to show.

Simply stated, because of the imposed work rules and pay, the agency has a problem retaining veteran controllers and recruiting qualified candidates. They have now sunk to the level of advertising for candidates on MySpace.com and Craig's List.

These problems have begun to negatively affect the safety margins in the system. Here are the facts. Because new hires now face a 30 percent pay cut, experienced military controllers are turning down FAA jobs in droves because it would mean a huge pay cut to them; retirements and even total attrition are exceeding the FAA's planning for a fourth year in a row; and, more importantly, the resulting fatigue among the remaining employees is now having a major safety concern for us. Controllers are forced to work longer hours on position without a break, 10-hour days, and mandatory six-day work weeks due to the effects of the imposed work rules and resulting short staffing.

I strongly urge this Committee to carefully study this safety issue. I firmly believe that without a concerted effort to attract experienced or qualified controllers and to retain our current workforce, the air traffic control system will continue to lose controllers that will mean flight delays, runway incursions, and increased chance of aviation disasters.

And don't let the FAA's propaganda bamboozle you. According to the FAA Regional Administrator, Doug Murphy, 50 percent of the trainees fail and it takes three years for the controllers to certify, so hiring one-for-one isn't going to adequately staff this system.

Just two days ago the DOT Inspector General reported that approximately 2,563, or 11.1 percent, of the total midnight shifts they reviewed were staffed with only one controller before the Comair crash in Lexington last August. As the FAA has even now admitted, its own policy required two people in the Lexington facility, and only one was on duty at the time of the disaster. I firmly believe that was as a result of the agency's refusal to backfill retirements or to use overtime. The IG report should be a wake-up call to the agency to reevaluate its new staffing plan and increase its new staffing standards, not cut them down to grossly negligent budget-driven levels.

As USA Today reported yesterday, the IG reported that the FAA spokesman said the agency has stopped understaffing the towers. We disagree with this assertion and we have mandatory overtime stories to prove it. Some staffing facts are indisputable. The FAA Administrator told this Committee last week that traffic is up, yet the number of controllers has fallen by over 1,000 in just three years, and it is going to get worse. The FAA's new staffing range calls for a reduction in controller staffing levels of between 9 percent and 26 percent from previously agreed upon safe staffing needs. I believe this Committee should ask for the supporting documentation and justification for this change.

In terms of modernization of the air traffic control system, I want to be clear on one point: no one would like to see more efficient air traffic control technology put in place than the controllers using the equipment. With the proper tools in place, air traffic controllers could handle an increase in capacity while making the entire system safer and more efficient. The agency continues to refuse to allow controllers to be part of a collaborative process for new technology to ensure its timely delivery and successful implementation. Air traffic controllers not only want the modernization system; they need it and they demand it.

As far as the Administrator's FAA reauthorization proposal, NATCA believes it constitutes an ill-advised user fee financing system and other precursors to privatization that threaten to undermine an inherently governmental safety function.

In closing, I would like to remind the Members of this Committee that, as a controller, my main concern is safety. I understand the safety implications of losing its most experienced controllers at a rate that is completely unacceptable: three per day. As a controller, I understand that new hires will need three years to certify and fail training at a rate of 50 percent in New York, according to FAA Regional Administrator Doug Murphy. As a controller, I understand the safety implications of an air traffic control system where 40 percent of the controller workforce, by 2010, will have less than four years of experience.

The safety of the system is severely compromised if the FAA cannot give its veteran controllers a reason to stay and help to rebuild the controller workforce of tomorrow before they take a well earned retirement. The FAA will not give them a reason to stay and help them keep the trainees.

I would be happy to answer any questions you have, sir.

Mr. COSTELLO. The Chair thanks you, Mr. Forrey.

Mr. Brantley, the Chair recognizes you for five minutes.

Mr. BRANTLEY. Thank you. Chairman Costello, Congressman Petri, and Members of the Subcommittee, thank you for inviting PASS to testify today. PASS represents approximately 11,000 FAA employees working throughout the United States and overseas, and we appreciate the opportunity to present our views on issues vital to aviation safety.

Labor relations within the FAA are in a state of chaos due to the manner in which the FAA has approached contract negotiations with its unions. Under its interpretation of current law, if the FAA declares that the negotiations have reached impasse, the Administrator can send the matter to Congress. If Congress fails to act

within 60 days, the FAA's terms are unilaterally implemented, a process that hijacks the collective bargaining rights of FAA employees. Contract negotiations for four of PASS's five bargaining units have been at impasse for over four years—four years—and there is no foreseeable end in sight.

During negotiations over the contract for PASS's largest bargaining unit, Air Traffic Organization Technical Operations, the agency's behavior made it clear that it was not interested in good faith bargaining and was intent on declaring impasse as soon as possible, so PASS accepted the FAA's proposal in order to give the employees that PASS represents a voice in the process. They responded by overwhelmingly rejecting the contract proposal. Yet, rather than respecting the employees' rejection of its proposal and returning to the bargaining table, the FAA has instead chosen to pursue unilateral implementation of its terms through litigation. Is it any wonder that the 2006 FAA employee attitude survey showed that 64 percent of FAA employees disagree or strongly disagree with the following statement: I trust FAA management?

It is clear that a change is needed in order to ensure FAA employees their right to collective bargaining. PASS is asking Congress to take action to clarify that the Federal Service Impasses Panel has jurisdiction over all bargaining impasses arising at the FAA and that binding arbitration before a neutral third party is the method used for resolving disputes.

Understaffing is also a major concern for PASS, especially in our technician and safety inspector bargaining units. Inadequate technician staffing has resulted in more unplanned outages, a dramatic increase in restoration times, and a move toward a fix-on-failure approach where preventive maintenance and certification of NAS systems and equipment are significantly reduced. The FAA does not have a staffing model in place to accurately determine the number of trained technicians needed to meet the agency's needs. PASS is requesting that Congress require a study of FAA technician training and the methods used by the FAA to estimate technician staffing needs.

By 2010, as you pointed out, Mr. Chairman, almost 50 percent of FAA inspectors will be eligible to retire. Yet, instead of addressing its staffing problems, the FAA has chosen to increase its reliance on its designee programs. The agency has responded to repeated criticisms of its use of these programs by assigning even more hands-on work to designees that was once performed by FAA inspectors. The latest example is a concept known as the organizational designation authorization program, which would allow a private organization to be in charge of overseeing the designee. In essence, the industry overseeing itself.

In order to protect the safety of the aviation system, PASS is requesting that Congress direct the FAA to put expansion of designee programs on hold until the National Academy of Sciences staffing model is implemented and recommendations issued by the GAO, including the establishment of a program to evaluate the agency's designee programs can be thoroughly addressed.

PASS is extremely concerned about several aspects of the FAA's reauthorization proposal, including outsourcing of key components of the NAS, the creation of a partisan commission to justify

outsourcing targets and facility closures, and ambiguous user fees to fund the agency. The United States has the largest, safest, and most efficient aviation system in the world. To introduce concepts that would hinder or abandon the work performed by these professionals would be to risk the foundation that keeps this Country's aviation system safe. PASS remains committed to making sure that our Country maintains its standing as having the safest aviation system in the world, and turning that system over to private corporations will not accomplish that goal.

Thank you, and I would be happy to answer any questions you may have.

Mr. COSTELLO. We thank you.

The Chair recognizes for his opening statement or summary Mr. Waters.

Mr. WATERS. Thank you, Mr. Chairman. Good morning Members of the Aviation Subcommittee. I am Tom Waters, President of AFSCME Local 3290. AFSCME is a labor organization that represents 1.4 million workers, predominantly in the public sector. Approximately 2,000 of our members are employed in various professional positions at the FAA Headquarters here in Washington.

For the past seven years, I have had the honor to serve and represent the attorneys and administrative staff within the FAA's Office of Chief Counsel. Today I am especially pleased to also represent, through my testimony, the AFSCME members within the other three FAA headquarter locals at the request of their presidents, my colleagues and friends, who are here today.

Like the other unions, our story deals with the FAA's conduct in contract negotiations, but rather than repeat the often cited history of personnel reform and related statutes, I want to amplify the cost in human terms of the FAA's often sharp practices under reform. Working without a collective bargaining agreement for over six years, I have seen how quickly a workforce can be distracted and demoralized by the belief that its employer has dealt with it in an unjust and high-handed manner. After all, the issues at stake for the employee are no less than the employee's career, livelihood, and the ability to keep his or her family healthy, safe, and secure.

Our own ongoing contract dispute with FAA has its origins in the agency's desire for a pay-for-performance salary system. In 1996, the FAA sought, and Congress granted, total authority to revise both the pay and personnel systems. Although we negotiated a contract under the new reform system, the FAA reneged and refused to implement, with the result that AFSCME members are now divided between two separate pay systems and serve under a hodgepodge of old and new work regulations negotiated, if at all, under a piecemeal process.

I hasten to add that the employees in the Office of Chief Counsel—and I believe throughout headquarters—initially had little apprehension about the concept of pay-for-performance, called core compensation at the FAA. However, management's performance monitoring on the specific five-tiered system was one of failure. So, in one of its first changes under personnel reform, management implemented a pass-fail system. These habits and sequence of events became the source of much workforce mistrust and ultimately led the employees in the Office of Chief Counsel to unionizing. Other

headquarters employees followed and formed three more AFSCME locals.

From the summer of 2000 through February 2001, a 25-member negotiating team comprised of members of all AFSCME headquarters locals negotiated a 75-article contract with a management negotiating team comprised of management representatives from all affected lines of business. It was pursuant to a strict predetermined procedure for signifying closure for each article that the parties agreed upon each of the 75 articles. Productivity gains offset any pay raises.

The four AFSCME locals overwhelmingly ratified the agreement on February 21st, 2001, by a vote of approximately 1,000 to 30. However, the elation was short lived because Administrator Garvey submitted the agreement to the Office of Management and Budget for approval and then ultimately refused to sign and execute the contract, alleging that OMB disapproved. As you know, OMB approval of an agency collective bargaining agreement is not—is not—a requirement under Federal labor law, nor did the union ever acquiesce to OMB review or approval.

Between Congress, the FLRA, and the United States Court of Appeals for the District of Columbia, the history of the protracted litigation resulting from the Administration's action, which the union lost, is a matter of substantial record and not repeated here. Worth recounting here, though, is that under the initial litigation, documents surfaced which refuted the agency's representation. One document showed that the FAA asked OMB to change draft language in a letter responsive to a congressional inquiry. OMB's review made it clear that the FAA management held the final decision on signing. The change requested by the FAA was to remove this language for wording that stressed that OMB did not concur. The agency's intent to revise the OMB letter is perhaps as telling as the substance of the revision itself. I have the document with me, if anyone is interested in reviewing it.

Even if it preferred OMB approval, the FAA shot itself in the foot by refusing to execute the agreement. After ratification, the headquarters workforce was satisfied that it had replaced the sharp edges of a pending unilaterally imposed pay-for-performance system in favor of a well planned, bilaterally agreed upon pay-for-performance system. As I said, employees were enthusiastic to put behind them the fear and distraction of a new pay system and the concomitant arguments with and suspicions about management. Instead, today, some employees are in an FAA-imposed pay system while others remain in a near exact replica of the General Schedule system. There is such chaos that even the attorney managers in my office sued the agency for more money. We have often pointless performance reviews. We have no meaningful grievance procedure. Litigation remains the only recourse when third party resolution is desired. All working conditions must be resolved on a piecemeal basis through impact and implementation bargaining.

AFSCME has tried every means available to resolve this long and protracted contract dispute. We requested assistance from Congress and twice had report language inserted in appropriations measures directing that the agency implement the contact. The FAA ignored the directives. Considering the fact that AFSCME has

exhausted all means to resolve this matter and the FAA has used all means to thwart our efforts and those of other unions who are in similar unfortunate positions, it is time for Congress to consider a legislative approach to resolving FAA's failure to live up to the congressionally mandated task of legitimate personnel reform.

We want not negotiate, but the fiscal year 1996 appropriations language that granted FAA unfettered discretion in personnel reform must be repealed because the agency's version has led to poor morale and distrust. Employees must believe in the integrity of their employer and that they will receive a fair shake when it comes to bargaining with their employer. I urge the Subcommittee to act to eliminate the flawed and unfair bargaining process that currently exists at FAA in order to avoid any further misuse by the agency of its bargaining authority.

In closing, I would like to invite each of you to the FAA to meet and speak with AFSCME members to fully understand the impact of the transactions and occurrences discussed here today. They are humble, dedicated, hard-working, and conscientious public servants who deserve better treatment than they receive from their management.

I thank you and I would be pleased to answer any questions.

Mr. COSTELLO. We thank you and all of the witnesses that have testified so far this morning.

Mr. Forrey, let me ask you, if I may. In your testimony you indicate that the FAA is not hiring controllers, but they are hiring trainees, and I wonder if you might explain the significance of your statement.

Mr. FORREY. Well, I think the agency likes to portray the fact that they hire a controller for every one that retires, but the fact is it takes years to train a controller to be fully certified at any facility. The average is about three, according to the FAA's own Regional Administrator. And of those trainees we are finding a huge amount of individuals that are not making it and they are failing in training, and part of the reason being they are bringing them right out of these schools or they are bringing them off the street and they are sticking them in towers like Atlanta and O'Hare and New York TRACON and Dallas, and they don't stand a chance.

The military controllers that used to come into the FAA are now being briefed by their own colonels and generals on the agency's payroll, jailhouse work rules, and pay system to stay in the military. So that avenue is kind of drying up for the agency and we are not getting those experienced controllers that might even help us in those busy facilities.

So just a perfect example, at Atlanta tower there are 34 certified controllers there; they have 7 trainees, they are expecting only 2 to make it; and the next year 12 of them are eligible to retire. There are 23 positions in that tower and next year, by this time in October, there might only be about 25 controllers working that facility. How do you work the busiest air traffic control facility in the world with 12 people or with 25 people? That is just ludicrous. They cannot train somebody in six minutes when they hire them and put them in the facility and be ready to go, it just doesn't work that way.

Mr. COSTELLO. Thank you.

Mr. Brantley, let me ask you about the inspector staffing. You indicate in your testimony that because of the evolving industry, that the workload on the aviation safety inspectors have increased dramatically, and I want you to elaborate on that, explain that.

Mr. BRANTLEY. Well, Mr. Chairman, the nature of the business for the aviation industry has changed, so they are going to more regional jets as opposed to their current practice, which is more flights, more planes. But also things like the agency implementing its new ATOS system, while that is not fully implemented and it is not fully developed yet, that has created a whole different set of work practices for inspectors. Things like aging aircraft, which Congress directed the agency to begin looking into I guess about 10 or 12 years ago now, and it is just coming about, but that creates another workload. The explosion of outsourcing of maintenance by air carriers has created a workload because now, instead of just overseeing carrier itself, you know, it brings in the repair facilities that are now going to have to be overseen by the agency.

So all of these things combined just create a lot more work, but the number of inspectors is not increasing.

Mr. COSTELLO. The number of inspectors, I have been expressing, as well as other Members of this Subcommittee, the number that are eligible to retire and may be leaving, is the figure that I have been giving this morning, that since the end of September that we have seen 77 safety inspectors leave since October the 1st?

Mr. BRANTLEY. Yes, sir, and that is a net loss.

Mr. COSTELLO. It is a net loss.

Mr. BRANTLEY. Yes, sir.

Mr. COSTELLO. I wonder if you might just quickly, without going into a lot of detail, give us an update on the status of negotiations with the FAA. Is it at a standstill or is there any indication at all?

Mr. BRANTLEY. Well, Mr. Chairman, as I mentioned earlier, for four out of the five bargaining units that we represent we have been at impasse, which is the stage where everything comes to a halt unless the agency decides to bring that to Congress. We have been at impasse for more than four years. Not a thing has happened in those four years by the agency to try to move these contracts to closure. The one contract that we had negotiations on in recent times, about a year ago—because we did not believe the agency was intent on reaching an agreement but, rather, their intent was to get to impasse so that they could impose their own terms—we actually accepted their proposal so we could put it to our Members for a vote. You know, our hope was, frankly, that seeing the results of that vote would wake the agency up, and 98 percent of our Members, in a record turnout, 98 percent voted no. So I think the message was there. Unfortunately, no one was willing to listen. So now we are involved in litigation. The agency is trying to implement the contract terms through litigation. We have a hearing next week, and I would be glad to keep you updated on how it is going, but essentially that is where we are.

Mr. COSTELLO. Thank you.

The Chair, at this time, recognizes the Ranking Member of the Full Committee, Mr. Mica.

Mr. MICA. Well, thank you, Mr. Costello.

I guess last night was American Idol. I didn't miss it; instead, I—I did miss it. In fact, I never watch it. But I did stay up reading testimony. I did read all of Mr. Forrey's—and thank you, it was probably one of the most comprehensive submissions I have seen—and some of the others. I tried to catch up before today's hearing. Your pages aren't numbered, but the subject of the hearing, too, today is actually on, I guess, financing the system that we have got. Of course, a key component is personnel, since I asked and just found out that personnel costs will make up 80 percent of the budget cost in fiscal year 2008 and do now. But on this page here, Mr. Forrey, you say, third, a user fee based system is vulnerable to problems that disrupt aviation and commerce much as 9/11 and SARS did a few years ago. That is your statement, correct?

Mr. FORREY. That is correct, sir.

Mr. MICA. Well, I venture to say that if we look at the current system and we go back and look at 2001—we now have a 7.5 percent ticket tax and aviation fuel tax that compose most of the revenue—that also is subject to the same type of disruption. And we actually have the documentation to prove the dramatic affect and loss, so I don't think that that is a very good criticism on what is being proposed by the Administration or the position. Which I support as a hybrid system.

Let's see, then I think you also said in your testimony staffing-to-traffic, is that pretty much your position, trying to have staffing to the traffic?

Mr. FORREY. I am claiming that the agency is staffing-to-budget, and not staffing-to-traffic.

Mr. MICA. It is not staffing. But you would prefer staffing-to-traffic. I have a chart of traffic and staffing.

Can we put that up there? We can go back a little bit. They are 1999, 2000. Actually, according to staffing-to-traffic, if we use that model, FAA is still ahead of traffic, unless somebody could dispute these figures, but these are the figures. We have 14,618 controllers on board. That is in employment right now. Well, at the end of 2006. So we are still ahead of traffic.

In fact, it was interesting. Mr. Kuhl was here just a few minutes ago, and I visited a number of airports in September and October. One was Elmira, which brought this to light. Elmira, New York had a dramatic drop-off in traffic. There are very few flights in there; you can almost count them on a few hands. They had 13 air traffic controllers in 2001 and they still have 13 air traffic controllers, with almost no traffic. Now, I could cite others here. Just a few: Albuquerque, Seattle, Columbus, Milwaukee, San Francisco. The list goes on.

So part of the problem appears to be that the staffing has been left at some levels in some places, and, Mr. Forrey, you cited in some places we don't have enough air traffic controllers, is that correct?

Mr. FORREY. That is correct.

Mr. MICA. So part of the problem might be distribution. First of all, we have more numbers and then we have many airports—and I will submit a list for the record—that have more air traffic controllers than needed—all of these experienced pretty severe declines, and we saw that across the Country.

Now, let's see, part of the problem, too, is applicants. Do we have a problem with applicants for these positions?

Mr. FORREY. I believe you are going to run out of applicants. Right now the agency claims they have got about 3,000 or 3,500 people in the pipeline, and the qualification level, to what extent we don't know.

Mr. MICA. Actually, there are over 2,000 applicants that have been ranked and rated as eligible. So there may be 3,000, but 2,000 applicants. So we have got a little bit more evidence that we have applicants.

Now, one of the other things is the 10 day—of course, the people that we have working, I think you stated that—oh, wait, wait, wait. You did state, too, they are going from the schools to the towers. And we could play back the tape, but that is what you said. I don't know that to be the case. Don't they all go through Oklahoma City?

Mr. FORREY. As far as I understand they go to Oklahoma City for basic instruction.

Mr. MICA. But isn't that a requirement, that you have to have those 10 weeks of training?

Mr. FORREY. Yes, that is correct, but then they are putting them right into the towers, when they didn't do that before, sir.

Mr. MICA. But there is no one going from the schools to the towers.

Mr. FORREY. No, they spend 10 weeks at Oklahoma City.

Mr. MICA. And the requirement is still just a college education, is that right, for those who enter. You can go directly as an applicant into Oklahoma or you could come from a school or from the military?

Mr. FORREY. All candidates go through Oklahoma City, whether you come from a school or whether you come off the street. And now they are advertising for no qualifications.

Mr. MICA. Well, I just want to make certain for the record that we have that correct.

And then the issue about 10-hour work days. Now, it is my understanding that a full-time controller's basic work day is an 8-hour shift, which includes a 30-minute meal break. The average controller's time on board actually engaged in separating airplanes, according to—again, this I get from FAA—is 4 hours and 30 minutes per shift. That is the average time. Would that be about correct?

Mr. FORREY. I have no idea.

Mr. MICA. Okay. And the other thing, too, about this issue of the 10-hour days, anything over that amount of time that is set now would be voluntary. Is that correct?

Mr. FORREY. I don't know. I don't know what you are talking about. Could you rephrase your question, because I am not sure what you are talking about?

Mr. MICA. Well, again, under the terms of the previous contract——

Mr. FORREY. Well, we are operating under imposed work rules now, sir.

Mr. MICA. Okay, but under the——

Mr. FORREY. The terms of the previous contract don't apply.

Mr. MICA. But is anyone forced to do more than the 8 hours?

Mr. FORREY. Yes, in many cases they are.

Mr. MICA. But that is voluntary——

Mr. FORREY. They are required to stay for 2 additional hours than the 8. Yes, it is happening a lot. Including 6 days when they don't want to.

Mr. MICA. Okay. Was any of this a subject of the questions in arbitration or in discussions during the contract discussions?

Mr. FORREY. Absolutely. It was one of the issues that was at impasse and was unilaterally imposed on the workforce.

Mr. MICA. Well, again, I talked to some of the negotiators and they told me that it was not, that the union never brought that into the discussions.

Mr. FORREY. Well, I am telling you that we did. So there you go.

Mr. MICA. Again, I just talked to one of them. And the purpose of the hearing is really to clarify this.

Mr. FORREY. I understand.

Mr. MICA. Finally, the period of the past contract was 1998, and then I think it went to about 2003 with an extension of two years, so over a total of that period of time the pay increase averaged a little over 10 percent per year, is that correct?

Mr. FORREY. I disagree with that.

Mr. MICA. On average? Well, they say through the time of the negotiation it was an 80 percent pay increase, because during the times——

Mr. FORREY. Who is they?

Mr. MICA. Well, at the end of the second year extension, which was 2005, I think it was July of 2005 until April, the terms of the old contract prevailed, so the increase in pay would be related to the old contract, is that correct?

Mr. FORREY. From 2001 up through the imposition of this work rule and pay system our controllers have been earning the same or less than the rest of the Federal Government employees on their annual increases.

Mr. MICA. Average pay would be—and I have heard three different figures. Average pay with salary and benefits I have heard 163, I saw a union document that said 173, and I am told 171. From your standpoint today, before us, what is the average salary pay and benefits for a controller?

Mr. FORREY. With the existing workforce? I believe it is probably about 116 with average pay and locality pay. That is right now. But under the agency's imposed work rules it will probably be somewhere around 84.

Mr. MICA. That is quite different from what is publicly pronounced.

Mr. FORREY. By whom?

Mr. MICA. Well, again, last year Mr. Carr put forth a document that said $173,000——

Mr. FORREY. That is with benefits.

Mr. MICA.—pay, benefits——

Mr. FORREY. Benefits we have no control over, sir. That is what all Federal Government employees get.

Mr. MICA. But that is the cost to us, which is——

Mr. FORREY. I understand. And I can tell you this, the cost——

Mr. MICA.—the 80 percent——

Mr. FORREY. And I lost, if we did nothing is flat for the next——

Mr. COSTELLO. The Chair can interrupt here.

Mr. MICA. Well, thank you. Again, I was just trying to clarify some things for the record. Appreciate it. Yield back.

Mr. COSTELLO. Let me ask a question for clarification here, because I am a little bit confused. The Administrator always says that the average salary with benefits is $170,000, and you are saying here that that is not anywhere close with the current workforce, is that correct?

Mr. FORREY. That is correct.

Mr. COSTELLO. Okay.

The Chair, at this time, recognizes, under the five minute rule, Mr. Boswell.

Mr. BOSWELL. Thank you, Mr. Chairman. I sense that this is a pretty important discussion we are having here today, and me and my colleague across the aisle there, we kind of use the system.

Mr. Forrey, I think you answered us why we don't have the pool from the military. I was going to ask you to expand on that, but I think that is pretty clear. They are being encouraged, because of things going on, to stay where they are. I think that is pretty clear.

I would just like for you to—I apologize, I came in a little bit late, but would you just do two or three things? Would you just tell us as concisely as you can what is the shortage today; how many controllers are needed by calendar quarter over the next year for us to be safe and have trained controllers; and what does it take, in your opinion, to interest an individual to apply and train to become a controller? And if you have a number in mind, if you could, from your perspective, what would it take cost-wise to fix the situation in your mind?

Mr. FORREY. Mr. Boswell——

Mr. BOSWELL. First, what is the shortage today?

Mr. FORREY. The shortage today is about 1100 to 1200 controllers that we had three years ago. We have less than that. And the traffic is now growing.

Mr. BOSWELL. Eleven to 1200?

Mr. FORREY. Yes. We had 15,383 in 2003; we now have 14,000, as the Administrator's fact book told us, 14,200, of which 2,000 are trainees, they are not even certified controllers.

Mr. BOSWELL. I think the whole listing public ought to be concerned about that figure. Go ahead.

Mr. FORREY. What we need, probably, at least for a starter, is to get back to the levels we had, that we all agreed on several years ago, that we thought would fill the system. Those were developed by good empirical standards based on traffic activity, based on number of positions, number of sectors, the amount of volume of traffic through each of the radar positions. Those were all calculated and tabulated along with very scientific how much time it takes to work, how much leave people get, everything else, to decide by facility what kind of staffing was required.

The agency just solved their whole problem by just coming out with some range thing on their staffing standard that basically says, lo and behold, look at that, all the people we have on board right now fit within our ranges, so we don't have a staffing problem

anymore. They have not given us any kind of empirical data to support what they did, just rhetoric.

So at least for a starter we would like to do that. We have asked the Administrator, I personally have asked the Administrator on a number of occasions and in writing, to get together with them and develop our staffing standards, that we be part of that. I think we have something to offer to that; we are the experts in the field. She has said that she would be willing to, but then, of course, at the same time they introduced this standard. So I am not sure if she is still willing or interested or not. But I think that is probably a good place to start, and involve the National Academy of Sciences in that process.

As far as what it would take to interest controllers to come into this occupation, I think it would interest them that they don't hear stories about controllers that call in sick because they have a fever, are forced to come in because they are going to get fired if they don't, and end up vomiting on their radar position. At the same time, finding out that a supervisor with the same symptoms called in and said I can't make it, and they said, fine, don't come in, and replaced that person with overtime. That happened at Jacksonville Center. That is the kind of stuff going on in the field today.

And until that changes, you are not going to see anyone really interested in taking this job. That is why they are passing it up. They are sending these kids to the Oklahoma City Academy at $18,000 a year, which is just over minimum wage, without any health benefits for three months, and then they are saying, you want the job? You go out there and do that. And, by the way, if you are successful there, we will put you in one of these facilities like New York TRACON or the Chicago TRACON or Dallas-Fort Worth TRACON, because we are going to get killed in those facilities with the staffing in about another 12 months, and the system is going to come to a screeching halt. And these kids don't stand a chance. It is like taking some kid out of high school baseball, pitcher star, and sticking them on the New York Yankees and saying, all right, buddy, it is the ninth inning, bases are loaded, two outs, and you are up. That is not the kind of situation we want.

Mr. BOSWELL. Well, I appreciate that and I sense your frustration. Having visited a few control stations in busy areas, it is a tough job. It is a tough job, and I want to thank you for staying in there and fighting for what you believe in to, one, keep the professional life and, two, to make it safe not only for us that fly and use the system, but for those many, many thousands of passengers who are out there flying every day. So thank you.

Mr. FORREY. Thank you, sir.

Mr. COSTELLO. I thank the gentleman.

The Chair recognizes the Ranking Member of the Subcommittee, Mr. Petri.

Mr. PETRI. Thank you very much, Mr. Chairman. Before I yield a minute to my colleague, the Ranking Member of the Full Committee, I just wonder if I could ask kind of a general question of both Mr. Forrey and Mr. Brantley, and that is I am sure that you and your members are focusing, as we are, on the rollout of NextGen technology, and this has great promise, obviously, and it seems to be about time. The industry is looking forward to it and

it is already happening. What is your attitude on—I mean, this will affect staffing levels and job descriptions and a lot of changes in the system, and even locations of personnel and so on. Do you have an attitude toward all this? You know, some people have likened it to the difference between switchboard operators and what we have now. In some ways the job will become much more responsible because a lot of the routine parts of the controlling, for example, I guess, will be handled by the technology. Could you comment on that?

Mr. FORREY. Certainly. I would like to, sir. We are very interested in Next Generation Air Traffic Control System. I think it is about time it got done. I don't know that this funding mechanism has anything to do with it. The agency spent $35 billion. The Government has given the agency $35 billion on new technology stuff since the 1980s, and the only thing we got out of it so far is new radar displays in our centers and terminals and a few little safety items like ASDX. That is poor management, that has nothing to do with funding. So this whole shenanigan about user fees is going to fund Next Generation, I think what you need is someone who is going to manage the operation better. That might go a long way towards getting new equipment.

Secondly, the agency doesn't want to include us for some reason. I don't know why, but they don't. So I have gotten myself involved with the JPDO, the RTCA, the IMC, and I am going to try and get the controller experience and the professional people that know the system involved in that avenue. We have been very well accepted and I am looking forward to it.

But I am very interested in new equipment. We want it. We need it. But there has got to be more than just new equipment. The last time I looked, Buck Rogers was a TV show; it is not here, it is not today. I don't follow those conspiracy theories that, you know, they are going to take air traffic controllers and put them out of a job because of new technology. That is hogwash. We need equipment that is going to be able to provide the controller the tools to move more capacity in the system in a safer manner. We are all for that and we want to be part of that, but we are being shut out of that process right now.

Mr. BRANTLEY. Thank you. Congressman, I would echo, at least in part, what Mr. Forrey just said, and that is with regard to not being involved by the agency. You know, as late as three years ago we were involved in most of what was going on in the FAA as far as modernization. We had members that were part of these product teams to help evaluate it and develop the best possible product.

Under this Administrator, the agency decided to no longer do that. Today we have no one involved in any modernization at the FAA. No one.

Mr. MICA. Mr. Petri had yielded to me.

Let me just extend what—well, first, he gave me the balance of his time.

On the point of the trainees and somewhere between $17,000 and $19,000, they are paid for that 10-week period, they don't get health benefits. Paying someone to go to school is unprecedented almost anywhere. With your predecessor, Mr. Carr, we had talked about actually shortening that course, certifying the 10 or 12

schools that we could have, and either have two-or four-year programs where they came out better qualified, as some of the NATCA personnel I have talked to who went to private schools versus those that went for the 10-week course, and then the taxpayer wouldn't have to pick up health care or that cost. Just like any other profession, they could go to school and pay it their own. And we have thousands of them coming through Embry-Riddle that are very qualified.

The other point, both of you are interested in actually having a say in this. What I am going to propose today is that we give you a say in this, that we take 80 percent of the money and that we give it to you, all the money, the personnel operational money, and we create a not-for-profit ESOP, employee stock ownership plan, and we let you run it. You run it instead of FAA. We get rid of the FAA Administrator overhead. You may chuckle at this, but I am prepared to do that, to turn it over to you, to the unions and whoever else wants to participate; give you that 80 percent of the money and let you run it. We will give you that. And don't think it can't be done. When I was chairman of Civil Service, I ESOPed 1,000 employees in Mr. English's district. They created a not-for-profit. They have since made a profit, they are paying taxes, and they do a wonderful job. There is no reason why we can't do the same thing and turn it over to you. Are you ready to take it?

Mr. COSTELLO. Mr. Petri's time has expired.

[Laughter.]

Mr. MICA. Let them answer. That would be an interesting question.

Mr. FORREY. I think the first thing I would do, Mr. Mica, is I would invite the agency to join me in that process.

Mr. COSTELLO. The Chair recognizes the gentlelady from Hawaii under the five minute rule.

Ms. HIRONO. I would like to ask all of the panelists I believe that the agency is moving toward privatizing various functions, including the running of whole towers. We have some of these occurring in my State, particularly, for example, at Kona Airport. I have a question to all of you as to what your concerns are regarding this move toward privatizing and public safety issues. Are there any inherent safety issues that we need to concern ourselves with this move toward privatization?

Mr. FORREY. I will go ahead and start. Certainly, we have a very big concern about that. I mean, if you look at the FAA reauthorization proposal, they are talking about contracting out all the navigational needs at airports to the highest bidder, or the lowest bidder, I should say, and then selling those services to the users. They are talking about redefining VFR tower so they can contract them out more easily.

We are very concerned about that because what happens when they contract it out is they reduce the employee personnel so they can make a profit, and that is what is happening in those contract towers out in the field right now. We don't have any problem with the controllers, we think they are very good controllers; the problem is there are just not enough of them and there is no oversight. The agency says there is, but there is not the oversight that they have for FAA facilities, I can guarantee you that.

And if you look at the flight service stations that they just did, the A-76 process with last year, we have already got reports now where we are calling the flight service station to report pirate reports. We have icing and things that are very urgent need information to know for the pilots, and they are saying we don't do that anymore, we don't do that service anymore. So now they are cutting out services so they can make their profits.

I think privatizing in an inherently governmental function like air traffic control services is disastrous.

Mr. BRANTLEY. Thank you. Yes, I agree, I think any time that the bottom line of whether it is making a buck or balancing the bottom line is the priority rather than safety, that just has so many inherent risks. I also think, quite frankly, if there was a way to make money at it, they would already be doing it. The reality is most airports are not capable of creating revenue, I believe, that would allow them to operate safely the way they do today. I think if they were privatized, they would have to scale back quite a bit, which means that a lot of communities that rely on the services of an airport would have to do without many things.

So I don't think it is as easy as just turning it over. I think part of this is kind of the general public welfare. And I don't mean welfare as in the usual context here on the Hill, I mean as in the good of the people.

Mr. WATERS. Do you want me to respond to that question?

Ms. HIRONO. Sure.

Mr. WATERS. I was going to try to avoid it, since I have to admit that I was the staff attorney on the contract towers program and still I became president of the union in 2000. So, I don't know, that makes me kind of uncomfortable with Mr. Forrey. I wrote the memo on whether air traffic control at that level is inherently governmental.

I think that the contract tower program, at the level that it is at, worked okay, if that is how we decided to go. We tried to write oversight in it, but I can tell you that, from a legal standpoint, oversight is the issue. I think that a lot of the—at that time—it was in 2000 that I was in—a lot of the controllers were former FAA controllers, so I had confidence in them because they were FAA controllers; they just went to contract towers. But I think that it ought to be held to the level that it is at, instead of expanded. You know, the contract towers program came out of the firing in 1980, so it was an emergency sort of staffing remedy at that time.

So it has to maintain oversight, our oversight, FAA oversight. I think a lot of times, having practiced a lot of government contracts, both at the FAA and for the Marine Corps, that, you know, it is true that contractors issue is profit margin and they will cut where they can. I have been involved in a lot of litigation where the contractor did not give what the government asked for, what it paid for. A lot of litigation. So you have got to maintain the oversight.

With Mr. Forrey, I should have pleaded the fifth, probably.

[Laughter.]

Ms. HIRONO. One more question. Since the FAA is supposed to provide the oversight for these privatized entities, etc., and if they are not providing that, is it Congress that should be providing that oversight?

Mr. WATERS. Me?

Ms. HIRONO. Anybody.

Mr. FORREY. Well, I think they need to tighten up what they do when they oversight these facilities. They go and they do on-the-spot checks maybe once a year, maybe more often, I don't know. But the fact of the matter is these facilities, they are not automated like you have in the major terminals and major en route facilities, so there is no way to electronically catch them when they have errors or they make mistakes, and it is in their best interest not to report those. So, you know, it is kind of like the chicken guarding the hen house. So who knows?

Mr. BRANTLEY. I personally would love to see Congress step up and provide some oversight, since it is not being done adequately.

Mr. COSTELLO. The Chair thanks the gentlelady and recognizes the gentleman from North Carolina, Mr. Hayes.

Mr. HAYES. Thank you, Mr. Chairman.

Gentlemen, thank you for being here. I get the feeling—I want to make sure I get this correct—there is some tension between you all and the FAA.

[Laughter.]

Mr. HAYES. Next Generation—Pat or anybody that would like—excuse me, Mr. Forrey—ADS-B, is that the answer to all the ills of air traffic control and congestion and everything else out there?

Mr. FORREY. I think it is the future surveillance system. It is not the answer, it is just one leg of the three-legged stool.

Mr. HAYES. What capabilities are available to us with the equipment that is in the cockpit, in the towers, in the TRACONs right now that do a lot of the things that are proposed for ADS-B? I know that is a big question.

Mr. FORREY. I think there is the opportunity right now for the FAA to start utilizing ADS-B in the oceans of the world, where we don't have any radar coverage.

Mr. HAYES. How about here at home?

Mr. FORREY. Here at home, they are doing it in Alaska. I think they are doing a project down in the Ohio Valley with UPS or FedEx. I am not sure which. The Gulf of Mexico is another place where they are trying this new technologies. I think those are great opportunities and that is what they should be doing. I don't know that they are doing it enough.

Mr. HAYES. Okay. And those are specific applications. A lot of flying goes on within the continental United States. Given the fact that a lot of general aviation aircraft fly outside of the 3 percent of congested airspace, what does that do to the cost, as far as you and the controllers are concerned, does that add a whole heck of a lot to what you are doing?

Mr. FORREY. Well, I guess contrary to popular belief, a blip is not necessarily a blip. Certain operations have certain different impacts and costs. Most VFR pilots that are tooling around out there have absolutely no influence or no impact on the system.

Mr. HAYES. How about IFR guys tooling around——

Mr. FORREY. IFR guys? It depends, it depends. You know, the level of service, it just depends what flight strata you are in, what major airports you are around. Obviously, the more major the air-

port you are around or the higher the stratum of atmosphere, you are going to have a little bit more of an impact on the system.

Mr. HAYES. Back to the 3 percent rule. I talked to your guys on the phone, on the radio, and in person, and they wanted me to get you all to talk about why you wanted to keep talking about the contract. But I think you have covered that, so I didn't want them to think I had forgotten.

Last, but not least, you kind of age yourself. You and I are Buck Rogers. There is some new guy now, I don't know what his name is. I would love to see, Leonard and I and other pilots, Sam, we would put a working group together with all the players here, would certainly encourage—and I will see you next week in the office, we will see how we get this thing going.

Mr. Chairman, thank you. I want to yield the rest of my time to Mr. Mica so he can finish up on his offer.

Mr. MICA. Thank you. You had a couple of minutes here.

Back to Mr. Forrey for a minute here. You separated the base pay, which you said was about 116, on average, is that correct? And the rest is benefits and——

Mr. FORREY. Here is the deal. I want to go back to the table and negotiate fairly. I don't want to talk about what it was or what it is now. I want to talk about going back to the table, present the facts to an independent arbitrator who can delve through those facts. If the Administration is afraid to do that, the Administrator is afraid to do that, probably because her facts are not right.

Mr. MICA. Again, what I am trying to do is get to sort of the money basis of this. You are trying to get a higher income for your folks, right?

Mr. FORREY. I am trying to protect the system. I am trying to protect the occupation. I am trying to be able to go back to the table and negotiate fairly. I didn't have that opportunity, sir.

Mr. MICA. Well, part of my question also deals with financing NATCA. I am told, and I don't know if this is correct, that 1.5 percent of the air traffic controllers' base salary goes to fund NATCA. Is that the way you all finance most of your operation?

Mr. FORREY. Well, first of all——

Mr. MICA. Is that the basis?

Mr. FORREY. That is how we primarily finance it, yes.

Mr. MICA. Have you lost money from this contract or are you on the terms of the old contract? This is an honest question. Someone told me that you are still on the terms of the 1.5 that applies to the old money versus that. Has NATCA had a net loss in money from the terms of the imposed work rules and what is going on now?

Mr. FORREY. No, we haven't since we corrected the agency's deduction of our dues.

Mr. MICA. So you still get the same amount.

PASS, how do you get money to finance yourself? Do you get this 1.5 percent?

Mr. BRANTLEY. No, sir.

Mr. MICA. So if you get more money, then you don't get more money.

How about AFSCME?

Mr. WATERS. I am sorry, can you repeat your question?

Mr. MICA. How do you get your revenue to operate, do you get 1.5 percent of the base salary?

Mr. WATERS. For our union?

Mr. MICA. Yes.

Mr. WATERS. Yes, sir.

Mr. MICA. You do.

Mr. WATERS. And if I could clarify, Mr. Mica.

Mr. MICA. I am seeing no's in the back.

Mr. WATERS. I am sorry, it is .065. I am not sure I am clear on what you are asking, .065.

Mr. MICA. You guys aren't negotiating very well.

Mr. WATERS. Well——

Mr. MICA. Thank you. I yield back the balance of my time.

Mr. COSTELLO. I thank the gentleman. Let me just remind Members, if I may, that yesterday's hearing was on the FAA's financing proposal; today is on the operation and safety programs. And I realize that they are related, but I would hope that we are not all here to renegotiate contracts here in this room.

Mr. BRANTLEY. We would welcome the opportunity, Mr. Chairman.

Mr. COSTELLO. The Chair recognizes the gentleman from New York, Mr. Hall, under the five minute rule.

Mr. HALL. Thank you, Mr. Chairman.

I don't think that this is the proper place to grill our witnesses about how their bargaining units are organized or financed, although I can assume that when an administration takes a consistently anti-union stance across the board in every department of government, that it obviously doesn't help the membership or the funding of the unions.

Unfortunately, as one of you stated this morning, this is one of those government functions that probably shouldn't be privatized and also shouldn't be subject to this adversarial relationship when the safety of the flying public is at stake. I am offended and upset at the way it seems that all three of you and your members are being treated.

Having said that, I will say—this is a point of information for our Ranking Member, Mr. Mica—that there are schools who pay students to go to school. My daughter actually was paid as a graduate student by the University of Maryland. My nephew has several engineering offers to him for a master's and PhD candidate by very prestigious State schools where he will be paid, because he is such a desirable candidate, to go to acquire a master's and a PhD. So, just as a factual thing, that simply isn't true.

I also would note that many of us up here, Members of this Committee, have junior or mid-level members of our staff who are in their twenties, probably, or maybe early thirties, and who don't have the responsibility of thousands of passengers in the air at any given time that we are responsible for who are getting salaries close to just below or just above that $32,000 entry salary that I see in Mr. Forrey's written testimony.

Some of the letters from our military controllers who wrote rejecting offers of employment, saying that they could not take a pay cut down to $32,000 a year. I just want you to understand that I have some very capable—I am not putting my staff down, but I

have some very capable members of my staff in their twenties who, going by our congressional pay scale that comes from the Congressional Member Services Office recommendations, I don't think you can compare them to the skill and the importance of the job of a controller.

That is the end of my speech and here is my question.

First of all, can you compare the expected impact of NextGen to the impact of spending a fraction of that money to fully staff and adequately pay the controller workforce and the other workforce of the agency? And I will start with Mr. Forrey.

Mr. FORREY. I don't think you can afford to not staff the system if you ever want to get to NextGen. NextGen is way down the road, it is concepts right now. I mean, ADS-B is just one piece of it, and it is only the air piece, it is not the ground piece. I mean, you can put all the airplanes you want in the air, but if you don't have more space on the ground, what are they going to do?

Same with the controller. If you want to jam twice as many aircraft into a sector I am working 25 already, and you want to stick another 25 in there because of the increased capacity, reduced separation standards, whatever you want to do to get that capacity, what tools are you providing the controllers to make sure they can do that safely without causing disaster?

So you need the staffing to keep the system going. You need the staffing to train the next generation of controller who is going to be using and developing that equipment. And I think that is what you need to do, you need to get that——

Mr. HALL. Thank you. I am running out of time, so I will throw this out there to any or all of you. If you were given the ear of the FAA, what do you feel are the most important, the must-haves, the critical technological improvements that would allow the controller force to do its job, and what things do you think may be well intentioned but ultimately unnecessary or counterproductive out of this NextGen program?

Mr. FORREY. Well, I think the most electronic thing we can get right now is called a human being. We need more of those. That is what we need right now. I think any kind of runway incursion devices, things of that nature, that would be great too, like ASDE-X. We need that deployed throughout the system; it is only in about 35 facilities right now and we need it in a lot more places. Controllers are getting fatigued and they are missing things, and equipment like that is just another backup, another thing for us to have a bigger safety net on the system.

Mr. COSTELLO. The Chair thanks the gentleman from New York——

Mr. HAYES. Thank you, Mr. Chairman.

Mr. COSTELLO.—and recognizes the gentleman from Missouri, Mr. Graves, for five minutes.

Mr. GRAVES. Thank you, Mr. Chairman. I have got some pretty quick questions, and I think you can probably answer them through just providing me with the data later, and I don't even think we even need to go into, with me, the stuff with the privatization complete agreement. I think we are in agreement with this whole funding level for Next Generation. I think we are.

But when was the last time we did—and, Mr. Chairman, you may be able to answer this—the last time we did the staffing set up the way it is now, was it in 1998, was that the last time we did——

Mr. FORREY. 1998, that is correct.

Mr. GRAVES. Could you provide me the data on how the staffing was put together in 1998, how it was designed for that bill? Could you do that and just provide it to me, or the Committee, for that matter?

Mr. FORREY. Certainly.

Mr. GRAVES. And then the next thing is I need to know, you have talked about new technology and, obviously, we have got some things out there we don't even know what it is going to be yet, we don't know what is going to be asked for. You know, we don't even know what the system is. But what I want to know from you is what do you need. And be realistic, because, you know, we have to come up with a system that works, but what do you need as a controller to do your job.

That is what I want to know. What do you need as a controller to do your job. If you would provide that to me. Whether it is one of these new systems which, again, we are not sure yet what that is going to be. I am talking about right now reality, what we can do the next thing with.

And the last thing is—and you can start talking as soon as I get done, but I also want to know how you feel about—you were talking about staffing levels and having people who are qualified, but I had a young man in the Kansas City area that applied, highly qualified. In fact, this was an individual that was outstanding in obviously his college class where he graduated, but, yet he got caught up in this thing. They do the random—and the FAA is the one I know who has implemented this—it is the random choosing, you know, your name is drawn out of the hat and that is the first cut; it is not based on whether or not the kid is good enough or it is not based on whether or not he can qualify for it, it is this random cut, and I hate that. If I want somebody controlling an aircraft, I want somebody that knows what the heck they are doing, and I don't care who it is. I don't want a random system.

I would like your comments on that. And, again, if we don't get through it all, please submit it to my office or submit it to the Committee, however you want to do it. But the technology, if you can do that real quick, I would be very interested and also the other.

Mr. FORREY. The technology right now is we could use more stuff for the runways, we could use more stuff for the en route facilities and the TRACONs. Newer equipment like the STARS implementation was a new standard terminal displays. There is a thing out there called ACDs. They can be installed a lot cheaper and do the same thing with more functionality for our controllers. Those could be distributed throughout the system on all our terminals and TRACONs.

We have facilities that are in disrepair. We have got facilities where people are getting sick from mold, infestation. It is destroying their lives and the agency does nothing about it. We need more staffing, obviously, so that people aren't getting fatigued, over-

stressed, overworked. Those are the kinds of things we need right now.

As far as the—I can't remember your last question.

Mr. GRAVES. I was talking about the random lottery.

Mr. FORREY. Yes, how they select people. That is based on what the agency does. I mean, that is their entire human resources division that is doing that kind of stuff, and we have absolutely no say in it one way or the other.

Mr. GRAVES. I want that to change. And it gets right to your comment on qualified——

Mr. FORREY. In 1998, when we negotiated the last contract, we negotiated hiring people based on qualifications. The agency forced us out of that in 2003 and said, no, we want to pay them all the same, no matter what their qualifications are. I don't know why.

Mr. GRAVES. I think we have got an abundance of applicants I don't like—and I think there are lots of people out there that will do—I do disagree with the United—I don't know if I disagree with you or do disagree with you, I am not quite sure yet. But I do think there is an abundance of applicants out there. I think there is an abundance of applicants that can do the job, but cutting them out of the system purely because they don't make the lottery I think is wrong.

I have got one more. Please write it down and submit it to me. This goes along with the overall funding plan also, but what I need to know is if this contract is opened back up, when we are talking about funding levels, I want to know how much it is going to cost the taxpayers and the FAA immediately, and if it is made retroactive, how much it is going to cost them for the next 10 years. You can submit that to me also or just call me and let me know or submit it to the Committee. But I want the overall cost, because that is what we are talking about in this whole NextGen system.

Mr. FORREY. I will give you something in writing, but I can just tell you right off the bat, if it just went back to where it was before it was imposed on it, it would be flat for the next 10 years, payroll.

Mr. GRAVES. Because that is different than information I am getting, and that is the reason I want to get to the bottom of it, so please go through that with me.

Mr. FORREY. We will do that.

Mr. GRAVES. Thank you, Mr. Chairman.

Mr. COSTELLO. The Chair thanks the gentleman.

The Chair recognizes the gentleman from Iowa, Mr. Braley, for five minutes.

Mr. BRALEY. Thank you, Mr. Chairman.

I want to thank all of the panel for coming today, but most importantly I want to thank the members you represent for the role they play every day in keeping our skies safe and allowing us to get to where we need to go to.

Mr. Forrey, in your testimony you talked about the direct correlation between controller staffing and safety, and I wondered if you could elaborate a little bit on that as it relates to circumstances in the tower when you are dealing with staffing shortages.

Mr. FORREY. I will try to, sir. When you have less bodies to work in the tower, you have fewer eyes watching the operation, you have

more distractions on other duties you now have to do that you normally wouldn't be doing if there were other people there in the tower; you have less ears listening to the frequencies and what is being said and relayed back and forth between the pilots; and you are working longer time on position because you don't have people to relieve you. You are doing combined positions because you can't open up positions because you don't have enough staffing to do it.

And this is a common occurrence happening every day in the system. We catch more and more near disasters on a common, regular day basis because we do, at some places, have appropriate staffing, but what is going to happen as that starts to reduce and whittle away, that safety net gets degraded and now the opportunity and chance for some near disasters can happen.

I mean, just Atlanta, last month, we had a controller that inadvertently departed an aircraft head-on into six arrivals coming the opposite direction on that runway. Caught it two knots before they were going to hit rotation off the ground. It blew out the tires on the aircraft, but no one got off the ground and it ended up safely. That individual had worked overtime six-day work weeks four out of the last six weeks. That is a facility that is in severe crisis.

Mr. BRALEY. Well, the last time you and I spoke we talked about a similar incident over my district, the 1st District of Iowa, out of your O'Hare unit as well, correct?

Mr. FORREY. Correct.

Mr. BRALEY. One of the other things that I noted in your written testimony is how the imposed work rules are causing strife between employees and management, decimating staffing levels by driving out veteran controllers at record pace, and destroying morale at the facilities, and you cite some additional examples. As someone who has studied human factors, can you talk about how these types of morale problems can have an impact on the ability of controllers to do their jobs in the tower on a day-to-day basis?

Mr. FORREY. Well, first and foremost, I think our men and women in the field try to not let those distractions get in their way and they are still providing the safest operation in the world, and I commend them for that considering all that is going on and all the abuse that they are taking under these imposed work rules.

I think some of the human factors you lose is they get worn out, they get tired, they get fatigued. They are working longer hours, they get angry. I mean, just at one of my facilities up in the Northeast last week, there was a confrontation between a supervisor and a controller in the hallway, where the controller accuses the supervisor of bashing him and throwing him up against the wall, and the supervisor accuses the controller of doing that. Well, the supervisor weighs 300 pounds; the controller works about 150 soaking wet. I mean, it is causing a lot of distraction and animosity between workers and the people that supervise them, and that is not a good thing for anybody.

So, sooner of later, you know, someone is going to get involved into some kind of a confrontation and they are going to miss something, and that is what we are concerned about. So if you can't have a happy workforce—and they are not happy, they are just leaving. We are losing about three a day through attrition.

Mr. BRALEY. And that provides a good transition for you, Mr. Waters, because in your written testimony on the pay-for-performance subject you talked about a factor that is very common in the workplace but nobody likes to talk about, that is the problem we encounter when there are workplace rules requiring regular performance evaluations that are never carried out and that employees never get the type of guidance and supervision that they are directed to and, therefore, disputes erupt between labor and management on whether or not an employee is living up to performance expectations.

You have cited specific examples where an attorney who was part of your bargaining unit had to write her own performance evaluation after never receiving one over a three-year period. I would just like you to have the opportunity to comment on how that affects morale in the workplace and contributes to some of the other problems we have been talking about.

Mr. WATERS. Oh, it is a dramatic impact on morale because there is absolutely no trust. When you talk about pay-for-performance—and I think, you know, attorneys in particular are willing—and I think I wrote in there that I told Administrator Garvey myself that we would be leading the charge for pay-for-performance. In my office, in my division, where we do government contract litigation, we have cited the taxpayer billions of dollars. I mean, we have confidence in our abilities, but what we don't have is two or three performance appraisals for the last three years.

The answer is to insist that the managers get graded on giving performance evaluations. I have been in the Marine Corps for 22 years. We don't have conversations in the Marine Corps did you get a performance evaluation this year? No, I haven't had one for three years. You don't have those because the officers are graded on their timeliness of giving those appraisals, and they have to be given. It is not even a possibility.

So when I came to the FAA, I was shocked to see this. The other system that we had was so simple, especially on the merit system. You could look at the sheet and see that it required an initial counseling, and when that was; a mid-term counseling, and when that was; and then the final, and when that was. And as I cited, there were people who didn't get them for years. I have heard stories of people who didn't get them for 10 years. Sometimes I got them, sometimes I didn't. I never got the initial or the mid-term. So I guess you could say that, yes, sir, that definitely breeds mistrust because you can't have a pay-for-performance system if you are not measuring performance; it is impossible. And I know that adult professionals want feedback——

Mr. COSTELLO. The Chair thanks the gentleman from Iowa and recognizes the gentleman from Texas, Mr. Poe.

Mr. POE. Thank you, Mr. Chairman. A couple comments, then I have a question for Mr. Forrey.

I am concerned, of course, about the aging of air traffic controllers. I have been to the facility at Intercontinental Airport, and every time I go up there it looks like an AARP convention, and that concerns me because eventually those guys are going to quit, you know, they are going to retire.

I am also concerned about the training. I don't know how long it takes to train an air traffic controller, but I think however much time is needed, we should not cut back on training in the name of getting more air traffic controllers. It sounds to me similar to we need more doctors in the United States, so we will just cut med school in half and we will get more doctors quicker. Both of those have to do with public safety. So however long it takes to train one, that is how long they need to be trained.

But my concern is consolidation of facilities with Intercontinental Airport in Houston and also the Beaumont facility that I represent about 97 miles away. Your testimony, Mr. Forrey, about the consolidation of FAA facilities, as you know, I questioned last week Administrator Blakey about the possible consolidation of the Beaumont and the Houston Intercontinental TRACON facilities and the loss of personnel, including air traffic controllers. She told me that consolidation would ensure that our controllers would have the best equipment, but both facilities use the STARS system, so I am a little confused about that, so I look forward to her answer. But, in your opinion, what is driving this consolidation of Houston and Beaumont, and what will it mean to those of us who use this airspace, including me? And do you have an example, in your opinion, of where consolidation made sense and was a good idea, and how it differs from what the Administration is proposing at Beaumont and its BRAC-like consolidation in their FAA reauthorization legislation?

Mr. FORREY. I hope I can remember all that. I am very familiar with the Beaumont operation. They are essentially taking the airspace from the Beaumont tower and the surrounding area, putting that airspace over in the Houston Intercontinental facility, the TRACON, and they are not going to supply any staffing to support that airspace change, and they are going to downgrade that facility in Beaumont tower a couple levels, which is going to be about an 8 percent pay loss to those employees right off the bat, and essentially contract that facility out. At least that is what I believe they are going to do, because they are going to fall down to that kind of traffic.

As far as the user of the system, you now no longer have people that are familiar with that airspace and the surrounding terrain and the surrounding weather. When something happens, they are going to be stuck over in a facility 100 miles away that has no clue what kind of airspace they are dealing with over there; now all they have is a tower.

The agency is in the practice now of closing down these approach controls and these smaller facilities on the midnight shifts and moving them over hundreds of miles away, the airspace, to controllers in other facilities and centers, en route facilities that have no clue of what goes on in that airspace. They have no up-to-date weather information, they don't know what the terrain is like, and on many instances they don't even have standard operating procedures on how they are going to run the operation because the agency hasn't gotten around to it.

So we are very concerned about consolidations. We are not opposed to consolidations. I mean, it does make sense in some instances, but not when the agency goes out and does a cost study

basis analysis and takes a 7,000 square foot facility and says, hmm, let's make it a 14,000 square foot facility and see if it is just as easy and cheap to keep it here or to move it somewhere else. Well, they don't need 14,000 square feet, they need maybe 7,000 or 8,000 square feet. Give it an honest assessment. So those are the things we are looking at.

Does it make sense to move those facilities to consolidate? In this particular instance, you are right, it doesn't; they are both using the modernized equipment. You are taking away a benefit to the users of the system that fly in and around that Beaumont area.

The New York TRACON and New York Center we are working on putting together a consolidated facility. That made sense. You have got two huge facilities out on Long Island. Put them into one. It consolidated the airspace and it allows you to provide better transportation routes in and out of that whole New York complex area. Through the surrounding centers, it impacted flights out of Boston, out of Cleveland, out of Atlanta, and Florida. It was a great plan, but we got shut out of that process too.

So there is a time and place when we can do that. There are 314 FAA facilities out there. Is it reasonable to believe in the future that they can continue to fund and update equipment in all 314 facilities? Probably not. But let's make sure, when you do something like that, it is for the right reason, and right now we don't believe it is for the right reason, they are just doing it for cost.

Mr. POE. Thank you very much.

What time I have left I yield to the Ranking Member, Mr. Mica.

Mr. MICA. That is dangerous. I only have one quick question.

The grievances that have been filed—you know, I consider air traffic controllers a profession and professionals, and you spoke to them as professionals, but I was told that since September 3rd, 2006, there have been filed over 248,276 grievances. Now, all of that has to take time. This is one of the forms that has to be filled out with the documentation, which obviously is taking a lot of air traffic controllers away from their responsibilities. But this concerns me. This is a very serious amount of time.

I really don't think air traffic controllers—now, I know they have some differences with you call "work-imposed rules," but this is not my idea—put this up there—this is not my idea of professionalism. So we have got to stop this and we have got to stop this and start acting like professionals in this process. This is not acceptable.

Mr. COSTELLO. The Chair would observe that Mr. Poe's time has gone over by a minute.

We are going to be called for three votes, but before we do, I would recognize the gentleman from Oregon, Mr. DeFazio.

Mr. DEFAZIO. Thanks, Mr. Chairman. I have been enjoying the debate, but let's get back to some critical safety and operational issues here.

I think a good case has been made that we need a just settlement and a contract, but I am going to go to something a little more specific, and the question goes to Mr. Brantley with PASS.

I am very concerned to read in your testimony the FAA's move to a fix-on-failure approach, abandoning periodic maintenance and certification of NAS systems. Is this true?

Mr. BRANTLEY. Yes, sir, they are moving towards that approach and where, today, a lot of the maintenance is preventive in nature, the idea is to——

Mr. DEFAZIO. But if we have a failure, it is a critical component, doesn't that mean we suddenly have airplanes that can't leave, airplanes that can't land, airplanes in holding patterns somewhere out there, and a lot of turmoil and potential for not only expensive delays, but also jeopardizing health and safety?

Mr. BRANTLEY. Yes, sir, absolutely. And, you know, part of the problem is the way the agency looks at things today is different than they used to, as well. One of the fundamentals built into the system is redundancy, and if your primary system were to fail, you would begin restoring that immediately, even though you are on a backup, so that you have a safety margin as well. And one of the things that we are seeing now is as long as there is a backup that you can go to, in many instances they don't even start getting someone to work on it until the next business day or the next time they have someone available.

Mr. DEFAZIO. I think I read of an instance earlier this year, it might have been LA, I think, where both systems, both primary and secondary, went down.

Mr. BRANTLEY. Yes, sir. And there wasn't a person available that was actually—you know, the person that was assigned to cover the airport was also covering other airports in the area, so they weren't there at LAX when it happened.

Mr. DEFAZIO. Could we call this sort of penny wise and pound foolish? I mean, has the industry itself complained to the FAA about this, said, really, this doesn't make a lot of sense to us here?

Mr. BRANTLEY. Yes, sir, I think one of the factors is that outages of equipment that are equipment-related are such a small percentage of the overall agency outages, it doesn't get the attention that at least I think it deserves. Because even though it is small, it is preventable to a large extent. So weather is something we are always going to struggle with, but that gets most of the agency's attention.

And, yes, I think having the right number of trained people where they are needed is absolutely critical, and that is why we asked for a study on a staffing model and on training because, frankly, a debate right now about staffing is very hard to have because the agency can't even determine where they should have people.

Mr. DEFAZIO. Is there a pending study?

Mr. BRANTLEY. There is not.

Mr. DEFAZIO. Okay.

Mr. BRANTLEY. We are asking for some help.

Mr. DEFAZIO. I think that is something the Committee might want to put into the FAA reauthorization that mandates such a study.

I note a number of other areas that I think are really critical. You say we also have a dearth of qualified safety inspectors. Could this be true?

Mr. BRANTLEY. Yes, sir. And again, you know, the workload has increased and the number of inspectors has not. You know, it cre-

ates a situation where inspectors are spending less time doing inspections.

Mr. DEFAZIO. So they are just checking paperwork that someone else created, like a designee or something——

Mr. BRANTLEY. Absolutely, sir.

Mr. DEFAZIO. Or maybe a non-qualified maintenance facility.

Mr. BRANTLEY. Well, unfortunately, many of those they are not even allowed to inspect unless the sponsor, whoever is contracting with them, offers to take them in.

Mr. DEFAZIO. Wait a minute. So we have someone doing critical aviation maintenance over here, they have been contracted with by a qualified facility or an airline over here, this is not a qualified facility. Our inspectors, as few as they are and as little capability as they have to get around and inspect these things, they can't go in there without——

Mr. BRANTLEY. Not an unannounced inspection. The sponsor has to take them in. And, you know, as bad as that is, even doing an inspection on a carrier or a certificated repair facility is becoming more and more rare because they are not allowed to, whether it is for reasons of budget, because they can't travel to go to the facility, or just because they don't want anyone going in there and disrupting the work the way they like to talk about it.

Mr. DEFAZIO. You mean like overseeing the work?

Mr. BRANTLEY. Exactly.

Mr. DEFAZIO. Checking the work?

Mr. BRANTLEY. Yes, sir.

Mr. DEFAZIO. I find those things very alarming, Mr. Chairman, and hopefully we will have more opportunity to discuss those next week. But you need an adequate staffing level for your technicians, you need an adequate staffing level for the inspectors, and that is something I hope we can accomplish in the budget and then we will get into those other concerns next week.

Thank you, Mr. Chairman.

Mr. BRANTLEY. Thank you, sir.

Mr. COSTELLO. I thank the gentleman from Oregon.

The Chair, at this time, would announce we have a little over nine minutes. We have three votes on the floor. Immediately after the last vote we will come back and resume the hearing.

At this time the Chair would recognize the distinguished Chairman of the Full Committee, Chairman oberstar.

Mr. OBERSTAR. Thank you very much, Mr. Chairman, and thank you for your diligence in holding these hearings and thank all the other Members on both sides of the aisle for participating today. I regret I stopped in at the beginning, heard your presentation, then I had other children of transportation to deal with, like Water Resources Development and Technical Corrections Act, and a few other things that we are trying to wrap up here.

We don't need to spend a lot of time discussing—at least I don't—discussing the concerns of the air traffic controllers. We had extensive hearings in 1981 and in 1980 about conditions in the facilities—whether towers, TRACONs, en route centers—about the state of the art of aviation technology. We went through all of that. We knew what needed to be done, it was all laid out in the course of hearings in the Subcommittee of Investigations and Oversight.

And when the government didn't participate in a cooperative and constructive manner with the air traffic controllers, they walked out.

My father had card number one at the Steel Workers Union in 1937, he was the first one to join. To establish the right of workers to bargain collectively and to withhold their services when the collective bargaining process broke down, that is a fundamental right. I was there at Farmington on August 4th. The strike occurred on August 3rd. And I stand with you today. We need to fix the collective bargaining process. Chairman Costello said that at the outset. We have got to fix it.

This isn't about what kind of shirt you wear in a darkened TRACON facility or what type of slacks you wear. Professionalism is not in your clothes, it is in your head. Professionalism is in the command you give to the aircraft. Professionalism is being able to handle 27 aircraft in your sector at a crisis time.

When a KC-135, for example, is in that airspace and it has a fire onboard and it is loaded with fuel, and you have got to get the other 26 aircraft out of that airspace, and you need every bit of professionalism, I don't give a damn whether you have got shorts on or a t-shirt on. I do care whether your commands are right; whether your separation is right; whether your management is sound. That is what this is about. The FAA needs to negotiate in good faith and we have to provide you with the tools to be able to do that, and we will find a way to do it.

Thank you, Mr. Chairman.

Mr. COSTELLO. I thank the distinguished Chairman.

Let me thank the first panel for their testimony and for answering our questions. You are dismissed. We thank you for your testimony.

We will hear from the second panel as soon as the Subcommittee resumes after the last vote.

[Recess.]

Mr. COSTELLO. If we could ask those who are on the second panel to please have their seats, we will go ahead and get started.

The Chair would like to welcome the second panel and make brief introductions. First, Captain Terry McVenes, the Executive Air Safety Chairman for the Air Line Pilots Association; Patricia Friend, the International President for the Association of Flight Attendants; Robert Roach, the General Vice President of the International Association of Machinists. We thank you for being here today and the Chair recognizes Captain McVenes under the five minute rule.

TESTIMONY OF CAPTAIN TERRY MCVENES, EXECUTIVE AIR SAFETY CHAIRMAN, AIR LINE PILOTS ASSOCIATION; PATRICIA FRIEND, INTERNATIONAL PRESIDENT, ASSOCIATION OF FLIGHT ATTENDANTS-CWA; ROBERT ROACH, JR., GENERAL VICE PRESIDENT, INTERNATIONAL ASSOCIATION OF MACHINISTS

Mr. MCVENES. Thank you, Mr. Chairman, and good afternoon. I want to thank you all for the opportunity to outline the Air Line Pilots Association's perspective on FAA safety and operational programs.

ALPA is the world's largest pilot union. We represent more than 60,000 pilots in the United States and Canada. The Association was founded in 1931 and our motto since its beginning has been "Schedule with Safety." Even today, in spite of the challenges and obstacles facing the airline industry, airline pilots remain focused on operating airliners safely and, as a result, the U.S. safety record is the envy of the rest of the world. From pilot fatigue to securing funding for modernizing the airspace system, the 110th Congress will need to play a pivotal role within the aviation community to maintain our unrivaled safety record.

Today's air traffic system is under more pressure than ever to accommodate more airplanes in the same airspace, and we are all too familiar with the recent media reports of 10 hour ground delays some of our airlines have experienced. Those delays are unfortunate, but the broader issue is that these delays signal a weakness in the system that may eventually lead to an accident if it is not addressed.

We must take these delays as a warning signal that the system needs help. We must proactively manage the safety risks that exist in our industry through safety management systems, or SMS, before an accident occurs. ALPA is a strong SMS advocate and Congress needs to monitor the FAA's progress on SMS implementation to ensure compliance with the ICAO standards deadline of January 1st of 2009.

The Aviation Safety Action Program, or ASAP, is a critical element of SMS or in any aviation safety program. It allows front-line employees to report safety and operational issues first-hand, enabling the industry to work together to find solutions to difficult problems.

As an industry, we have seen the value of ASAP go far beyond the cockpit to other employee groups in the airlines. Pilots and the airlines they fly for reap the safety and economic benefits of ASAP. In the air traffic arena, however, that same culture does not exist, and the front-line controllers' advice and input is often not welcome. They do not have a means to report safety or operational issues in the same cultural environment that many of the pilots at the other end of the radio do. And even though the FAA has encouraged and promoted ASAP for our Nation's airlines, they have not done so internally for the benefit of their own organization.

In order to take that next step in aviation safety, all components of the system must be involved in ASAP, including air traffic control. Congress must urge the FAA to expeditiously make ASAP a reality for air traffic controllers. And just like the airlines, this requirement requires a commitment from the very top of the organization; in this case the FAA, and in this case specifically the FAA Administrator. The Administration can make this happen and it will have a tremendous impact on the safety and efficiency of our entire air transportation system.

Allow me to switch now to transportation worker fatigue, which is a present and growing problem. FAA duty and roles for airline pilots are a dated patchwork of regulations developed over the past 60 years. ALPA recommends that Congress strongly encourage the FAA to modernize flight and duty regulations using rational, scientifically based working hour limits. Being on duty for 15 or 16

hours may make sense in a normal office environment, but it makes no sense for an airline pilot operating a complex machine in a complex environment, and it should make no sense to America's traveling public whose lives often depend on split-second decision-making.

ALPA has long advocated one level of safety in the airline industry. Nevertheless, there are several discrepancies between cargo and passenger carrier regulations that must be addressed in order to bridge the safety gap between passenger and all-cargo operations. Cargo airlines often operate in the same type of aircraft to the same airports at the same times as their passenger counterparts, and these aircraft need to be operated to the same safety and security standards, regardless of their payload. Flight deck door and firefighting requirements, to name just two of the issues, simply do not provide the same safety and security for cargo airlines as for passenger airlines, and legislation can fix that.

To keep our National Airspace System functional, Congress must secure long-term funding for improvements now. Modernization efforts must include upgrading computer and satellite systems to improve operational safety and efficiency. More effective tools must be developed that will increase capacity and will also result in lower fuel usage, reduce taxi times, more efficient gate management, and more efficient departures.

As a tragic overrun accident at Midway Airport in December of 2005 showed us, we also need to improve runway safety areas at all airports. The FAA's own numbers tell us that 45 percent of our Nation's airports must be improved to meet the standards. We also need to have more funding of industry research to develop accurate and reliable means to measure runway friction and to provide a reliable means to get accurate runway surface condition reports to the cockpit.

Next week marks the thirtieth anniversary of the disastrous ground collision of two airliners in Tenerite. While much work has been done to prevent a similar occurrence from happening again, we are all too aware of several close calls in Chicago and Los Angeles just in the last nine months, any one of which could have had a similar disastrous result. The runway incursion problem has been thoroughly studied and mitigations have been devised that can lessen the risk of runway incursions. However, the Government and industry must be willing to devote the resources required to achieve long-term solutions to this problem.

The final issue I want to mention is outsource maintenance oversight. One way that many of our carriers have cut costs since 9/11 is by reducing the amount of maintenance they perform internally themselves. When maintenance is outsourced, oversight becomes more complex and more difficult. Congress must ensure that the FAA retains the mandates and the resources to fill its oversight role in the new economic environment of outsource maintenance.

For more than 75 years, ALPA has had a tremendous impact on improving aviation safety. Today ALPA continues to be the world's leading aviation safety advocate, protecting the safety interests of our passengers, fellow crew members, and cargo around the world. Congress must help us ensure that the airline industry's safety net is not eroded. Together we can advance the aviation safety in the

years to come. As professional aviators who help keep this industry safe, together with the strong support of Congress, we are confident of success, success that is vital to the well-being of our Nation, our industry, and the traveling public. Thank you.

Mr. COSTELLO. Captain, thank you.

Ms. Friend, your statement, if you can give us a summary in five minutes or less.

Ms. FRIEND. Thank you, Chairman Costello, for giving AFA the opportunity to testify today. Flight attendants, as the first-responders in the aircraft cabin, have a unique perspective on a number of the safety programs of the FAA, and we are pleased to have a seat here today to discuss some of these issues.

Unfortunately, I must tell you that the FAA has repeatedly failed to take action on several fronts that would improve the overall safety of the employees that work under its jurisdiction. My written testimony highlights a number of important issues, but in the five minutes allotted today I want to focus on just two of them: flight attendant fatigue and the lack of basic workplace safety and health protections for flight attendants.

Fatigue is a very real and serious concern for the flight attendant workforce in this Country, just as it is for pilots. Some air carriers are routinely taking advantage of a reduced rest provision which allows a rest period to be reduced to eight hours. It is our understanding that the original intent of this provision was to accommodate day-of scheduling delays such as bad weather or air traffic control problems. This exception has become the rule and flight attendants are now so exhausted that they have informed us that they have, in some cases, forgotten to perform critical safety functions.

Using the term "rest period" can be misleading because it involves much more than just sleep. The rest period can begin as soon as 15 minutes after an aircraft pulls into the gate and continue until one hour prior to the next scheduled departure. This rest period must also include waiting and travel time to the layover hotel; checking in; eating a meal, since many of our carriers have eliminated flight attendant crew meals; getting prepared for bed; then getting dressed for work the next morning; traveling back to the airport and preparing for the flight. Our members are reporting that the actual sleep time in an 8-hour rest is in many cases only between 4 and 5 hours.

To further highlight the FAA's turning of a blind eye to this practice, an FAA spokesperson, in response to a question from the media on this issue, stated the FAA rules on flight time and rest for both pilots and flight attendants are fundamentally sound; they serve aviation safety very well. We fundamentally disagree.

Congress has recognized this problem and directed the FAA to conduct a study of flight attendant fatigue with a report that was due originally in June of 2005. After a year of stonewalling, the FAA finally released the report in June of 2006. The report concluded that flight attendants are definitely experiencing fatigue, and it went on to recommend specific areas for further evaluation. AFA's request is that CAMI be directed to continue their initial research and that it receive adequate funding to do so.

Like our longstanding battle to combat flight attendant fatigue, for well over 30 years AFA has been fighting for the most basic workplace safety and health protections for flight attendants. Those pleas continue to fall on deaf ears at the FAA. Flight attendants encounter numerous occupational injuries and illnesses while working aboard commercial flights. Their injuries are at rates several times greater than those for all private industry workers and even significantly greater than the rates experienced by construction workers.

The reason that flight attendants continue to experience such high rates of injuries is that we are not covered under OSHA. The FAA has repeatedly refused to take any significant action to enforce standards protecting the occupational safety and health of flight attendants. The FAA claimed exclusive jurisdiction over our workforce in 1975. After decades of inaction by the FAA, AFA filed a petition for rulemaking in 1990, asking the FAA to adopt selected OSHA safety regulations and apply them to airline crew members. Seven years later the FAA finally responded, declining the petition, stating that the issues do not address an immediate safety concern.

After increased pressure from AFA, progress seemed to be forthcoming when the FAA and OSHA entered into a historic Memorandum of Understanding in August of 2000. The MOU established a joint FAA-OSHA team to identify whether OSHA requirements could be applied to the working conditions of employees on aircraft. The first report of the joint team identified five basic OSHA protections that could be implemented without compromising aircraft safety concerns. Unfortunately, the team did not meet again until January 2002, at which time they could not agree on a time line for implementation of the relevant OSHA regulatory standards.

The DOT Inspector General has issued a report which concluded that unless FAA and OSHA resume working together, we have no confidence that industry standards will be issued in the near future to address occupational hazards. The report went on to recommend several concrete actions that the FAA and OSHA should take. It stated "If these recommendations are not implemented, it will, in our opinion, be apparent that after 25 years of limited progress, an alternative approach will be necessary." To date, the FAA and OSHA have taken no steps to implement the recommendations.

In light of the continued stonewalling on the part of the FAA, we believe it is time for Congress to force the FAA to relinquish the exclusive jurisdiction over flight attendant workplace safety and health. Thirty years of inaction is far too long.

Again, Mr. Chairman, thank you for giving me the opportunity to testify today.

Mr. COSTELLO. Thank you, Ms. Friend.

Mr. Roach, you are recognized to summarize your statement, please.

Mr. ROACH. Thank you, Mr. Chairman, for the opportunity to appear before this Committee. I am here representing the National Association of Machinists and Aerospace Workers at the request of International president R. Thomas Buffenbarger. We represent over 100,000 airline employees within this industry, employees at every classification with the exception of pilots. Our statement is in the record and we will be very brief here because, as I stated,

the statement is in the record and we don't want to take up too much time.

Our first situation is the NMB, National Mediation Board and National Labor Relations Board jurisdiction. While Congress has been discussing and voted on H.R. 800, the Employee Free Choice Act, which gives the employees an opportunity to be recognized by a carrier, we have a large group of employees who were certified under the National Labor Relations Act under the existing procedures, signed up for an election, voted secret ballot, had been represented in some cases for 10, 20, and 30 years, who overnight have lost union representation because of a change in the interpretation of the law by the National Labor Relations Board and the National Mediation Board.

For example, in Minneapolis we had well over 200 members certified in the IAM since 1973. Overnight, in 2006, they lost union representation because they wanted improvements in their particular contract. This is creating an unsafe condition because, instead of having long-term loyal employees working on the airports, fueling planes and delivering certain items to the airports, we have a group of employees who are making minimum wage and change jobs very rapidly. We think that a change in the law is required to fix this problem.

In addition, the lack of consistency by the National Labor Relations Board, National Labor Relations Act, and the Railway Labor Act in terms of express carriers. Under UPS, the employees, the truck drivers and the mechanics, the ground mechanics are covered under the National Labor Relations Act. At Federal Express, because the term "express carriers" was entered in the middle of the night into the law, Federal Express employees are all covered by the Railway Labor Act, which means to organize these employees, they must be organized throughout the entire Country, which is much different than what has happened at UPS. So there is a lack of consistency and there is not a level playing field between the carriers.

We represent a large number of flight attendants as well, and we echo Sister Friend's concerns about flight attendant fatigue, as well as the fact that OSHA does not have control over the safety of flight attendants. We also have a concern about self-defense. Currently, today, self-defense training is voluntary and the TSA handles voluntary training. We do not believe that since 9/11 and the tragedy that 9/11 has caused, that self-defense training, which is designed to protect the individual flight attendant, as well as the flying public, should be voluntary. There should be mandatory training for all flight attendants, all active flight attendants.

Foreign repair stations, there is insufficient oversight. There is not enough funding to get the proper inspections. A number of jobs have gone overseas, which every job that goes overseas is 16 other support jobs that we lose in this Country. We believe it is a matter of national security, as we export technology and jobs overseas, at some point in time some of this technology may come back to the United States to hurt us. It wasn't that long ago that President Saddam Hussein was an ally of the United States, until he became a terrorist, a member of the axis of evil.

Foreign competition, we quickly want to echo the sentiments of my colleagues here, that we do not believe that any additional foreign intervention into ownership of airlines would be beneficial. Increased ownership must not be allowed. Congress rejected President Bush's Administration plan and that position should not change. The airports are a very safety sensitive place to work, it is a very dangerous place to work, and we believe that more oversight, not less oversight, is required.

Since 9/11, we believe that because of subcontracting of work to small operations the safety of the airports and the employees and the flying public has been compromised. We stand ready to work with this Committee and the Members of Congress in providing any input that we can as a machinists union to improve the conditions.

We are prepared to answer any questions. Thank you.

Mr. COSTELLO. Mr. Roach, we thank you.

Captain McVenes, a couple of quick questions, please. One is in your testimony you indicate that there is a need to ensure that the aviation community does not become a culture of capacity, but a culture of safety, and I wonder if you might elaborate on that.

Mr. MCVENES. Currently, today, there is a lot of emphasis being placed on increasing capacity and that is a good thing, it is good for the traveling public, it is good for everyone to get capacity up. However, we cannot increase capacity just for the sake of increasing capacity unless we make sure that good safety safeguards are part of the solution to increasing capacity.

Mr. COSTELLO. I wonder if you might talk a little bit about the outsourcing of maintenance. In your testimony you indicate how there may be difficulty in the distance between maintenance being done and the people ultimately responsible for its correct completion, the more complicated the process might be by outsourcing to foreign countries and so on.

Mr. MCVENES. What we are finding, there is a very wide range of differences in the various repair stations out there that many of the airlines are using for this outsourcing. Some are done very well, some are not done so well. The results that we are getting back when the airplanes come back into service, a lot depends on the oversight that took place by the regulatory authorities at that repair station. So we have to ensure that that oversight continues. If there is not good—you know, everybody has got budgets that they are trying to work under, including the FAA, when it comes to oversight, but we have to make sure that they have got the funding there to have the right oversight, regardless of where the repair station is, to ensure that the work coming out of there is done correctly.

Mr. COSTELLO. Well, we share your concern, and if you were here for my opening statement, that is an issue that we are going to delve into further.

Let me just say I really do not have questions at this time for Ms. Friend or Mr. Roach, but let me say that with the flight attendants, I think you have made a very compelling case, not just today, but in many instances, the 30 years of inaction. We hope that, as we move forward with the reauthorization and other legis-

lation, we can address some of the issues that you in fact have been working so hard to address over the years.

Mr. Roach, the issue with the National Mediation Board, I couldn't agree with you more, and at some point in time I hope that we can work with you to address that issue as well.

At this time, the Chair recognizes the Ranking Member of the Subcommittee, Mr. Petri.

Mr. PETRI. Thank you very much, Mr. Chairman. Let me just say, first of all, as a member of the traveling public, I would like to thank all of your members for the generally high level of service that you provide. I mainly see the stewardesses or flight attendants, and they have a lot of challenges and do a great job almost all the time.

I have a couple of questions, and this one you may not really want to answer, Captain, it has been a hot potato in the community for years. The international rules seem to be changing in the direction of allowing pilots who meet health safety standards to fly up to age 65 with a co-pilot who is 60 or under. This has been debated, obviously, and I know you have Members on both sides of this. Do you have any guidance you can offer to us here in Congress on that issue?

Mr. MCVENES. Well, you are absolutely correct, it is a very divisive issue for all of us, and it is one that we really are putting a lot of effort into completely understand. As it stands right now, in light of the FAA's announcement for wanting to change the rule—and it is going to be placed into rulemaking—we feel that is the proper venue to deal with the age 60 question. Through that rulemaking process we can make sure that all the issues are addressed, safety and operational issues, to ensure they get addressed correctly, and whatever decisions are made, that they are done with all of those things in mind. But we really believe the rulemaking process is the way to go.

Mr. PETRI. Thank you.

In your testimony, Ms. Friend, you strongly urge that we have legislation to encourage regulations setting bag weight limits in the cabin, I guess, on the planes. Is there a reason for that?

Ms. FRIEND. This is the carry-on bag issue?

Mr. PETRI. Yes.

Ms. FRIEND. Right. There are a number of reasons. First of all, the excess cabin baggage is a primary cause of a lot of injuries for our members attempting to get those bags properly stowed. We also believe if we limit the amount of baggage that is allowed into the cabin, that it also expedites the security process because the screeners have less bags that they have to examine through the x-ray machine, and we believe it increases the level of safety. I mean, there is just a limited amount of space in the cabin of that aircraft, and just traveling as a passenger, I can see how overstuffed those bins are, and I have no confidence at all that they would hold in any kind of an accident or incident, that that cabin would be littered with baggage and impede the safe evacuation of those passengers. So, yes, we strongly urge a reduction in the amount and size of baggage allowed in the cabin of the aircraft.

Mr. PETRI. Mr. Roach, could you expand on your testimony opposing foreign investment in U.S. airlines? I am interested not in

control or management of airlines, but just investment in the American corporate—it is a global world; we are investing all over the world in a variety of ways. Why wouldn't it be a two-way street?

Mr. ROACH. Well, we are talking about control. The current investment level as it stands now, we are not trying to change that. But there is a lot of discussion about increasing investment from foreign carriers and in some cases some standards that don't appear to be control but is control. I go back to my days when I represented people at British Airways and British Airways invested $450 million in U.S. Airways, and there was some discussion with the Department of Transportation that they could not have control, and an executive of British Airways said to me in the hallway one day, he said, you know, you don't invest $450 million in anything and don't have control; we have control.

So the more investment that we allow and the higher the percentage of this investment, they, at some point, have control over these airlines and it becomes anti-competitive in our view. And they have decimated the foreign flags in this Country. All the foreign flags that used to fly here, they have all disappeared or been reduced. So we think that foreign investment could be a very bad thing once control, once a foreign carrier or a foreign entity takes control of an American or domestic carrier.

Ms. FRIEND. Mr. Chairman, may I add a comment to that?

Mr. COSTELLO. Please.

Ms. FRIEND. I think, Congressman Petri, it is all in how you look at the U.S. air transportation system. I look at it as a public service, and in many cases as a part of our national defense when we provide the civil reserve air fleet and when we provide military airlift during times of war. It is not an auto plant or a bank or a telecommunications industry, it is part of our infrastructure, and I just don't think that control of it should be in foreign hands.

Mr. COSTELLO. Thank you.

The Chair recognizes the gentleman from New York, Mr. Hall.

Mr. HALL. Thank you, Mr. Chairman, and thank you to all of our panelists.

I agree, Ms. Friend, with the statement you just made about critical infrastructure and services that relate to our national security—at certain times they definitely relate to our national security—needing to be in American hands.

I wanted to go back to Captain McVenes' testimony that the fatigue cushion once provided by negotiated work rules has been completely eliminated. I was curious if you could elaborate on that.

And then, Ms. Friend, if you would also speak to fatigue and to the CAMI study on fatigue and what recommendations were made.

Mr. MCVENES. If you take a look at the regulations that have been developed for flight duty and rest periods, they really date back 60 years, to a time when we were flying piston-powered airplanes and sometimes three pilot crews and very short haul operations. The way we have dealt with the changes in the industry in spite of those rules has always been through the collective bargaining agreements, where we were able to secure more realistic rest periods, more realistic duty times from those collective bargaining agreements.

After 9/11, when the industry went through a very tremendous economic downturn, we lost a lot of those—there were a lot of changes that were made in those collective bargaining agreements as they applied to flight and duty time and rest periods. Consequently, we are at a point now where most of our airlines are operating strictly under the basic Federal regulations, the FARs, so we are seeing now that we are having a lot more issues purely from a safety perspective just on fatigue, and the reason has been because the contracts have changed.

Ms. FRIEND. Captain McVenes is right. Those duty and rest times were intended to be a floor, and a floor that we never actually had to face and work under until all of the concessionary agreements made during bankruptcy. We now know that it is an inadequate floor.

But on your question of the original CAMI fatigue study, in the initial study, CAMI reported that they only had time to really review existing literature and do some preliminary interviews or surveying of cabin crew members or flight attendants. What they recommended that they do is a more extensive study, actually follow selected crew members around and measure their reaction times at certain points in the duty time or following the reduced rest.

So we have asked or we are asking that they be fully funded for what they need to complete that study so that we can only identify that flight attendants are fatigued—we know that—but we can identify where is the break point, what is the maximum amount of duty and minimum amount of rest that is required to maintain the vigilance and the reaction time that is necessary.

Mr. HALL. Thank you. I also wanted to ask, Ms. Friend, about your testimony about poor air quality in the cabin or treatment of the aircraft with pesticides and the risks that you are aware of or that you suspect to passengers and crew.

Ms. FRIEND. On the question of the pesticides, several countries require either active pesticide spraying or residual pesticide spraying. We have a number of our members and we are aware of some passengers who have suffered continuing health problems as a result of being exposed to this spray. Talk about Australia, where we do residual spraying, where the cabin seats and the crew bunks are literally saturated with a pesticide and then allowed to dry for maybe 8 hours, and then people actually are seated. And, you know, whether or not you have a particular sensitivity, you know, you in fact can be affected by this spray even though it is dry. What happens with our members is that they have repeated exposure and they do build up a sensitivity and suffer from rashes and even from some neurological damage.

We have been working with the Department of Transportation on an alternative to chemicals, something that is called an air curtain, and actually has been tested and does work. We are actually going to be testing it soon in Puerto Rico. The government there has agreed to test, and if they are satisfied that it works, then they will eliminate the chemical spray and go to this air curtain. So the DOT has been very cooperative in working with this and are committed with us to try to persuade other countries to abandon the chemical and go with this non-chemical approach.

Mr. HALL. Thank you very much, and thanks for all the work that you do and your members do.

Thank you, Mr. Chairman.

Mr. COSTELLO. I thank my friend from New York.

The Chair recognizes now, under the five minutes rule, the gentleman from Illinois, Mr. Lipinski.

Mr. LIPINSKI. Thank you, Mr. Chairman. I want to thank all of our witnesses for their testimony. I was actually back in my office listening to all your testimony. I appreciate the work that you do on behalf of those who are working and putting themselves in these situations. I know we were talking about flight attendants, the important safety role that they serve right now. I think that is especially true.

One thing, quickly, I just want to ask in regard to, again, a safety question, but safety at airports. I want to ask Captain McVenes your testimony indicates that much more needs to be done to ensure the safety of runways and the airport environment. Right now, Midway Airport, there was an unfortunate situation where the plane ran off the runway. The runway safety areas are small there, but right now we are putting in the EMAS to restrict the planes that may go into the runway safety area. Are there any other recommendations that ALPA has in this regard in general?

Mr. MCVENES. Certainly, the effects of EMAS installations are something that can really help at those airports that are geographically challenged, shall we say, for runway lengths. We also have to take a look at the operating waves that we allow some of the airplanes to operate at when they go into some of these airports to ensure that they can safely be operated. In the other areas of runway safety, there are tests being done with runway status lights, for example, that can help in the runway incursion area. Tests were done in Dallas, also in San Diego, and I know there are some other airports around the Country, including O'Hare, I think, that have taken a look at this system as a means to help that runway incursion problem.

These type of things, along with perimeter taxiways, could really go a long way to help runway safety. And then we can start taking a look at some very simple solutions, simple things like proper markings on the taxiways and runways; hold short lines, how they are signed and marked can help in that runway incursion area, too, to help us in this, the runway safety problem we have.

Mr. LIPINSKI. Thank you.

A quick question for Mr. Roach in terms of airport workers. There has been some talk about maintaining safety and making sure only people who should be in an airport are allowed in there. Do you have any concerns one way or the other on the rules or the access right now to the airport? Do you experience any problems?

Mr. ROACH. I think with a lot of the subcontracting of work that is going out, there are a lot of people coming on the airports that do not work for airlines, and that has been increasing over time. I recall some years ago at Continental Airlines, there were 100 employees who were working on the overnight cleaning who belonged to a company, not Continental Airlines, and it was found this company that had brought these people in had illegal documents and we didn't know who these people were or what they were doing.

The access to employees coming on the airport, they all must go through a security check, but access for non-airline employees, driving trucks onto the airport, is very bad, and we have a concern for the people that we represent that people have access to the airports who have not been checked, who don't have criminal background checks, who have not been tested, and that these people are allowed to come on the airports. So we do have a concern about that particular group coming onto the airport.

Mr. LIPINSKI. Thank you.

Thank you. I yield back the balance of my time.

Mr. COSTELLO. I thank the gentleman and I thank all three of our witnesses. We appreciate your testimony here today and look forward to working with you as we proceed with the reauthorization. Thank you.

At this time, the Chair will ask the third panel to come forward, and while you are coming forward I will make the introductions.

Dr. Gerald Dillingham is back with us today. He was here yesterday and was very patient yesterday and has been patient today. He is, of course, the Director of Physical Infrastructure issues with the Government Accountability Office. Mr. Steve Baker, who is the President of the FAA Managers Association; Mr. Warren Kroeppel, who is the General Manager of LaGuardia Airport, the Port Authority of New York and New Jersey; Dr. Steve Sliwa, who is the CEO and President of The Insitu Group; and Mr. James Renninger, who is the Director of Aviation Center of Excellence, Florida Community College at Jacksonville.

We would ask that you all take your seats, and we will proceed with Dr. Dillingham. You are recognized. Again, we appreciate not only you being here yesterday and today, but all of your good work. You are always very responsive to the Subcommittee, both in the past and currently, and we appreciate all that you and your folks do.

TESTIMONY OF GERALD DILLINGHAM, DIRECTOR, PHYSICAL INFRASTRUCTURE ISSUES, U.S. GOVERNMENT ACCOUNTABILITY OFFICE; STEVE BAKER, PRESIDENT, FAA MANAGERS ASSOCIATION; WARREN KROEPPEL, GENERAL MANAGER OF LAGUARDIA AIRPORT, THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY; STEVE SLIWA, CEO AND PRESIDENT, THE INSITU GROUP, INC.; JAMES B. RENNINGER, DIRECTOR, AVIATION CENTER OF EXCELLENCE, FLORIDA COMMUNITY COLLEGE OF JACKSONVILLE

Mr. DILLINGHAM. Thank you, Mr. Chairman, Mr. Petri, Mr. Lipinski. This FAA reauthorization comes at a very critical time for the Nation's air transportation system and the FAA. The current system is under stress, as evident by last year's record delays and the increasing number and duration of air traffic control system outages. My testimony this afternoon addresses three specific questions: What progress is FAA making with the operation of the current ATC program that will be essential foundations for NextGen? Secondly, what are the key operational issues that need to be addressed to help ensure a successful transition to NextGen? And, third, what are the key safety areas that need to be addressed for

the continued safe operation of the Nation's air transportation system?

With regard to the current system, over the last few years, FAA has made significant progress in moving to more business-like and cost-effective operations of the air traffic control system. There are, however, some significant challenges that need to be addressed during this authorization period. One of those challenges is for FAA to institutionalize the progress that it has made in managing the operations of the current ATC system. This challenge is made even more difficult because the new FAA Administrator and a permanent leader of FAA's air traffic organization will also need to be selected.

Mr. Chairman, because the next few years are very critical for implementing NextGen, FAA may want to identify a candidate for chief operating officer at the ATO who is able to serve the full five-year term.

There are other significant challenges that need to be addressed. For example, FAA must address the problem of the increasing number and duration of ATC system outages. Maintaining existing systems as it begins to acquire NextGen systems is critical, since these existing systems will be the core of the Nation's ATC system for years to come.

Finally, continuing FAA initiatives, such as facility consolidations and closings, should be based on a risk assessment and with full involvement of the Congress and FAA's internal stakeholders, including the controllers and the technicians.

Now I would like to identify some of the key operational issues and challenges associated with the transition to NextGen. One challenge is FAA's ability to maintain critical acquisitions on schedule and on budget. This will be essential to meeting the goal of transitioning to NextGen by 2025 and minimizing any cost increases and schedule delays.

Another challenge is the coordination that will be necessary between the ATO, which is charged with the operation and maintenance of the current air traffic system, and the JPDO, which is sometimes referred to as being responsible for the visionary component of the system.

The operational evolution partnership is FAA's plan for providing continuity between the current system and the vision to come. The challenge is the extent to which the plan is actually implemented.

Now I want to turn to our last issue and identify the areas that need to be addressed during reauthorization for continued safe operation of the air transportation system. First, ground safety is an area of concern and will continue to be because air traffic is forecast to grow substantially during the coming decade. FAA needs to keep on schedule to deploy technologies that help prevent runway incursions, a safety issue that remains on NTSB's most wanted safety list.

Second, FAA needs to work with Congress to establish the appropriate regulatory approach for some system users. For example, Congress may want to revisit FAA's dual role of both regulating the safety and promoting the commercial space industry. In light of the recent spike in air ambulance accidents, FAA may want to

revisit the regulation under which air ambulances currently operate.

A third safety area that needs attention is improving the accuracy and completeness of safety data and FAA's analysis of that data. Accurate, complete information would provide FAA with the basis for a data-driven risk management safety approach. Such an approach could give the agency an early warning of hazards and national trends, thus potentially averting accidents.

A fourth safety challenge is FAA's ability to manage its human resources, specifically, the hiring, training, and deployment of its safety inspectors, engineers, technicians, and air traffic controllers.

And, lastly, the FAA and the unions must find ways to work together to minimize conflict and maximize cooperation for operating the current system as well as transforming to NextGen.

In the final analysis, each of these challenges that I have identified has the potential to significantly affect the safety and efficiency of the Nation's air transportation system and should receive serious consideration in this reauthorization.

Thank you, Mr. Chairman.

Mr. COSTELLO. Thank you, Dr. Dillingham.

The Chair now recognizes Mr. Baker for his statement, if you could summarize in five minutes or less.

Mr. BAKER. Thank you, Chairman Costello and Ranking Member Petri. I appreciate the opportunity to come before the Aviation Subcommittee and provide you with a perspective of the managers throughout the FAA system on safety and operational programs.

The FAA Managers Association is made up of non-bargaining unit employees within the FAA from each of its lines of business. We promote excellence in public service and are the advocates of managing the skies in a safe and efficient manner for the flying public and the aviation industry, and adhere and implement the guidance of Congress.

While we, as an association, represent all managers within the FAA, today I will primarily be focused on delivering the perspective of the air traffic managers within the system. I would like to focus my comments on basically three areas: first, thank you to this Committee for your leadership and including Section 226 in the last FAA reauthorization; second, I will discuss the need for increasing the air traffic front-line managers; and, third, I will share our perspective of how the current system is working.

Section 226 expanded accelerated retirement to some second level managers within the air traffic control field. We basically have an accelerated system whereby, with 20 years and age 50, we can retire. With 25 years we can retire at any age. It was, in the past, limited to simply air traffic controllers and front-line managers. This Committee, under the leadership of then Chairman Mica and now Chairman Oberstar, along with Mr. Costello and Mr. Petri, got language inserted that expanded that retirement benefit and eliminated a huge disincentive for our controllers to move up within the ranks, and it is not often that we get to thank you guys for what you do for us. We really appreciate it. It was legislation that worked. It was bipartisan. It did exactly what it was supposed to. Thank you for that.

My second point speaks to the pressing need for appropriate levels of oversight at the front-line level. It is important to emphasize where air traffic managers come from. We are not plucked out of the sky; we are not hired off the streets. We are actually air traffic controllers that have moved up within the organization. It is impossible to be a front-line manager, an air traffic manager in the FAA without having that background and experience.

The actual floor set by Congress is currently 1,846 front-line managers. Unfortunately, that is a level that the FAA has been unable to attain thus far. In 1995, we had 772 operational errors, and operational errors, of course, are when aircraft get below the standards, too close. By 2005, that operational error rate had risen to 1,506. That is a 95 percent increase in operational errors. In 1995, runway incursions were 249. By 2005, they were at 336. That is a 35 percent increase.

The only difference between today and 1995 in the way we staff our facilities is actually in the front-line manager ranks. We have tried for several years, and Congress has helped in setting a floor, and we hope that Congress will continue to help us reach those levels of necessary front-line managers. We continue to try to work with the FAA to increase those levels of management. We are hampered by budgetary constraints and currently undergoing a huge restructuring, which you heard much about this morning, and I am sure you will continue to hear much about in the years to come.

The FAA is hiring a brand new workforce. We are turning over an entire group of air traffic controllers in a very short amount of time. These are all reasons why we need the proper amount of front-line managers in there to oversee the changes that have to do with NextGen, that have to do with hiring a new workforce, that have to do with bringing on new systems. It all requires the proper amount of oversight, and I was pleased to hear all of the unions this morning express the need for proper oversight.

We want to make sure that the Committee understands that our association, while independent from the FAA, is not at a battle with any of the unions over their contracts. We do, however, have grave concern that we are changing a process that has already been put in place. To reverse a process now would have very bad effects on the entire agency in terms of morale, in terms of cost. I have no problem with setting a set of rules up for future negotiations, but to go backwards in time now would have dire effects.

These impasse procedures were developed in 1995, when the FAA was removed from Title V and a process was put in place to make sure that Congress maintained control of the budget. To send a contract to mandatory arbitration by a disinterested third party, Congress would lose control of that budget, and that concerns us.

Mr. COSTELLO. Mr. Baker, we thank you for your testimony.

At this time, the Chair recognizes Mr. Kroeppel.

Mr. KROEPPEL. Chairman Costello, Congressman Petri, Congressman Hall, and the other distinguished Members of the Subcommittee, good afternoon. I am Warren Kroeppel, the General Manager of LaGuardia Airport for the Port Authority of New York and New Jersey. On behalf of the Port Authority, I would like to thank you for organizing this hearing and giving me the opportunity to testify today and to share with you our thoughts regard-

ing the management of the Nation's largest airport system and some of our current challenges. My comments will be brief and I request that my entire statement be entered into the record.

The Port Authority of New York and New Jersey operates four airports that are critical to the Nation's trade, travel, commerce, and tourism. It is a rapidly growing gateway. John F. Kennedy International, Newark Liberty International, LaGuardia, and Teterboro Airports are used by 104 million passengers with over 2.6 million tons of cargo and 1.2 million aircraft movements in 2006. LaGuardia is by far the smallest of New York area's three commercial airports, consisting of only 680 acres in area. It has two intersecting 7,000 foot runways and four passenger terminals with 73 gates.

The FAA's propose of NextGen legislation seeks to address a fundamental and undeniable problem: the scarcity of airfield resources at LaGuardia. It has been clear since the high density rule was established in the late 1960s that certain airports have insufficient runways and taxiways to handle unconstrained demand without experiencing significant congestion and the attendant delay and passenger inconvenience.

At LaGuardia, the problem is exacerbated by the fact that no amount of labor, capital or entrepreneurship, can expand the constraint on that capacity, which is actually airport land. The highly constrained facilities at LaGuardia are not capable of absorbing the demand for access to the airport without the use of tools to manage the inevitable delay and strain on the airport infrastructure that would ensue if access were left unchecked. Managing congestion is just one of the key goals for LaGuardia in the post-high density rule era.

Congress also had established the goal of creating opportunities for new entrants and ensuring service to small communities. In addition, the FAA and Port Authority were concerned about the efficient use of airspace or throughput. To address congestion management, the FAA correctly focuses on the need to continue to place limits on flight activity consistent with the supply of capacity. The Port Authority agrees that this is an FAA responsibility; however, the Port Authority believes that the current limit on operations at LaGuardia may not be low enough and that now is the time to further examine this limit to determine whether reduced hourly operations rate or other measures will prevent delays from accumulating to excessive levels.

While we agree with the goal of providing new entrants and limited incumbents access to LaGuardia, we have great concern about the FAA's approach. The NPRM proposed that starting in 2010, and every year thereafter, 10 percent of all existing operating authorities would be reallocated. The NPRM, much like the language in the NextGen bill, are silent on the mechanics of how this would actually work.

A turnover of this nature would create excessive roiling for the entire airport community. Airlines that have spent years building their schedules so that it could provide hourly service in high demand business markets would be faced with potentially losing key pieces of their operation. Even if the airlines were successful in restoring some elements of their lost 10 percent by repurchasing

through whatever mechanism is instituted, there is no certainty they would be able to restore their schedules.

As for carriers who may successfully acquire new operating rights through their forced annual reallocation of the 10 percent of LaGuardia's capacity, there is no certainty that they will find contiguous gate space which would permit them to take advantage of the new opportunity in a commercially viable manner. Both the NPRM and the NextGen bill are filled with uncertainty that is quite troubling to airlines, the airport, and the customers we serve.

The Port Authority strongly agrees that in the case of LaGuardia, where it has been established that aeronautical capacity is finite and cannot be expanded, the over-abundance of service to large markets with small aircraft effectively precludes other services. Both the FAA and Port Authority differentiate between small planes to large places, which often poorly serve the traveling public, and small planes to small places, which is the only way small communities can afford access.

Although the Port Authority supports the many principles, doctrines, and tenets that the FAA has articulated, in the Port Authority's view, the proposed rule and legislation needless interfere with the airport operator's proprietary rights to manage LaGuardia. More importantly, it appears that the proposal would have undesirable impacts on the airport, the airlines, and ultimately the traveling public due to the fundamental mismatch between the proposed airfield policy and the management of the land site infrastructure.

The FAA's proposal is too prescriptive and improperly assigns to the Federal Government the responsibility of managing access to the all-important airport gate facilities, rather than acknowledging the responsibility for doing so rests with the airport operator as the manager of the facility.

The Port Authority has determined that an alternate approach is preferable, realizable, and responsive to the aforementioned goals. The FAA needs only to set the operational hourly limit and to establish the criteria for service to small communities. The Port Authority will then exercise its right to manage utilization of access to LaGuardia's terminal and gate facilities, which avoids many of the potential pitfalls in the NPRM proposal and the NextGen legislation.

The Port Authority proposes using its proprietary rights to effectuate gate utilization measures, in consultation with air carriers, to achieve the objectives that Congress and the FAA have articulated. The Port Authority has legitimate interest as the proprietor of the airport to seek to optimize the efficient use of limited airport capacity and facilities to promote competition at LaGuardia.

The FAA acknowledges there is a tremendous uncertainty embedded in the LaGuardia NPRM, uncertainty as to what Congress will authorize and uncertainty as to how market clearing charges will work in its first application in the United States aviation context. Rather than face this tremendous uncertainty with the resultant high disruptive effects on airlines, airports, and the customers, the Port Authority believes that it would be preferable to use gate leasing policy, which is a time-tested and common industry practice. The FAA should set the hourly capacity at LaGuardia, provide

for small community access, and empower the Port Authority to proceed with its gate leasing policy. We urge Congress to enable the Port Authority to proceed with a simpler, more simple solution to LaGuardia's congestion issue: incentive-based gate leasing policy.

If the Administration's provision for congestion airports are incorporated into legislation, we then urge Congress to engage gate leasing policy as a potential market-based mechanism.

Mr. COSTELLO. We thank you for your testimony, and the Chair, at this time, would recognize Dr. Sliwa.

Mr. SLIWA. Thank you, Chairman Costello. Mr. Petri and Members of the Subcommittee, good afternoon. It is my pleasure to be here today in support of your review of FAA operational and safety programs in our Nation's air traffic system. Thank you for this opportunity. There are some significant partnering opportunities which, if taken, can foster and advance commercial applications of unmanned aircraft system activity without compromising the safety and established operating procedures of the National Airspace System.

I am the CEO of Insitu, a small, fast growing company that develops and produces UAV systems. We received recognition in 1998 as the first company to fly an unmanned aircraft across the Atlantic Ocean. It weighed 40 pounds, took 27 hours, and burned a gallon and a half of gas. More recently we are known as the developers of the ScanEagle system, which we jointly deploy with Boeing. It is flown over 36,000 hours in Iraq and from ships on the U.S. Navy, making it the fourth most used UAV in U.S. history, and is still on a commercial off-the-shelf, COTS, system.

There are well over 400 small companies in the U.S. that are involved in unmanned aircraft system development and component manufacturing at various levels of sophistication. The situation is similar to the 1930s and 1940s, when many airplane companies built the legacy of aviation we all enjoy today. Many predict that the 21st century will be the century of autonomous aircraft.

However, the commercial unmanned aircraft market is outpacing the incremental processes which create procedural or regulatory guidance. Current market analyses assess that the unmanned aircraft system products and services market will grow to be $15 billion in annual revenue within the next 8 years. We need your help to capture this market and, with its capture, help assure U.S. leadership in aviation.

Although the operations to date have been in support of the military operations, civilian applications are beginning to become viable as these systems mature. In fact, we at Insitu have commissioned for several civilian applications in the coming year valued in the millions of dollars. We see many opportunities in the future, ranging from minerals assessment, search and rescue, resource management, and to homeland security.

But these civilian applications, and even supporting the research, training, and production flight testing needs for military applications, require access to the U.S. airspace system. In fact, I would say that the foremost challenge in achieving growth in this dynamic market is a safe, sustained access to airspace.

The FAA Unmanned Aircraft Program Office is developing guidance and regulations for the certification and integration of unmanned aircraft in the NAS and is supported by an FAA-commissioned industry working group through RTCA which just completed a compilation of recommended best practices and guidance material, and trade associations such as the Association of Unmanned Vehicle Systems, known as AUVSI. We in the industry applaud this first step and we are proactively collaborating with this Program Office and with other FAA offices and with industry working groups and trade associations.

However, we can't achieve progress rapidly on the current path. The United States unmanned aircraft industry is sometimes cast an envious glance at the regulatory practices of our allies and trading partners like Australia and Canada, which encourage unmanned aircraft experimentation with flexible risk assessment, continuous data collection, and continuous improvement. As a case in point, the FAA has stopped issuing certificates of authorization for other than government agencies to experiment with UAVs in the national aerospace system. This past February, the FAA published policy guidance in the Federal Register related to unmanned aviation systems and is viewed by many in our industry as an attempt to create regulations by policy inference.

We believe that defining industry performance parameters without first encouraging the industry to demonstrate its level of performance is comparable to the classic catch-22 paradox. We applaud the efforts the FAA is making, but it is resource-constrained when it considers the challenges before it. Unmanned aircraft range in range from a few ounces to many tons in gross weight. Some have applications they want to test in very remote locations and others want to interoperate with commercial aircraft on instrument flight plans.

Unfortunately, trying to apply rules and regulations to such a diverse field of unmanned aircraft, with a few pages of guidance, is problematic, and trying to quickly apply the current rules developed for the manned aircraft infrastructure to this class of aircraft is not likely to be fruitful for broad and rapidly evolving industry. For example, the FAA is currently using the manned experimental aircraft rules for unmanned aircraft industry, which has significant flaws as the industry develops.

I have five suggestions helpful to the industry, to the FAA, and to our Nation: one, provide sufficient personnel and financial resources for FAA unmanned aircraft system policy exploration, development, and application; two, encourage the FAA to experiment, collaborate with industry, and collect data; three, reintroduce the use of civil certificates of authorization for commercial companies with appropriate FAA safety case reviews and monitoring; four, encourage the FAA to address huge variations in unmanned aircraft types and risk factors; and, five, discourage the current regressive practice of regulating via policy promulgation.

In conclusion, safe access to the airspace requires both a mix of technology, policy, and regulation, and also judicious and reasonable experimentation. We encourage Congress to increase the FAA unmanned aircraft systems program application funding to equip the FAA with the tools and incentive to encourage military and ci-

vilian experimentation, and we encourage Congress to support FAA sound policy based upon knowledge of distinct unmanned aircraft system classes, current technology, and industry needs.

Mr. COSTELLO. Dr. Sliwa, thank you.

Mr. Renninger, you are recognized under the five minute rule. Thank you.

Mr. RENNINGER. Well, thank you, Chairman Costello and Members of this Subcommittee. I am pleased to be here today to discuss air traffic controller training, the FAA college initiative, and suggestions for increasing the number of qualified air traffic controllers.

As you are probably aware, there is a looming crisis in the Nation's control towers, as controllers hired in the wake of the 1981 strike reach retirement age. Not only do these controllers need to be replaced, but there is also a growing need to provide additional air traffic control services for the new transportation systems brought on by things such as very light jets.

Government experts predict that by 2025 there will be three times the number of planes in the skies as there are today. Numerous GAO studies have been warning for years about the need to better prepare for controller attrition, and FAA's own projections indicate that approximately 72 percent of the current air traffic controller workforce will be eligible to retire in the next 10 years. Clearly, there is a need to attract and train new air traffic controllers and use all available resources to provide the technical training they require.

Currently, there are three sources from which the FAA gets air traffic controllers: number one is former DoD and FAA controllers; number two is students from the CTI schools; and number three is applicants responding to FAA vacancy announcements.

The percentage of controllers supplied by the CTI programs varies, but was 33 percent of the total as of November 2005 and 25 percent at the end of fiscal year 2006. Now, these figures do not reflect the true value of CTI graduates who had required less time to be certified after the mandatory on-the-job training for all controllers. Only controllers who have transferred from another FAA facility require less time to certify at their new positions. It is clear that the training and education that controllers receive at the colleges and CTI schools prepares them to join the air traffic controller workforce with minimal cost from the FAA.

Now, CTI was started in 1989, when Congress established the Mid-America Aviation Resource Consortium (MARC) to provide ATC training in Minnesota. Hampton University followed shortly thereafter, and was awarded FAA funds for ATC training in 1990. Interest in this program led to the FAA adding three more schools in 1991: Community College in Beaver County, UND, and University of Alaska. Nine more schools were admitted to the CTI program in 1997. There have been no new schools added since 1997 and there is no process with the FAA to become a CTI school, although there is a strong interest in joining this group by well qualified schools.

Graduates of CTI schools earn either an associate's or bachelor's degree in aviation administration or management that incorporates basic training courses for air traffic controllers. Air traffic control-

lers need this associate's degree just to be a controller, and they need a bachelor's degree if they want to move on into management. The cost of earning a degree varies widely among the CTI schools, from a low of about $4,000 for an associate's degree from a public school to a high of almost $100,000 for a bachelor's degree from a private university. The cost is borne by the student, who comes to the FAA ready for on-the-job training that is necessary to be certified.

Once in Oklahoma, they undergo further training before going to their final FAA facility, where they will have on-the-job training that is specific to each position. Only after successfully completing this training are the developmental controllers certified and able to begin working as air traffic controllers.

Being designated a CTI school is very important for a college or university that wants to offer ATC training. Only graduates from a CTI school can have their names added to the hiring database maintained by the FAA. It is from this database that individuals are chosen for further training and employment. The FAA currently has no process to admit any new schools to the CTI program. Well qualified schools that offer other FAA certified training have indicated an interest in becoming CTI schools and have been rebuffed. The FAA needs to open the CTI school process that are able to meet the FAA standards for air traffic control training. If the FAA can certify training for pilots and aircraft mechanics, there should be no reason why they cannot certify air traffic controller training programs and degrees at colleges and universities.

The benefits of becoming a CTI school are these: they increase the pool of pre-screened candidates and also the pool of qualified applicants at little or no cost to the FAA; they also have applicants in the region where the demand exists the most. The advantage of the flexibility of community colleges and universities, who are the experts in workforce education and training, is that we can do this at a fraction of the cost of what private schools charge.

Mr. Chairman, this concludes my remarks, and I hope I have convinced you of the need to open up the FAA's college training initiative program. I can tell you that Florida Community College at Jacksonville is currently providing FAA-certified training in aircraft mechanics, as well as pilot training, and we see no reason why we couldn't do training in air traffic control as well. I think we can do this for the betterment of the air traffic controllers who are going to man our aircraft control towers, terminal radar facilities, and our traffic control centers of the future.

Thank you very much.

Mr. COSTELLO. We thank you for your testimony and we thank the entire panel. I know it is difficult to summarize your remarks in five minutes, but you all did pretty well.

Let me ask a few questions.

Dr. Dillingham, the FAA recently released an updated version of their controller workforce plan, and I just wondered what GAO's impression is of this current version of the controller workforce plan.

Mr. DILLINGHAM. Mr. Chairman, we think that the FAA has done a credible job in recognizing that they have had more retirements than they had initially projected and, therefore, have made

an attempt to bring more people into the pool. We do have a concern about the fact that there are fewer past DoD controllers and the fact that even some of the CTI graduates are finding other jobs.

So what that means, of course, is that you are going to have a core of people that are going to need more training, you are going to have less experienced controllers in place for a while. I think the number is something like 40 percent of the controllers within the next five years will be there less than four years, and it usually takes three to five years to be a full performance controller.

So they have made some steps. You know, it still is a work in progress, as far as we can tell.

Mr. COSTELLO. And there is still reason for concern. I mean, we are not here to beat up on the FAA, we are here to delve into issues and arrive at conclusions and try and provide solutions.

You heard testimony earlier today concerning the issue of the controllers, and I think it is a fact that there are fewer DoD controllers going to work for the FAA and, as you mentioned, the CTI grads are finding other jobs as they graduate. What is the primary reason for that. That hasn't taken place in the past.

Mr. DILLINGHAM. Well, I think it was mentioned earlier that our research has shown that when the candidates take a look at what the starting salary is now, as opposed to what it was prior to, when they understand what the work rules are, and another thing that was mentioned today that we also found to be the case is that DoD is offering incentives to keep their people in. So those are the major contributing factors that we have been able to discern.

Mr. COSTELLO. In your opinion, what does the FAA need to do to ensure that there are enough air traffic controllers in the future to handle the traffic?

Mr. DILLINGHAM. I think what they have started to do is a step in the right direction, that is, to look at staffing by facilities and also to get a surge of candidates to take into account that they are going to be losing more than they did in the past. I don't know if you want to call it PR, but the notion that there is such discord between labor and management probably is something that has to be addressed; otherwise, you are not going to have people wanting to go into that situation, so somehow that has to be ameliorated.

Mr. COSTELLO. And you mentioned, I think, in your testimony that if in fact—and we all, both the Ranking Member, Mr. Petri, and the Ranking Member of the full committee, Mr. Mica, Chairman Oberstar, and myself, we have all encouraged the FAA and the unions to try and come together and work out their differences and to reach an agreement. You mentioned in your testimony that if in fact relations between the FAA and their unions improve, it could have a positive effect on safety. I wonder if you might elaborate on that.

Mr. DILLINGHAM. Yes, Mr. Chairman. I think it is a pretty well understood and accepted principle, and I think somebody mentioned it earlier today, the idea about a happy workforce, and I think it is a little bit more than a happy workforce. I think, you know, if people can concentrate on their jobs, particularly a job such as an air traffic controller job, you have got to have a focus on that, you can't be concerned about other things. So that is one of the things.

We also, at the Government Accountability Office, are trying to think about how we can do a study to actually look at labor management relations at FAA because it is clearly a unique situation in government. We recognize that we don't think either the majority or the minority will ask us to do any work like that, so we are going to try to work with the Comptroller General to get permission to do that kind of work.

Mr. COSTELLO. Very good. I thank you.

The Chair recognizes the Ranking Member, Mr. Petri.

Mr. PETRI. Thank you very much. I have several questions, first for Mr. Kroeppel.

I get the impression—I mean, LaGuardia is under a lot of pressure. You are at capacity and you have a very huge market to serve, and your customers, both the traveling public and the airlines, spend a lot of years developing their shuttles and all of that sort of thing. Will you be developing some specific proposal or something that we can put our teeth into as we analyze the FAA's proposal, to kind of have a managed capacity situation? They are trying to develop a national plan and you obviously have a lot of stakeholders and a huge problem and could be affected by it a lot; and there are control issues and uncertainty issues, and people have invested a lot in developing various programs. Could you expand on that or could we work with you on this?

Mr. KROEPPEL. Yes. That is actually the gist of the issue, Congressman. As we had mentioned, the real issue here that we have, we agree with most of the FAA proposals, except for the one as far as just how to do it. The real key to this is we have to match the airspace capacity to the available ground resources. We actually did look at different market-based scenarios. We found that it didn't work.

So while we agree with the FAA that they should set the limit of airspace and also assign small community access, the way to really do this to make it work at an airport would be to give us the tool to use our own gate leasing and management system, and the best example I can give you is this: What really concerns us is in the proposal there is a proposal with 10 percent reallocation per year, and a good example of that would be, for example, if a Delta on the east side of the airport, in a terminal on the east side of the airport would lose 10 percent of its capacity, if, for example, an American Airlines on the west side of the airport, through some mechanism, would gain those, it really wouldn't work for them because they wouldn't have contiguous gates and economically it would not work for them.

So we feel the only way we can actually match the land site resources to the air site capacity made by the FAA would be by giving the airport proprietary right of having this gate management system, which would allocate those scarce resources properly.

Mr. Petri. Is there a money issue in this too? If you auction off obviously a scarce resource, one way to allocate it is by charging more or having people bid. Is there an issue as to who gets the money from some sort of a queue management system like that?

Mr. DILLINGHAM. Well, that is one of the issues, but, really, we felt that if it does go to some type of auction-based solution or some type of peak period charge use, it really wouldn't solve that issue.

Where it breaks down for the airlines and the customers is how does that 10 percent, how do these resources on the ground, how do you match that, how does it become realized and how does the operation run smoothly.

So the real key of that is the control would be us having control of the gates and basically managing the resources and making that available to new competitive services and allowing new entrants to come in. With the way the system is now, airlines can have gates and not utilize them to the proper capacity. So this solves a lot of issues.

Mr. PETRI. Well, this is a complicated issue that requires, I suspect, much more extensive analysis and discussion than we can do in this particular forum, but thank you for raising it and for your testimony.

I just wonder if I could talk with Mr. Baker for a minute. I don't know if we should be alarmed or how we should deal with the situation of the quarter of a million grievances in the FAA. Is this a sign of bad management, or is this a tactic, or what is going on here?

Mr. BAKER. Well, if you look at the makeup of the grievances, Mr. Petri, you will find that many of them are grievances because my manager told me I couldn't wear shorts to work. So many of them are frivolous. We actually have a huge concern about what so many of those types of grievances in the system, that we look over grievances. They all matter, but there are real grievances out there and we don't want to miss those. Those grievances have overwhelmed the system.

I believe they are under control now, off the facility level, which was my concern. The union has every right to grieve anything within the statute, and they did so. Now we have gotten it off the facility level and it is up at the higher levels, where it always should have been anyway. We did as good a job as I think we possibly could have, taking the distraction of the contract, imposed work rules, whatever you want to call what we have, out of the workforce so that our actual facilities can focus on safety, which is what we are there for, and I think we are doing that.

Mr. PETRI. Thank you.

Mr. COSTELLO. I thank the Ranking Member.

In fact, the LaGuardia question, I was going to delve into that a little bit, but I think Mr. Petri covered it. I think it is an issue that is not going to be resolved today, but we are going to have to work with you and others on it.

I have no further questions, and if the Ranking Member does not, I want to thank you, all of you and all of our witnesses today. I think it has been a very productive and comprehensive hearing. So we thank you. We look forward to working with you as we move forward with the reauthorization.

With that, the Committee stands adjourned.

[Whereupon, at 1:39 p.m., the Subcommittee was adjourned.]

STATEMENT OF THE
THE HONORABLE JERRY F. COSTELLO
SUBCOMMITTEE ON AVIATION
HEARING ON
A REVIEW OF THE FEDERAL AVIATION ADMINISTRATION'S
OPERATIONAL AND SAFETY PROGRAMS
MARCH 22, 2007

- I want to welcome everyone to the third Subcommittee hearing on the Federal Aviation Administration (FAA) reauthorization. This hearing will provide a general review of issues associated with FAA's operational and safety programs. This hearing represents an opportunity for our panelists to discuss issues that they believe this Committee should consider in the context of the reauthorization.

- The first panel will include comments from the FAA's workforce, including the controllers, as represented by the National Air Traffic Controllers Association; air traffic technicians and aviation inspectors, as represented by the Professional Airways Systems Specialists, and other FAA professionals represented by the American Federation of State County and Municipal Employees.

- As I have stated previously, I am very concerned about future staffing levels for the FAA's controller and safety inspector workforces. In particular, over the next 10 years, approximately 70 percent of FAA's nearly 15,000 air traffic controllers will be eligible to retire. FAA estimates that it could lose more than 10,300 air traffic controllers by 2015 and it will need to hire approximately 11,800 controllers over the next 10 years to have enough recruits in the pipeline to meet the positions lost.

- I am also concerned that FAA's unilateral imposition of pay and work rules on the controller workforce has accelerated retirements. According to NATCA, veteran controllers are currently retiring at a rate of more than three per day since the end of fiscal year 2006.

- In addition, it is not just NATCA that is affected by the FAA's interpretation of its authority to impose pay and work rules: it extends to the FAA's entire workforce. I look forward to hearing from PASS and

AFSCME on the status of their respective contract negotiations with the FAA.

- It is clear to me that the contract negotiation process as currently designed does not promote good faith negotiations and gives an unfair advantage to the FAA. I am committed to fixing this grossly unfair process during the FAA Reauthorization bill.

- I am also concerned about potential attrition in FAA's safety inspector workforce. It is my understanding that over one-third of FAA's safety inspectors will be eligible to retire by 2010. Last year, the National Research Council reported that FAA lacks staffing standards for inspectors and recommended that the FAA undertake a holistic approach to determine its staffing needs.

- It is imperative that we make the investments in FAA's workforce now so that they can meet the new challenges for maintaining the highest level of safety in this ever changing aviation environment.

- The air carrier workforce is also well-represented here by the Air Line Pilot's Association, the Association of Flight Attendants and the International Association of Machinists. With the airlines largely back on track after the events of September 11th, it is time once again to turn our attention to workplace and safety issues. To that end, I look forward to hearing about issues of concern to pilots, flight attendants and mechanics.

- On our third panel today, we will hear from a diverse group, including a return visit from Gerald Dillingham, of the Government Accountability Office, to discuss issues related to safety, accommodating new users in the airspace system, airport congestion and air traffic staffing and training.

- With that, I want to again welcome the witnesses today and I look forward to the testimony.

Statement of the Honorable Frank A. LoBiondo
Aviation Subcommittee Hearing
March 22, 2007

Mr. Chairman, thank you for holding this important hearing today. I share your concern about safety of our aviation system. The continued outsourcing of maintenance work, new work rules on controllers and the failure to provide adequate security training to our flight crews are compromising the safety of air travel. Also of concern to me is the impact of the FAA's current impasse process for its bargaining units on workplace morale and ultimately safety.

As you know, the current process requires the FAA to submit to Congress its last offer when mediation fails. If Congress fails to act within 60 days, the FAA may impose its last offer on employees. As we have seen with the NATCA contract, this process enables the FAA to short circuit any real attempt at bargaining and mediation and allows the agency to impose its will when Congress fails to act. The result is low workplace morale and a high number of experienced employees leaving the agency. And I think we all understand the impact on safety when a large number of experienced controllers leave the agency.

In my district, AFGE Local 200 FAA employees who do the critical job of keeping our aging air traffic control system functioning are currently at impasse with the FAA on a contract that has been in negotiation since 1999. The FAA recently walked out of mediation and is expected to forward their last offer to Congress in the coming weeks. I am very concerned that as a result, the agency is going to lose these very experienced employees at a time when their vital competencies are critically needed. I have included with my statement Local 200's testimony and would encourage all members to review it closely.

I strongly believe that Congress needs to reform the current impasse system to ensure fairness for employees. Last year I sponsored legislation with Representative LaTourette that attracted over 270 members of the House, but unfortunately failed to reach the 2/3 necessary for passage. This legislation would have forced the FAA into real mediation and would have prohibited the agency from imposing its will on employees. I look forward to working with the Chairman to include this or similar legislation to reform the system in the FAA reauthorization or other appropriate legislative vehicle.

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AFGE Local 200 Testimony for Submission to the House Subcommittee on Aviation

March 22, 2007

FAA Collective Bargaining Process Leads to Imposed Work Rules and Pay Plans on FAA Bargaining Units

Good Day Chairperson Costello, Ranking Member Petri, and Distinguished Members,

AFGE Local 200 represents approximately 250 Federal employees at the William J. Hughes FAA Technical Center. Those employees perform essential technical support of electronic systems that are used to control air traffic in the FAA's National Airspace System (NAS). The systems used by Air Traffic Control personnel rely on us for the deployment of new and improved NAS products and on expert repair and restoration services when systems fail.

We are writing to bring attention to the plight of all FAA Bargaining Units with regards to Federal Aviation Administration (Agency) Collective Bargaining law. As Congress is well aware, the current law allows working conditions to be imposed by the Agency with no third party analysis and/or 'sanity checks'. The Unions have no right to strike and therefore must work under imposed rules and pay.

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Members of the Subcommittee, as a matter of urgency, our Local is the next Bargaining Unit in line to be imposed upon. Our own experience with this process shows that the FAA has no incentive to negotiate on contested issues. After the Agency imposed working conditions on two large Bargaining Units, it was clear that, not only did they not concede on any issue under contention, but regressed and/or rescinded previous written Agency proposals. Our bargaining team signed three Management proposals, returned them across the table and was promptly told that "things had changed" since the proposals were delivered. The Agency then regressed and took the position that the articles were not needed in the contract at all.

Deleted: contract

Further proof of the Agency's lack of incentive to negotiate serious issues follows. Throughout negotiations on work rule articles, it was repeatedly stated by the Agency Chief Negotiator that the existing Agency Team did not have the authority to negotiate budgetary issues nor pay. At the conclusion of work rule negotiations, the Agency would commit other negotiators to the process for that purpose. Upon entering discussions on these issues, the Agency rescinded its position and committed no persons with the authority to negotiate budgetary or pay issues to the process. Even upon initiation of the Mediation process, no agency representatives were present or consulted with on those issues under contention. The Agency simply believed there was no need because their proposal can be forced upon us.

The Reality Of 'Mediation'

AFGE Local 200 negotiators met on March 15, 2007 with the Agency Chief Negotiator and one non-budgetary manager under the facilitation of Commissioner John Gabrick of the Federal Mediation and Conciliation Service (FMCS). During the day, the Agency Chief Negotiator let it be known that the Agency's intent was to complete the effort that day.

What ensued was not mediation. There were numerous written concessions made by the Union while there was not a single Agency proposal or counter proposal. The Agency made threats of outsourcing the Bargaining Unit's jobs rather than making an effort to find one single thread of agreement.

It became apparent later that no mediation was intended by the Agency. The Union, using data from an Agency presentation on pay, offered to forego $700,000 in additional pay over the next three (3) years simply by staying in the current pay system. It was known to the Union that the $700,000 for our 250 employees ($1,300,000 over 5 years) was an enticement to enter into the Agency's Core Compensation Pay System. The Agency refused to concede anything including saving this amount of labor costs in the 3-year term of our contract.

In Closing:

Congressmen and Congresswomen, the urgency of our situation is hard to convey without putting a face on the negative impacts our employees will be subjected to without due process. Immediately, impacts will hit technical, administrative, professional and specialized occupations within our Bargaining Unit. Without a fair Collective Bargaining mechanism to follow, about 40% of our employees will be adversely impacted within two and a half years. We have married couples, 30-year employees, and 3-year employees; all of whom we can prove will be financially impacted negatively for life.

The situation as we know it is this:

- Though our Local is committed to negotiating a contract, we are anticipating a written declaration of 'impasse' from the Agency.

- Upon such declaration, we await a solicitation under the current law by the FAA Administrator. This solicitation would request, and we quote 40122, Section A, Paragraph 2; "...the objections of the exclusive bargaining representatives to the change, and the reasons for such objections...". The Administrator is required by this law to transmit to Congress these objections and reasons for the objections along with the Agency's proposed change (their 'last, best').

We urgently request that if the Agency's submission does not include such objections and reasons for them, that Congress reject the submission and direct the Administrator to comply with the existing Law.

In addition, we must resort to filing of Unfair Labor Practices with the Federal Labor Relations Authority for the Agency's failures to negotiate. **We again urge Congress to reject the Agency's submission while FLRA deliberations are pending.**

We are highly appreciative of Congressman LoBiondo's keen understanding of our situation and thank you all for your time in hearing our submission. Clarification on any of our statements or further insight into the FAA Bargaining Process or Core Compensation Pay Plan may be addressed to Robert Challender, Vice President, AFGE Local 200.

T&I Subcommittee on Aviation
A Review of Federal Aviation Administration Operational and Safety Programs
Statement of Rep. Doris Matsui
March 22, 2007

Thank you Chairman Costello and Ranking Member Petri for holding this important hearing on FAA safety and operations.

Operational and safety programs are at the core of the FAA's mission. The proper execution of these programs and activities determines the effectiveness with which the National Aviation System serves our constituents. We have an incredibly safe aviation system and this reauthorization should work to build and improve on what has already been accomplished.

I thank the witnesses on today's panels for their testimony and the perspective they bring to this debate. Many of today's witnesses represent the men and women that make up the backbone of our aviation system. To meet the increasing demand for air travel, it is important that the Committee learn from their experience and listen closely to their testimony.

I know there are some serious concerns about the nation's ability to meet the demand for air traffic controllers in the coming years. These are jobs that require extensive training, so we need to make sure the FAA's hiring plan is in line with the demands that we will face. There is significant disagreement on this issue and this Committee certainly has a responsibility to ensure that we have an adequate hiring plan in place.

On another issue, from looking at this FAA proposal and the administration as a whole, there is a tendency to try to outsource activities and duties to the private sector. As we have seen in other areas of government—and I know Chairman Waxman is looking at this very closely—the private sector does not always serve the public as well as government employees do. So this is an issue that I have serious concerns with and we should examine it closely.

I don't want to take any more time from the witnesses. So thank you to everyone who will testify today. We appreciate your perspective and your time.

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Statement of Rep. Harry Mitchell
House Transportation and Infrastructure Committee
Subcommittee on Aviation
3/22/07

--Thank you Mr. Chairman.

--Today is the third in a series of hearings on FAA reauthorization.

--When we began these hearings last week, I identified a number of issues of concern to me.

--Among these, safety is, of course, the most important.

--With that in mind, I look forward to hearing from today's witnesses about our air traffic control system.

--According to the FAA, 70 percent of our air traffic controllers will become eligible to retire over the next 10 years.

--We need to make sure the FAA has the resources it needs to recruit, train and maintain controllers to replace these retirees, and keep the flying public safe.

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--I am also deeply concerned about reports of passengers being trapped on grounded planes for extended periods of time without access to food, water and medical attention. In some cases passengers have been held in such conditions for more than seven hours .

--In my view, this is not just a matter of comfort and convenience. It is a matter of safety, and deserves to be addressed.

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--Our Chairman has been a leader on safety, and I want to thank him again for all his hard work.

-- I yield back the balance of my time.

OPENING STATEMENT OF
THE HONORABLE JAMES L. OBERSTAR
SUBCOMMITTEE ON AVIATION
A REVIEW OF THE FEDERAL AVIATION ADMINISTRATION'S
OPERATIONAL AND SAFETY PROGRAMS
MARCH 22, 2007

I want to thank Chairman Costello and Ranking Member Petri for calling today's hearing on *A Review of the Federal Aviation Administration's Operational and Safety Programs.* I understand that this is the third in a series of hearings that will inform the debate on the Federal Aviation Administration (FAA) reauthorization as the Committee moves towards introducing legislation.

I am pleased to see both the FAA and air carrier workforces well represented here today. We all recognize the tremendous contribution that each of these aviation professionals makes in ensuring that our aviation system is the safest in the world. While the post-September 11th period has been difficult, especially for aviation labor, most of the major airlines are back on track, and safety and operational issues are back in the forefront.

For our nation's nearly 15,000 controllers, this past year has been fraught with anxiety and frustration over the failed contract negotiations with the FAA. On April 6, the FAA declared an impasse in its negotiations with the National Air Traffic Controllers Association (NATCA) and sent the dispute up to Congress under a

provision that FAA argued gave it the right to unilaterally impose its contract terms if Congress did not act within 60 days. The FAA's subsequent imposition of its pay and work rules has had a harmful impact on the workforce, including an acceleration of retirements.

When legislation that would have allowed the contract dispute with the FAA to be resolved by the procedures that govern collective bargaining for pay at other federal agencies was brought up in the House, the Republican leadership forced a vote under Suspension of the Rules, which requires two-thirds of the House to vote for passage – a threshold much higher than the majority vote required under regular order. The bill failed by 8 votes. I have every confidence that under the new Democratic leadership, we will have a procedure that will permit majority rule on these types of issues.

FAA's interpretation of the law gives it an inherent, unfair advantage to impose its contract terms on its employees. Such a one-sided process affects the workforce agency-wide and has been an impediment to good faith negotiations that could lead to voluntary contracts. I look forward to hearing from both the Professional Airways Systems Specialists and the American Federation of State County and Municipal Employees on the impact of this provision on their respective contract negotiations.

We will also hear from representatives of the air carrier workforce, who are here today to discuss key workplace safety issues, including fatigue. With the industry's ever increasing emphasis on productivity and driving down labor costs, we need to be mindful of this important issue as it pertains to all aviation professionals, from pilots to controllers, to flight attendants and mechanics. As I have often said, fatigue does not show up in autopsies! Our nation's aviation professionals must be provided adequate rest to perform their critical safety functions. Anything less is simply not acceptable.

Other critical safety issues will also be discussed, including controller and inspector staffing, runway safety, issues associated with new and emerging users of the airspace system, as well as long term maintenance of our air traffic control equipment. Each of these issues must be carefully examined to ensure that safety remains paramount as we move to the next generation aviation system.

Thank you again, Mr. Chairman, for holding this hearing. I look forward to hearing from our witnesses.

STATEMENT OF

REP. THOMAS E. PETRI, Ranking Member

SUBCOMMITTEE ON AVIATION

HEARING ON

"A Review of Federal Aviation Administration Operational and Safety Programs"

March 22, 2007, 10:00 am, 2167 RHOB

Good morning. I would like to welcome our witnesses today and thank Chairman Costello for calling this hearing.

As indicated by Chairman Costello, today's "reauthorization hearing" will address FAA's operational and safety programs.

While today's testimony will reflect the broad variety of issues that Congress will be considering during this FAA Reauthorization cycle, it is important to remember that we are conducting this hearing at a time when America's aviation system has been safer than at any time in our history.

This remarkable safety record has been achieved through sound policy and continuous oversight. Nevertheless, we must continue to strive for an ever safer aviation system.

Therefore, I look forward to learning more about the FAA's operational and safety programs.

With that, I yield back the balance of my time.

Remarks of U.S. Rep. Nick Rahall
Hearing on the review of FAA Operational and Safety Programs
Subcommittee on Aviation
2167 Rayburn House Office Building
March 22, 2007

Mister Chairman, thank you for giving me the opportunity to address this issue and I appreciate all of the continued attention both you and Chairman Oberstar have brought to the issue of aviation safety.

I would also like to thank the witnesses who have taken time out of their schedules to testify before this Committee today, their service and commitment is noted, and appreciated.

It is not overly dramatic to say that safety is the most important aspect that FAA can ensure; it provides the foundation of trust between the carrier and the flying public. As we saw in the days after 9/11, when that trust disappears, so do the passengers.

To further the goal of keeping the flying public safe, this committee routinely reviews those programs and raises concerns that we feel have been overlooked.

My main safety concern, and that of several members of this committee, is the ongoing contract dispute with the air traffic controllers. This is not something only with which Congressmen and women have concern, the Government Accountability Office has also cited this as an area of concern in aviation safety in a report they issued on this topic in late 2006.

There are several points, that when taken as a whole, create a problem that is far greater then the FAA has accounted for. In 1981, President Reagan fired the air traffic controllers and hired new ones. It is now 2007, giving those who may have stayed the entire time, 16 years of service. When added to the anger that has been fomented from this ongoing contract dispute, I feel that you are underestimating the number of air traffic controllers who are retiring.

Additionally, the time to begin replacing them is not years off, the time is now. In order for an air traffic controller to complete his training, and not be put in charge of the safety of thousands of people daily without significant on the job training, we need to recruit them yesterday; at the very time this Administration is creating a schism with these same employees.

As we proceed with the formulation of the next FAA reauthorization, please know that this is an issue that is not going away, and will indeed receive further scrutiny.

Thank you again for allowing me to participate in today's hearing, and I ask that my statement be included as a part of the official record Mister Chairman.

Opening Statement
Congressman John T. Salazar
T&I Aviation Subcommittee Hearing
FAA Operational and Safety Programs
March 22, 2007

Thank you, Mr. Chairman.

I'd like to thank all of the panelists for being here today.

I welcome the opportunity to examine how the FAA is managing the operation and safety of the air transportation system as it transitions to NextGen.

I think it is safe to say that safety is our number one priority.

Efficiency, modernization, sustainability—these are all issues we are striving for with this reauthorization.

But safety is paramount.

I'd like to call attention to an article in yesterday's USA Today.

According to the article, air traffic control towers at small and medium airports—which, by the way, are the only kinds of airports we have in my district—have been routinely understaffed with only one person on a shift.

As the reporter accurately notes, this is a blatant violation of federal aviation rules.

The seriousness of such understaffing was unfortunately brought to our attention with the horrible accident in Lexington, Kentucky this past August.

This horrific event highlights the dangerous reality of having just one air traffic controller manning a tower.

Another matter of interest—we have been informed by the FAA that they intend to co-locate or consolidate the TRACON in Pueblo to either Colorado Springs or Denver.

I have voiced my concerns about such a move and must be honest that I have not been impressed with the FAA's response, or lack thereof.

I understand the potential cost savings of a facility consolidation, yet I have strong reservations that the FAA has thoroughly considered the safety implications of co-locating this TRACON.

I think everyone on the subcommittee is well aware of the ongoing issues between our air traffic controllers and the FAA.

Yet when safety is at stake, we need to find common ground and work to resolve our differences…for the sake of the American air passengers' wellbeing.

The controller staffing problem must be addressed.

We cannot allow the American people to be in harm's way because the FAA refuses to work with our controllers and come to an agreement.

I look forward to the testimony today and again, I thank the panel members for being here.

Thank you.

Testimony of Steve Baker
President of the FAA Managers Association

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Subcommittee on Aviation
Hearing on
March 22, 2007

Testimony of Steve Baker
President of the FAA Managers Association
Subcommittee on Aviation
Hearing on
March 22, 2007

Chairman Costello, Ranking Member Petri and Members of the Committee, my name is Steve Baker and I am the President of the FAA Mangers Association. I appreciate the opportunity to come before the Aviation Subcommittee and provide you with the perspective of field Air Traffic managers throughout the FAA system. As an incorporated Association, our mission is to promote excellence in public service and to ensure aviation safety and efficiency. Our organization, which represents all levels of management in the Federal Aviation Administration's lines of business, operates as effectively as agency safety parameters will allow. Among those we represent are the front line managers who develop, train and oversee the air traffic controllers. It is critical that you know that to become a front line manager, each of our Air Traffic Managers and or supervisors must have served successfully first as an air traffic controller. Additionally, we are an organization representing the leaders who carry out the Federal Aviation Administration (FAA) mission of providing the safest, most efficient aerospace system in the world. Each of our members understand very well the challenges that they face on a daily basis and as an organization we are focused on fostering communication of information, ideas, and opinions throughout all lines of business. Finally, our organization will continue to work to improve the working conditions for our members while supplying superior opportunities for professional development.

I would like to focus my comments on three key areas. First, I want to thank you for the leadership that Congressman Oberstar and Congressman Mica provided in Vision 100, the last FAA Reauthorization Bill, that fixed a major inequity in the retirement system that deterred highly qualified individuals from seeking promotion to senior air traffic supervisory positions from the ranks of Front Line Manager (Operational Supervisor). Second, there is a need to increase the statutory number of supervisors within the FAA to improve and enhance safety in the system, especially as the FAA continues to hire new air traffic controllers. Third, I want to provide you with my Association's views on how the current system is functioning

I would like to thank this Committee for including section 226 in the last FAA Reauthorization bill (Public Law 108-176). Section 226 changed several aspects of the ATC retirement system that impacts supervisors and managers in the Air Traffic Organization. Prior to the enactment of this section, only air traffic controllers and first-level supervisors were given full credit for operational time worked toward their retirement. Under the revised statute, some second-level supervisors now receive credit for time worked at favorable accrual rates. You have fixed a large part of what was a major disincentive for air traffic control supervisors to apply for more

senior supervisory positions. In Air Traffic today, we have 8 – 10 supervisors applying for every second level position that become available. Prior to the enactment of the law we had one or two applicants, and sometimes none. The net effect allows management to pick among highly qualified supervisors and assemble a team of the very best, which helps maintain the tiered level of management and oversight that is required in a difficult and challenging air traffic environment.
By removing that prior disincentive to move up in the supervisory ranks, we are able now to attract and recruit the best people for the job. So thank you very much for correcting that inequity.

Now for our number one issue for this FAA Reauthorization legislation: increase the number of Air Traffic Front Line Managers. In 1998, the Clinton Administration, as part of the collective bargaining agreement with the air traffic controller union, agreed to fund controller pay increases by eliminating 700 supervisor positions at air traffic control facilities across the country. At the time, many were concerned that fewer supervisors in the towers, TRACONs (Terminal Radar Approach Control, Enroute centers, and traffic management units would negatively impact safety. The FAA countered that safety would not be jeopardized and that the gap in supervision would be bridged through the expanded use of 'controllers in charge' (CIC), putting a seasoned controller temporarily in a supervisory role. Prior to 1998, CICs had been used typically when operations were slow and when supervisors took short breaks. In 1999 when the CIC program was expanded, it was implemented with the understanding that a small group of exceptional controllers would be selected and appropriately trained for the expanded supervisory role. Unfortunately, this did not occur. In 2000, the DOT Inspector General found that the FAA was bypassing its own selection process and designating virtually all available controllers as CIC eligible. According to the FAA, more than half of all controllers were deemed eligible for expanded CIC duties. In many facilities, nearly all controllers were designated as a CIC.

The lack of proper supervision at air traffic control facilitates has had a dramatic impact on safety as well as the working environments. Operational errors, runway incursions and delays have risen. In February 2003 in testimony before this subcommittee, the DOT Inspector General, warned "at least three serious operational errors and one serious runway incursion occur, on average, every ten days." Clearly there is a link between the level of supervision in the air traffic environment and safety. We offer the following statistics to demonstrate how safety has been jeopardized. Operational Errors in 1995 were 772, in 2005 they rose to 1506 a 95% increase. Additionally, in 1995 Runway Incursions were 249, in 2005 they rose 336 a 35% increase.

In FY04 and FY05 we were successful in obtaining funding and language included in the Transportation Treasury Appropriations Bills to start incrementally hiring supervisors. At present there is a floor of 1,846 supervisors mandated in law. Unfortunately, the FAA ignored the mandate and never had more than 1,801 permanent first line supervisors. This directly affects safety and efficiency in the

system. Our organization has discussed the need for more supervisors with the FAA's leadership, and we continue to engage in a dialogue with them on this issue. Recent attention has been placed on the need to hire additional controllers in anticipation of increased retirements. In contrast, very little planning has occurred for maintaining the continuity and expertise of the operations supervisors and managers who are an equally important element in the overall system. Supervisory retirements need as much attention as controllers retirements, but the FAA did not include in its workforce plan how they were going to keep up with supervisory retirements yet alone with congressionally mandated numbers.

We believe that there should be at a minimum 2,050 first line supervisors in the system. This number is based on our assessment of the current air traffic environment that has dramatically changed and with greater numbers of operations since 1998. While there have been discussions in the past about ratios of supervisors to controllers, we believe that such a rigid, fixed ratio system is counter productive. We need the flexibility to manage the challenges that we will face while being able to place more supervisors where the system is stressed and to use our resources in other facilities to ensure that we maintain the level of safety and efficiency the flying public expects.

I say this not to be critical of controllers, but rather to emphasize the fact that proper supervision is essential to a safe aviation system, and we strongly believe that the best person to provide this oversight is a trained and dedicated supervisor.

This brings me to my last area of focus today- our perspective on how the current system is working. Air Traffic Control supervisors and managers received unprecedented extensive training before the contract was implemented. This contract has permitted each of us to better manage the operational workforce and apply our resources where they are most needed. I have heard from my Membership across the country that the changes that have been implemented have been positive. One major aspect was the restructuring of the Controller-in-Charge program. We think that this was a wise decision on behalf of the FAA, and it is a prudent use of the scarce dollars that are available to manage our air traffic system.

I am fearful that if the contract were to be nullified, as some are suggesting, that it would have the unintended affect of encouraging many, many supervisors to retire. Of the managers we represent, approximately 71% are eligible to retire. Our conflict is not about the content of the contract per se, but rather the impact it will have on the safety and efficiency of the system we manage, and how the FAA would pay for increased benefits under a revised contract. There is no budgetary excess within the FAA, the agency is financially stretched, and our organization believes the agency should not sign any agreements we cannot afford. Additionally, our organization supports an impasse process that is fair for all parties and is never retroactive. Any agreements that do not provide meaningful savings and result in creating uncertainty to the managers we represent, most likely will generate chaos

and produce a difficult work environment, which may jeopardize safety in our system.

In 1995, aircraft system delays were 236,794; in 2004 they were 455,786 and increase of more than 90 percent. Delays in the system are extremely costly and amount to approximately $9.4 billion a year. That figure will only rise if we do not do everything we can to reduce or eliminate delays, not to mention the inevitable mistakes that could be made as traffic increases while management oversight decreases.

According to the U.S. Bureau of Transportation Statistics, arrival delays in January 2007 soared to 24.2 percent, the highest in that month since 2000. For all of last year, about 22.6 percent of flights arrived at least 15 minutes late. That amounts to 1 in 4 flights being affected. Failure to adequately staff our management oversight positions in the field facilities, those directly responsible for the safe operation of the National Airspace System (NAS), will continue to exacerbate the problems. Resources for the FAA will remain constrained, and as we move into the 21st century enlightened and challenged with leaps in technology only dreamed of yesterday, we must ensure the proper oversight of this progression and transition. Most importantly, without all factors taken into account, the safety of the flying public will be put at risk.

We are faced with complex problems in the areas of scheduling, equipment, data acquisition, airspace design, and technologies both old and leading edge. Yet, with all the studies and evaluations that have been conducted, a clear solution to the problems seems to elude us. FAAMA believes that, through an examination of past and present experiences, a vital component has not been sufficiently scrutinized.

The piece of the puzzle we at FAAMA know to be underestimated and under-addressed is management oversight and support. The Front Line Manager in the Air Traffic Control operational environment is the liaison between safety and efficiency and the management official directly responsible for the development, training and certification of the next generation of air traffic controllers. Second-level supervision in the larger Air Traffic facilities (pacer airports and above) is an integral part of this safety/efficiency formula, as are the support specialists who provide training, procedural development, and quality assurance, and the personnel responsible for maintaining the equipment necessary to operate the NAS. Since 1995, the FAA has embarked on an initiative to improve the agency's efficiency, following the recommendations of Vice President Gore's *National Performance Review* (now known as *the National Partnership for Reinventing Government*, or *NPR*) to move to a 15-to-1 employee-to-supervisor ratio. The FAA, in an attempt to comply with guidelines set forth in this initiative, began reducing management oversight, staff support, and maintenance support, in its Air Traffic facilities. The rapid increase in aircraft delays and negative

safety indicators can be at least partly attributed to the inception of initiatives set forth by the NPR.

The continuum that can be measured in relation to the increased delays, as well as safety factors such as runway incursions[1], surface incidents[2], operational deviations[3], and worst of all, operational errors[4], is the continuing decrease in operational oversight in both the operational and maintenance arenas. The reduction of oversight and support has an insidious effect on operations. For a limited period of time, there is no doubt that controllers can easily function without this oversight and support. However, eventually, conditions begin to deteriorate. Morale suffers due to personnel issues that go unaddressed, such as training on changes to existing procedures/practices; safety trends; recurrent training, and the addition of new controllers. Equipment begins to malfunction with greater and greater delays in returning it to service. Critical preventive maintenance is shelved for higher priority duties and more and more, we are seeing critical systems being taken off line during peak traffic times in order to accomplish maintenance that used to be completed during off-peak hours due to a lack of technicians and supervisory oversight. The systemic approach to proper traffic flow is subsequently reduced to the needs of individuals, and no longer those of the FAA and, more importantly, of the flying public. The tendency to "take the easy way," due to limitations exacerbated by a lack of adequate oversight, has the unfortunate result of slowing down the flow. For instance, miles-in-trail restrictions[5] are not closely monitored, compromising the efficiency of the system. Also, the willingness to act aggressively and accordingly to determine a new plan to accommodate changing weather conditions, or the willingness to take the time necessary to correct controller deficiencies – however minor – are lost due to higher priorities as well as stretched resources in personnel and facility capability.

Additionally, I want to note that our support resources were dramatically changed with the latest iteration of restructuring. Our field support staffs were consolidated into three Service Areas instead of nine (9). While we are hopeful that in time the logistics of this restructuring will be smoothed, the immediate effect is confusion, lack of clear continuity in support, delays in providing service, and the inability to fill vacancies (both at the field level and staff level). This has created the need to hire

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[1] A Runway Incursion is defined as any occurrence at an airport that involves an aircraft, vehicle, person, or object on the ground that creates a collision hazard or results in a loss of separation with an aircraft taking off, intending to take off, landing, or intending to land.
[2] A Surface Incident is defined as any event unauthorized, or an unapproved movement occurring within the movement area, or an occurrence in the movement area associated with one operation of an aircraft that affects or could affect the safety of flight. Surface incidents result from pilot deviations, vehicle or pedestrian deviations, or operational errors/deviations.
[3] An Operational Deviation is defined as: 1) Less than applicable separation between an aircraft and protected airspace or airspace delegated to another facility or position without approval; 2) An aircraft, vehicle, equipment, or personnel encroached upon a landing area that is delegated to another position of operation without prior coordination and approval.
[4] An Operational Error is defined as an occurrence attributable to an element of the air traffic control system: 1) Results in less than the applicable separation minima between two or more aircraft, or between an aircraft and terrain or obstacles and obstructions; 2) An aircraft lands or departs on a runway closed to aircraft operations after receiving air traffic authorization.
[5] Miles-in-trail restrictions are aircraft spacing requirements made by air traffic management in order to minimize delays and optimize system efficiency.

contract personnel to fill these vacancies, which creates further confusion and our ability to effectively manage the agency.

As I close, I want to reiterate that without the support of this Committee and your leadership the retirement inequities for managers would not have been fixed. It is critical to the safety and efficiency of the system that we increase the statutory number of supervisors. Finally, the current contract has provided supervisors with the flexibility to manage the controller workforce to achieve efficiencies that you desire with a constant focus on system safety.

Again, I appreciate the opportunity to testify today and I am happy to answers any questions the committee may have.

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STATEMENT OF TOM BRANTLEY
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BEFORE THE HOUSE COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE – SUBCOMMITTEE ON AVIATION

ON
FAA REAUTHORIZATION
REVIEW OF FAA'S OPERATIONAL AND SAFETY PROGRAMS

MARCH 22, 2007

Chairman Costello, Congressman Petri and members of the subcommittee, thank you for inviting PASS to testify today on the reauthorization of the Federal Aviation Administration (FAA) – review of FAA's operational and safety programs. Professional Airways Systems Specialists (PASS) is the oldest and second largest FAA union, representing approximately 11,000 FAA employees in five separate bargaining units throughout the United States and in several foreign countries. PASS members include Technical Operations technicians who install, maintain, repair and certify the radar, navigation, communication and environmental systems making up the air traffic control system; Flight Standards and manufacturing aviation safety inspectors responsible for inspecting and certifying every aspect of the commercial and general aviation industries; flight inspection pilots, missions specialists and procedures development specialists in Aviation Systems Standards; and administrative employees in the FAA's Aviation Registry.

Congress has an opportunity to enact meaningful FAA reauthorization legislation to modernize and improve the efficiency of the FAA and protect and enhance the safety of this country's aviation system. PASS appreciates the opportunity to present our views on proposals vital to aviation safety, including staffing and training of the technician and inspector workforces, the FAA's application of its designee programs, and airline outsourcing of maintenance work to non-certificated repair stations. In addition, it is undeniable that recent actions by FAA management have caused labor-management relations inside the FAA to fall into chaos. This legislation provides a chance to repair the contract negotiations impasse process within the agency, which will help improve productivity and ensure that the FAA has the very best men and women working together to promote air safety. We also have great concerns over what we consider to be dangerous and ill-advised propositions made by the administration in its proposed reauthorization legislation, such as piecemeal outsourcing of key components of the National Airspace System (NAS), the creation of a non-independent commission to identify outsourcing targets and facility closures, and ambiguous "user fees" to fund the agency.

Contract Negotiations

Labor relations within the FAA are in a state of chaos, with the eye of the storm being the manner in which the FAA has approached contract negotiations with PASS, the National Air Traffic Controllers Association (NATCA), and the American Federation of State, County and Municipal Employees (AFSCME), which collectively represent over 33,000 employees at the FAA. By taking advantage of the ambiguities in current law covering FAA labor negotiations, the agency has created a tempest of extremely low employee morale, difficult working conditions and overwhelming tension between labor and management.

The history leading to the current state of contract negotiations between the FAA and its unions starts with the FY 1996 Department of Transportation Appropriations Act, which exempted the FAA from most of the federal personnel system under Title 5 of the U.S. Code and ordered the agency to develop its own personnel system. The FAA Reauthorization Act of 1996 established a new process for resolving certain bargaining impasses that were related to the new personnel system, but provisions of the legislation did not clearly define the types of disputes covered under the new process. The FAA interpreted the provision to mean that it had authority to impose contract terms unilaterally without the agreement of employees' representatives or ratification by the employees themselves. According to this interpretation, if the FAA declares

that contract negotiations are at an impasse, the administrator can send the matter to Congress. If Congress does not act on the contract within 60 days, the FAA's contract offer will be automatically imposed on employees. Under these conditions, the rights of FAA employees to participate in fair contract negotiations have been taken away, and bargaining is merely an option for the FAA rather than a requirement.

The status of contract negotiations between PASS and the FAA are reflective of the serious problems with the agency's interpretation of the process. Contract negotiations are at impasse with four of PASS's five bargaining units, representing 3,500 employees in the Flight Standards (FS), Aviation Systems Standards (AVN), Aviation Registry (AFS-700) and Manufacturing Inspector District Office (MIDO) bargaining units. Negotiations over new contracts for these employees have been at impasse *for over four years*, and there is no foreseeable end to these stalemates other than the agency's persistent threat to submit the contracts to Congress in order to impose working conditions on these employees against their will.

Employees in PASS's largest bargaining unit, Air Traffic Organization (ATO) Technical Operations, have recently sent the FAA an undeniable message by overwhelmingly rejecting its contract proposal during the ratification process. The agency's actions at the bargaining table made it clear that it was not interested in real bargaining and was intent on going through the motions in order to declare impasse and simply impose the contract as soon as possible. At that point, it became obvious that additional bargaining would have been futile and no material changes were likely on the key issues of concern. Thus, PASS accepted the FAA's contract proposal to give the employees a chance to voice their opinion about the proposal and, if rejected by the membership, convince the administrator to reconsider her unacceptable positions. The agency's proposal included *no increases in base pay* for a majority of the workforce over the proposed seven-year term, no protections during drug and alcohol testing, and little, if any, negotiating over changes to working conditions during the term of the agreement. In August 2006, following a record voter turnout, PASS members in Technical Operations almost unanimously (98 percent) voted against the tentative agreement. Despite this result, the agency has chosen to pursue legal action to implement this anti-worker, anti-union and anti-safety agreement.

The current collective bargaining process for the FAA makes it clear that a change is needed in order to guarantee FAA employees access to an equitable contract negotiations procedure. After all, Congress has stated that collective bargaining in the federal government is in the public's interest; yet, there is no real collective bargaining in the FAA at this time. By following its current course, the FAA has only succeeded in further eroding the already troubled relationship between the agency and the employees' unions. It is essential that these problems be addressed quickly not only to ensure a highly motivated rather than greatly demoralized workforce but also to protect the safety and efficiency of the aviation system.

The following excerpts from the FAA's most recent Employee Attitude Survey (2006) illustrate the dismal state of morale within the FAA's workforce:

When asked to evaluate the following statements:	Employees responded:
The FAA is committed to employee concerns.	61% of employees *Disagree* or *Strongly Disagree.*
Within the past 2 years, I have seen a positive change in the emphasis that the FAA places on managing people.	66% of employees *Disagree* or *Strongly Disagree.*
The FAA takes into account the impact of organizational changes on employees.	68% of employees *Disagree* or *Strongly Disagree.*
My organization has a real interest in the welfare and satisfaction of those who work here.	61% of employees *Disagree* or *Strongly Disagree.*
I trust FAA management.	64% of employees *Disagree* or *Strongly Disagree.*
FAA executives are honest when communicating with employees.	64% of employees *Disagree* or *Strongly Disagree.*
In the past 12 months, I have seen improvements in the way the FAA communicates with its employees.	59% of employees *Disagree* or *Strongly Disagree.*
I think the FAA pay systems are administered fairly.	58% of employees *Disagree* or *Strongly Disagree.*

In order to guarantee FAA employees the right to participate in fair contract negotiations, PASS is requesting that Congress take action to clarify that the Federal Service Impasses Panel (FSIP), an impartial third party with special expertise in these matters, has jurisdiction over all bargaining impasses arising at the FAA, and that binding arbitration before a board of experienced arbitrators is the method to be used by the FSIP for resolving these bargaining disputes, such as those currently looming between PASS and the FAA. This is a system that has worked successfully in the Postal Service and would be appropriate for the FAA. Rather than forcing Congress to be directly involved in resolving labor disputes over internal agency personnel matters, PASS believes it is more appropriate to require both parties to submit bargaining impasse issues to binding arbitration under the direction of the FSIP. A fair contract that addresses issues important to both labor and management is essential in making a more efficient agency; by not establishing a balanced process, the FAA is impeded from moving forward.

Technical Training and Staffing

The largest PASS bargaining unit is the Air Traffic Organization (ATO) Technical Operations unit, consisting of technical employees (systems specialists, electronics technicians and computer specialists) who install, maintain, repair and certify the radar, navigation and communication systems making up the air traffic control system. Insufficient technical staffing continues to be a major problem at numerous facilities throughout the country, and an increasing attrition rate in these safety-sensitive positions is worsening the critical staffing crisis. Staffing figures released by the agency already show a significant decrease in technician staffing from December 2006, a decrease that further stretches the gap between target staffing numbers and actual figures in

many regions. For example, both the Great Lakes and Southern regions are understaffed by at least 45 technicians. Since it takes a minimum of three years for a technician to be able to satisfy all requirements of the job, training of the technical workforce also significantly affects the situation.

The chronic understaffing of the FAA's technical workforce is exacerbated by the agency's inability to accurately determine the right number of employees and job skills needed to safely and efficiently maintain the NAS. Currently, the FAA does not have a staffing standard or model that can accurately determine the number of trained FAA technicians needed to meet the agency's mission "to provide the safest, most efficient aerospace system in the world." In today's changing aviation environment, it is critical that there is a staffing standard in place for the FAA technical workforce and that the FAA is required to abide by that standard and ensure that it has an adequate number of professionally trained technical employees. When viewed in combination with the agency's "scorched earth" labor relations posture, PASS believes that the FAA is deliberately understaffing its Technical Operations workforce in order to make it a more attractive target for outsourcing.

Every day that the FAA operates with an inadequate number of trained technical employees places the flying American public at increased risk. For example, inadequate staffing has left the FAA without enough people to uphold its time-tested maintenance and certification program and the FAA is increasingly moving to a "fix on failure" approach where periodic maintenance and certification of NAS systems and equipment are significantly reduced. In other words, instead of hiring additional employees, the FAA is changing its maintenance approach, claiming a move towards efficiency; in reality, PASS believes this change will place aviation safety at risk and is merely an attempt to temporarily mitigate the impacts of inadequate staffing

The inadequate staffing has resulted in more unplanned outages and a dramatic increase in restoration times. FAA documents reveal a 50 percent increase in the hours required to restore and repair vital technical components of the NAS. Specifically, unscheduled outage restoration times rose from 21.6 hours in 2001 to 33 hours in 2005. Some facilities are staffed at less than half of what the facility has been allotted. Not only does this make daily operations difficult, it lessens the FAA's ability to respond to an emergency in a timely and efficient manner. Several recent high-visibility outages illustrate this issue, including a massive power and communications failure at Los Angeles International Airport that caused major delays. If the proper technical staff had been readily available at the time, the duration of the outage and the number of delays could have been significantly decreased. Consider the following additional examples:

- The Chicago Midway radar facility, which also acts as a backup to Chicago O'Hare, was originally staffed with six technicians providing coverage 24 hours a day, seven days a week; since 1999, there has only been one technician assigned to the radar and the coverage has gone down to 40 hours a week. The lone employee has worked several hours of overtime in order to complete necessary work; despite the employee's efforts, with such sparse staffing conditions, work is not getting done. To make matters worse, when that employee retires, there are suggestions that the FAA does not plan to staff the facility but remotely maintain it out of O'Hare. Yet, that presents additional staffing problems for the two airports as a recent

example illustrates. In that instance, an incident at Midway led the technician to request assistance from an employee stationed at O'Hare. The technician at O'Hare left his facility to travel 34 miles to the Midway facility, leaving O'Hare, one of the largest airports in this country, with no coverage. Leaving either airport understaffed, or without any staff at all, is an enormous risk to the safety and efficiency of this country's aviation system.

- The Frontier system support center (SSC) is responsible for air traffic across a 200-mile radius in Washington state. Currently, the staffing situation at the Frontier SSC is extremely low, with three navigation/communications (NavCom) technicians responsible for 45 facilities, another single NavCom technician responsible for 16 additional facilities and two environment technicians covering 37 facilities—*a total of six employees covering 98 facilities*. Currently, these employees are being pushed to the extreme in order to maintain safe air traffic within the region. Even more alarming is that two of the NavCom technicians will be eligible for retirement in two years and, although it takes a minimum of three years to properly train an FAA technician, there is no indication that there are employees currently being trained to replace the retiring technicians.

- The radar facility located in Jedburg, S.C., covers air traffic for most of the coast from South Carolina to Savannah, Ga., and half of inland South Carolina. The Department of Defense relies on this facility for radar data. The facility had always been staffed during the week, but, since the only technician at the facility recently retired, the facility will now be maintained out of the Charleston SSC located approximately 40 miles away. With this change, if the radar goes out, the average restoration time will be at least three to four hours, a significant amount of time especially considering the fact that this facility provides important information to the Department of Defense.

- The Superior system management office (SMO) includes 13 SSCs in Michigan and Wisconsin. As of November 2006, nine out of these 13 facilities are staffed at 60 percent or below their allocated levels with four at 50 percent or below. The lowest of these, the SSC for Austin Straubel International Airport in Green Bay, Wis., is staffed at an astonishingly low 45 percent, with four of these 14 technicians eligible to retire in 2006 and another three eligible by 2009. The staffing for the entire SMO is under 64 percent; 21 of these 154 employees are already eligible to retire and 54 will be eligible by 2010—over 35 percent of the total workforce.

- The Ashton long range radar facility in Idaho was staffed with three technicians until June 2006. Since that time, all three technicians have retired and management has decided that maintenance support for the radar will come from technicians at another facility located *seven hours away*. Not only does this put the safety and efficiency of the air traffic in the area at serious risk, but it is also a major hardship on the employee who has to make the trip, which involves a perilous drive up a dangerous mountain where cellular service is not available. Furthermore, the technician is required to perform work at the facility by himself in a remote location, a risky scenario that is in direct opposition to safety regulations and threatens the safety of both the employee and the aviation system. The situation is also affecting restoration times in the region since it now takes hours for a technician just to get to

the site. When there were technicians on location in Ashton, the radar could be restored in minutes.

It is clear that the state of technician staffing needs immediate attention in terms of the number of employees and the level of training. As such, PASS is requesting that Congress instruct the Comptroller General to conduct a study of the training of FAA technicians, including a recommendation for a future approach to training these employees. In addition, PASS is requesting that Congress direct the National Academy of Sciences to conduct a study of the assumptions and methods used by the FAA to estimate staffing needs for FAA technicians to ensure proper maintenance and certification of the NAS.

Inspector Staffing

FAA aviation safety inspector staffing continues to be a major concern for PASS. PASS represents approximately 2,800 Flight Standards (FS) field aviation safety inspectors (ASIs) and 127 Manufacturing Inspection District Office (MIDO) ASIs,[1] dedicated federal employees who are responsible for certification, education, oversight and surveillance of the entire aviation system, including air operator certificates, repair station certificates, aircraft, active pilots, mechanics, flight instructors and designees.

A National Academy of Sciences staffing study was initiated as part of the 2003 Aviation Reauthorization Act in reaction to concerns over the inadequate level of ASI staffing, combined with questions surrounding the FAA's increasing reliance on non-governmental "designees" to perform inspector duties and the ability to monitor outsourced work. The results of this two-year study were released in September 2006 in a report titled *Staffing Standards for Aviation Safety Inspectors*. The Academy concluded that the FAA currently had no viable staffing standard and that development of an entirely new model was necessary.[2] A staffing model would allow the FAA to determine whether it had the correct number of skilled individuals in position to accomplish the responsibilities of the job.

Unfortunately, little has been accomplished since the report was issued. The reasons behind the staffing study continue to be major issues today, calling increased attention to the need for an updated and detailed staffing model. In fact, at a recent hearing before this subcommittee, both the Department of Transportation Inspector General (IG) and the Government Accountability Office (GAO) supported the Academy's recommendations and expressed concern over the staffing level of the inspector workforce, calling specific attention to the high number of inspectors expected to retire in the coming years—nearly half of the inspector workforce will be eligible to retire by 2010. The FAA is requesting funding to hire an additional 203 aviation safety inspectors in FY 2008; however, according to the IG, without an effective staffing model,

[1] As of February 2007, the FAA lists the number of FS inspectors as 3,593 and the number of MIDO inspectors as 201. These figures, however, include first line field and office managers; the PASS figure only includes field inspectors.

[2] National Research Council, Committee on Federal Aviation Administration Aviation Safety Inspector Staffing, *Staffing Standards for Aviation Safety Inspectors* (Washington, D.C.: The National Academies Press, 2006).

the FAA "will not be able to make effective use of the resources that it obtains."[3] The GAO stated in its testimony that "part of the challenge that FAA faces with regard to safety inspectors is improving its process for determining staffing needs."[4] The IG echoed these concerns, clearly stating that the "FAA must develop a reliable staffing model to ensure that it has the right number of inspectors at the right locations."[5]

The level of inspector staffing combined with the evolving aviation industry places an incredible workload on the ASI workforce, making it mandatory to have a model in place for determining if the staffing numbers are adequate to meet these demands while satisfying safety requirements. Contributing to the increased demands on ASIs include:

- **Air Transportation Oversight System (ATOS):** The Air Transportation Oversight System (ATOS) was developed in 1998 as a "system safety" approach to oversight of the air carrier industry, aiming to ensure that airlines comply with FAA safety requirements and have operating systems to control risks and prevent accidents. ATOS has yet to be fully implemented due to insufficient staffing, inadequate training and a variety of other problems. Yet, the FAA has bold plans to transition the approximately 115 remaining air carriers into the program by the end of 2007, a move that will introduce even more challenges for the ASI workforce.

  While many organizations, including PASS, applaud the concept of employing a system that prioritizes workload based on risk, this move cannot be made without making sure that there is an adequate inspector workforce available to ensure that the entire aviation system is protected. Furthermore, at the same time the FAA is transitioning additional carriers to ATOS, it is also doing a major revision to the program, further complicating things and creating an enormous strain on resources. The expansion of ATOS with the corresponding changes in oversight activities and workload shifts makes it even more important that the FAA improve its staffing process and develop a reliable staffing model. As stated by the GAO in its 2007 testimony, "The expansion of its oversight program for air carriers will result in workload shifts for its inspector workforce that will make it important for FAA to improve its staffing process and address its lack of a staffing model."[6]

- **Outsourced Maintenance:** As part of an effort to find additional cost-saving methods, the aviation industry has increased its reliance on outsourcing maintenance work. A June 2005 IG report stated that the percentage of outsourced maintenance for major air carriers has gone up as much as 24 percent between 2002 and 2004.[7] In 2006, the IG said air carriers' use of repair facilities has grown from 37 percent of air carriers' maintenance costs in 1996 to 62

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[3] Department of Transportation Inspector General, *FAA's FY 2008 Budget Request: Key Issues Facing the Agency*, CC-2007-019 (Washington, D.C.: February 14, 2007), p. 11.
[4] Government Accountability Office, *Federal Aviation Administration: Challenges Facing the Agency in Fiscal Year 2008 and Beyond*, GAO-07-490T (Washington, D.C.: February 14, 2007), p. 9.
[5] Department of Transportation Inspector General, *FAA's FY 2008 Budget Request: Key Issues Facing the Agency*, CC-2007-019 (Washington, D.C.: February 14, 2007), p. 3.
[6] Government Accountability Office, *Federal Aviation Administration: Challenges Facing the Agency in Fiscal Year 2008 and Beyond*, GAO-07-490T (Washington, D.C.: February 14, 2007), p. 2.
[7] Department of Transportation Inspector General, *Safety Oversight of an Air Carrier Industry in Transition*, AV-2005-062 (Washington, D.C.: June 3, 2005), p. 8.

percent in 2005, an increase of 8 percent over the 2004 figure.[8] Much of this outsourced work is performed in areas outside the United States, with a significant portion being done in areas such as El Salvador, Hong Kong and Singapore. FAA airworthiness inspectors are charged with ensuring this outsourced maintenance is performed in accordance with airline and/or manufacturer instructions and FAA regulations. Yet, as the outsourcing business explodes, there has been no corresponding increase in the number of FAA inspectors.

- **Aging aircraft:** The FAA issued regulations in response to the Aging Aircraft Act of 1991 requiring aircraft to undergo inspections and record reviews by an FAA inspector after the 14th year in service and at specified intervals thereafter to ensure the adequate and timely maintenance of an aircraft's age-sensitive components. The number of aircraft in service for 14 years or more is growing, thereby increasing the demands on field inspectors to satisfy this requirement and ensure the continued airworthiness of aging aircraft. Since fulfilling this requirement is impossible given the current staffing situation, the administrator is designating out as much as 75 percent of this work instead of recognizing that this high-risk work demands direct FAA inspector oversight. Not only is this increasing the risk to the public safety, but the FAA inspectors are also responsible for overseeing the designees performing the work, resulting in yet another demand on the workforce. With the fleet of aging aircraft on the rise, the inspector workload will continue to increase, making it even more important that an appropriate and reliable staffing model be in place.

- **Increases in Aircraft Manufacturing:** The FAA ASI workforce responsible for overseeing aviation manufacturers has only 128 manufacturing inspectors, meaning that there are not enough of these employees to cover some major companies sufficiently. In fact, despite additional funding in recent budgets to hire more manufacturing ASIs, the level of this workforce is almost the same as it was 20 years ago. This inadequate staffing results in an overburdened workforce, with some inspectors responsible for up to 40 companies, and a limited ability to oversee manufacturing work. For example, one of the largest manufacturers of general aviation aircraft in the world, Cirrus Corporation, located near Duluth, Minn., has over 1,200 employees and is producing nearly a thousand airplanes a year; yet, only a single manufacturing ASI is assigned to the company. That same ASI is also responsible for 12 other manufacturers in four different states. With such limited resources, the ASI was only able to visit the Cirrus facility four times in 2005.

- **Emerging Trends in Aviation:** There are additional factors facing the inspector workforce that must be addressed when developing a staffing model, including emerging trends in aviation, such as unmanned aerial vehicles and the increasing popularity of very light jets (VLJs). By 2017, approximately 5,000 VLJs will be part of the aviation system and inspectors will have to confront a variety of new oversight challenges. According to the IG, as the new vehicles become operational, "FAA inspectors will face new oversight challenges in every aspect of FAA's operations, including inspector oversight of pilot training and aircraft maintenance and air traffic control."[9]

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[8] Department of Transportation Inspector General, *Observations on FAA's Oversight of Aviation Safety*, CC-2006-074 (Washington, D.C.: September 20, 2006), p. 4.
[9] Department of Transportation Inspector General, *FAA's FY 2008 Budget Request: Key Issues Facing the Agency*, CC-2007-019 (Washington, D.C.: February 14, 2007), p. 11.

It is imperative that the FAA immediately develop and implement a staffing model for aviation safety inspectors. PASS is requesting that Congress direct the agency to develop a staffing model for aviation safety inspectors and follow the recommendations outlined in the Academy's study. The Academy's staffing study also emphasized the importance of involving those who are affected by the staffing model in its development, specifically stating that aviation safety inspectors, as well as PASS, should be included in the process from the beginning and remain active participants through the model's design, development and implementation.

Designee Programs

The FAA has responded to the dwindling FAA inspector workforce by increasing its reliance on the agency's designee programs. These programs were initially intended to allow the administrator to delegate private individuals or companies to act on behalf of the FAA to perform certain basic responsibilities deemed non-safety critical, such as administering written tests to pilots and mechanics, inspecting repair work done by maintenance facilities and approving designs for aircraft parts. However, as a result of the FAA's attempts to compensate for inadequate FAA aviation safety inspector (ASI) staffing, these programs have not only experienced enormous growth in recent years but designees are being assigned even more hands-on work that was once performed by experienced FAA inspectors. While PASS is firmly against increasing designee responsibility, if the FAA continues in this practice, there must be enough inspectors to properly oversee this "shadow workforce."

The FAA designee programs were initially called into question during the investigation into the 1998 fatal crash of Swissair Flight 111, revealing that installation of an entertainment system approved by an FAA designee and inadequate FAA oversight were factors contributing to the accident. Since that time, several GAO reports have raised serious concerns regarding the FAA's use of its designee programs:

- The GAO criticized the FAA for its "inconsistent monitoring of its designee programs and oversight of its designees."[10] Experts identified top oversight weaknesses of the designee programs, including inconsistent level of oversight and interpretation of rules among FAA offices; poor performing designees are not identified and removed; and inadequate surveillance and oversight of designees. It was noted that, overall, the FAA has not made oversight of designees a high enough priority.

- The GAO called into question the FAA's review of the designee programs, stating that at the time of the report, the FAA had evaluated only six of the 18 designee programs over the last seven years (about 35 percent of FAA's designees). There are no set criteria or requirements for the periodical evaluation of these programs, and the current evaluations do not identify roots causes of the programs' flaws.[11]

[10] Government Accountability Office, *Aviation Safety: FAA Needs to Strengthen the Management of Its Designee Programs*, GAO-05-40 (Washington, D.C.: October 2004), p. 3.
[11] Id., pp. 15 – 16.

- Most recently, the GAO raised concerns regarding the FAA's oversight of designees, including the claim that the FAA's level of oversight and interpretation of rules differ among regions and offices within a region, thus limiting "FAA's assurance that designees' work is performed uniformly in accordance with FAA standards and policy, the primary goal of which is safety of U.S. aviation."[12]

Recently, the FAA has countered the criticism of its designee programs by proposing unsound changes to the programs, introducing a new concept known as the organizational designation authorization (ODA) program. In October 2005, the FAA issued a rule establishing the ODA program, with a plan to phase out the current designee program by November 2009. Under the ODA program, it would be possible for a corporation rather than an individual person to become an FAA designee. This would make it even more difficult to remove a poorly performing designee since that individual would be part of a larger organization. In today's already troubled designee programs, an inspector directly oversees a designee performing aviation safety-related work, such as certification and surveillance. Under the ODA program, the inspector would be taken completely out of the picture and an outside organization would be in charge of overseeing the designee—in essence, the industry is overseeing itself. The creation of the ODA program and other similar undertakings are further attempts by the FAA to outsource inspector work to the industry the FAA is supposed to be overseeing.

At the September 2006 hearing on FAA's oversight of aviation safety, the GAO questioned the FAA's development of the ODA program and the extent to which the program would remove the FAA from direct oversight. Specifically, the GAO expressed concern that planned changes to replace some designee programs with the ODA program will result in the FAA "focusing on the performance of organizations rather than the individuals within the organization who carry out the delegated functions."[13] The GAO issued a clear warning that, as the level of inspector oversight goes down with the ODA program, the FAA must pay strict attention to the tasks these organizations are allowed to perform.

The FAA has not indicated any plans for ensuring that the level of safety does not decrease as it transitions to the ODA program. In terms of improving the designee programs, the GAO stated the following in its 2004 report:

> To improve management control of the designee programs, and thus increase assurance that designees meet FAA's performance standards, we recommend that the Secretary of Transportation direct the FAA Administrator to establish a program to evaluate all designee programs, giving priority to those programs that have not been evaluated, and develop mechanisms to more consistently monitor and improve compliance with existing designee oversight policies, including identifying and sharing best practices among FAA programs and field offices. We also recommend that FAA strengthen the effectiveness of its designee databases by improving the

[12] Government Accountability Office, *Aviation Safety: FAA's Safety Efforts Generally Strong but Face Challenges*, GAO-06-1091T (Washington, D.C.: September 20, 2006), p. 11.
[13] Id., p. 2.

consistency and completeness of information on designees activities and performance and FAA oversight.[14]

Since the time of these recommendations, the only changes made to the designee programs have been the creation of additional programs. The ODA program and other similar programs do not address the oversight issue and only succeed in further separating inspectors from the process, decreasing the level of oversight even more. In the face of a serious lack of inspector staffing and the anticipated increase in the ASI retirement rate, oversight of the designee programs is a significant issue that must be addressed. In order to protect the safety of the aviation system, PASS is requesting that Congress direct the FAA to put expansion of the designee programs on hold until the National Academy of Sciences staffing model is implemented and recommendations issued by the GAO can be thoroughly addressed, including the establishment of a program to evaluate all designee programs.

Non-Certificated Repair Stations

The aviation industry's increasing reliance on outsourcing maintenance work to non-certificated repair stations and the FAA's oversight of this work has become a major focus for PASS as well as garnering concern in the media and among industry experts. "Non-certificated" means that the repair facility is not certificated by the FAA to operate under Federal Aviation Regulation Part 145 and is therefore not subject to direct FAA oversight.

Effective oversight of non-certificated repair facilities initially gained attention in the aftermath of the January 2003 Air Midwest crash in Charlotte, N.C. The National Transportation Safety Board determined that contributing causes of the accident included lack of FAA oversight of the airline's maintenance program, which included work performed by non-certificated entities. A December 2005 IG report demanded new attention be focused on this issue as it revealed that more and more scheduled airline maintenance work is being done at non-certificated facilities.[15] In fact, the IG discovered that non-certificated facilities are performing far more work than minor services, including some of the same type of work FAA-certificated repair stations perform, such as repairing parts used to measure airspeed, removing and replacing jet engines, and replacing flight control motors. Some of these non-certificated facilities are even performing scheduled and critical preventative maintenance.

It is obvious that relying on non-certificated facilities to perform critical maintenance work is dangerous on several levels. These facilities are operating without the same regulatory requirements and oversight as certificated repair stations; yet, in many cases, they are performing the same type of work. This practice cannot continue without a significant increase in risk to aviation safety.

The subject of oversight of outsourced maintenance work will be discussed at a hearing before this subcommittee next week and PASS will be testifying on the issue at that time. It would be

[14] Government Accountability Office, *Aviation Safety: FAA Needs to Strengthen the Management of Its Designee Programs*, GAO-05-40 (Washington, D.C.: October 2004), p. 5.
[15] Department of Transportation Inspector General, *Air Carriers' Use of Non-Certificated Repair Facilities*, AV-2006-031 (Washington, D.C.: December 15, 2005).

remiss, however, not to take this opportunity to emphasize the risk associated with this practice and to state that PASS is requesting that language be included in the FAA reauthorization bill to direct the FAA to require that all air carrier work only be performed by certificated repair stations regardless of the number of times that work is outsourced.

FAA's Reauthorization Proposal

The United States has the largest, safest and most efficient aviation system in the world. This reputation is kept intact through the work of experienced and trained FAA employees whose sole goal is to ensure and promote the safety of air travel. These federal employees are specifically trained to fulfill this responsibility and are involved in every aspect of air travel, including inspecting the plane and navigational systems, certifying air carriers, systems and equipment, and maintaining vital air traffic control systems. To introduce concepts that would hinder or delegate out the work performed by these professionals would be to risk the foundation that keeps this country's aviation system safe. Yet, in its reauthorization proposal, "Next Generation Air Transportation System Financing Reform Act of 2007," the FAA attempts to make significant changes that would not only impact the work done by FAA employees but has the potential to threaten the safety and efficiency of the entire system.

PASS is extremely concerned over the FAA's introduction of the Facilities Realignment and Consolidation (FRAC) program, a concept that completely ignores the safety implications associated with such an undertaking. Section 409 of the FAA's proposal establishes a commission appointed by the secretary of transportation to review the FAA Administrator's recommendations for closing or consolidating FAA facilities. Under the FRAC procedure, the FAA administrator will publish a list of facilities for realignment and closure and the commission will evaluate the recommendations and then send them to the president, who will approve or disapprove the recommendations. The FRAC process culminates with the submission of the president's report to Congress. The language in the proposed bill provides that if Congress does not act to block the president's report through passage of a joint resolution within 60 days, the president's recommendations for facility and services closures and realignments will automatically go into effect.

Under current law, the FAA has the authority to consolidate or close facilities where doing so will reduce the capital, operating, maintenance and administrative costs as long as the changes are consistent with the highest degree of aviation safety. At least privately, FAA officials are fond of blaming Congress for the agency's inability to consolidate facilities, claiming that congressional interests prevent the agency from making needed changes. The FRAC process is simply a way for the administration to rubberstamp any consolidations or closures deemed appropriate without giving Congress a meaningful opportunity to weigh in. The commission established through the FRAC program is not an independent commission but instead a group of administration appointees examining the administrator's selections for closure or realignment before simply sending the list on to the president. This is an extremely risky plan that does not allow for adequate oversight of the impact of closing or consolidating FAA facilities. Decisions on closing or consolidating FAA facilities should be made with safety of the aviation system as the primary goal.

PASS is equally alarmed that the FAA would consider a plan that would allow the administrator to transfer ownership, operating and maintenance responsibilities from the FAA to selected smaller airports. Currently, these smaller airports rely on FAA technicians to maintain and operate systems and equipment, but, through Section 317 of its plan, the FAA is now offering the airports a monetary "incentive" to take this responsibility on themselves. FAA technicians are highly skilled employees specifically trained to address the intricate details of this work and should be the only people trusted with this responsibility. Essentially bribing airports to assume responsibility for locations that the agency no longer deems important because they are not major hubs for large air carriers is an inappropriate action based on misguided assumptions.

PASS is also concerned with Section 410 of the agency's proposal, which provides the administrator with the authority to delegate out responsibility for the development, testing and maintenance of flight procedures. This work is currently being done by trained and skilled professionals in Aviation System Standards (AVN), where flight procedures and flight inspection employees are charged with developing, evaluating, certifying and maintaining the 16,000 instrument flight landing and takeoff procedures for every major and municipal instrument-capable airport across the country. These employees have met or exceeded every legacy and new technology or performance-based navigation goal set forth by the FAA; yet, the agency now wants the power to delegate this important work to the private sector. It is impossible for the FAA to assure Congress that it can effectively regulate, supervise or review the work of these third parties, or even guarantee the safety of the procedures and processes used by independent entities. The critical work performed by AVN employees should no doubt remain a function of the U.S. government and not be turned over to a private corporation or individual.

An aspect of the FAA's plan that has received considerable attention is the sweeping changes offered to the way the agency is funded, changes that take away congressional oversight and, in some ways, assume congressional responsibilities. Essentially, the FAA is proposing to set the fees and tax rates that are paid with no congressional oversight of these fees or tax rates. While it has been touting the introduction of user fees, the FAA's proposal puts forward no credible plan for establishing these fees other than taking Congress out of the picture. In fact, the FAA even wants the ability to hold on to any funds appropriated until these funds are expended, a major shift from the way in which unspent appropriated funds are currently addressed at the end of the fiscal year. The agency is vague on details in its financing proposal, but PASS is concerned that the FAA is intent on establishing a system in which it can set its own fees and tax rates with only token congressional oversight.

PASS is solely focused on making sure this country retains its reputation as having the safest aviation system in the world; the employees we represent give us confidence that this is a possibility. Congress must consider how the FAA's proposals would affect the safety and integrity of the aviation system. Piecemeal outsourcing of key parts of the intricate web known as the National Airspace System to the lowest bidder is dangerous and ill advised. Safety should never be anything but the FAA's top priority.

United States Government Accountability Office

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Testimony

Before the Subcommittee on Aviation, Committee on Transportation and Infrastructure, House of Representatives

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FEDERAL AVIATION ADMINISTRATION

Key Issues in Ensuring the Efficient Development and Safe Operation of the Next Generation Air Transportation System

Statement of Gerald L. Dillingham, Ph.D.
Director, Physical Infrastructure Issues

GAO-07-636T

GAO
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Highlights

Highlights of GAO-07-636T, a testimony before the Subcommittee on Aviation, Committee on Transportation and Infrastructure, House of Representatives

Why GAO Did This Study

The Federal Aviation Administration (FAA) operates one of the safest air transportation systems in the world. It is, however, a system under strain. The skies are becoming more crowded every day, with an estimated 1 billion passengers per year expected by 2015. The current aviation system cannot be expanded to meet this growth. The reauthorization of FAA is an opportunity to examine how the agency is managing the operation and safety of the air transportation system as it leads the transition to the Next Generation Air Transportation System (NextGen)—a major redesign of the current system. GAO's testimony focuses on key issues related to FAA's reauthorization, including (1) FAA's progress in implementing initiatives that could provide a solid foundation for NextGen, (2) issues that need to be addressed to help ensure a successful transition to NextGen, and (3) safety areas that are important for the continued safe operation of the current and future system. This statement is based on recent GAO reports and ongoing work on some management and safety initiatives.

What GAO Recommends

This testimony does not contain recommendations. However, GAO reports containing relevant recommendations are listed among the Related GAO Products, some of which FAA is in the process of responding to.

www.gao.gov/cgi-bin/getrpt?GAO-07-636T. To view the full product, including the scope and methodology, click on the link above. For more information, contact Gerald L. Dillingham, Ph.D., at (202) 512-2834 or dillinghamg@gao.gov.

March 22, 2007

FEDERAL AVIATION ADMINISTRATION

Key Issues in Ensuring the Efficient Development and Safe Operation of the Next Generation Air Transportation System

What GAO Found

FAA has made significant progress in moving to more businesslike and cost-effective operations and modernizing the air traffic control system. This progress should better position the agency for the complex implementation of NextGen. However, further work remains to fully address past problems in the modernization effort while at the same time finding new leadership—due to losses of key leaders at FAA and its Air Traffic Organization—that can continue an agencywide commitment to transformation. While FAA has improved its financial management capability, including implementing a new cost accounting system and developing a cost allocation methodology, it is not yet clear if that methodology provides a sound basis from which to derive the administration's proposed new cost-based funding structure for FAA. In addition, improved acquisition processes, such as establishing guidance on using Earned Value Management, are positive steps, but they need to be fully implemented across all critical acquisitions. As FAA works toward acquiring and deploying NextGen technology, it will also be important to phase out existing air traffic control equipment using a risk-based approach and continue to maintain existing systems.

Key issues that FAA needs to address as it begins implementing NextGen include continued focus on coordination with the Joint Planning and Development Office (JPDO). FAA, in coordination with JPDO, is developing an implementation plan for NextGen that is expected to include details of systems, timelines, and needed change to policies or regulations. This is a step in the right direction. While FAA estimates that its cost for NextGen programs may range between $15 billion and $22 billion, it will be important to determine which entities will fund and conduct the necessary developmental research. Also, GAO has recommended that FAA assess its capacity to handle the technical and contract management expertise to determine if it has the capabilities required to oversee the implementation of NextGen. FAA is considering action that would respond to this recommendation.

To deal with current safety issues and the transition to NextGen, it will be important for FAA to address safety in the airport environment, where forecasted traffic growth could lead to increased ground congestion and safety hazards. FAA also needs to establish the appropriate regulatory approach for certain current airspace users, such as air ambulances, and new users, such as the emerging space tourism industry. In addition, to maintain and expand the margin of safety, especially if substantial growth in air traffic materializes, FAA will need to rely more on data than on labor-intensive inspections. GAO has recommended that FAA improve its safety data. FAA has taken some action to improve its data, but more work remains. FAA's ability to ensure a safe system will also be affected by its ability to hire, train, and deploy its workforce of air traffic controllers, inspectors, and technicians.

Mr. Chairman and Members of the Subcommittee:

I appreciate the opportunity to testify before you today as you consider the reauthorization of the Federal Aviation Administration (FAA). FAA operates one of the safest air transportation systems in the world. It is, however, a system under strain. The skies over America are becoming more crowded every day. Demand for air travel has increased in recent years, with over 740 million passengers flying in fiscal year 2006, climbing toward an estimated 1 billion passengers per year in 2015, according to FAA estimates. Already, with the increasing demand for air travel, flight arrival delays have increased; such delays are nearing the record levels of 2000, a year in which one in four flights reached its destination behind schedule. The system is also expected to absorb a variety of different types of aircraft in the near future, ranging from the jumbo Airbus A380—which can hold more than 500 passengers—to very light jets—which may greatly increase the number of aircraft in the sky while transporting six or fewer passengers on any given flight. The consensus is that the current aviation system cannot be expanded to meet this projected growth.

In 2003, recognizing the need for system transformation, Congress authorized the creation of the Joint Planning and Development Office (JPDO), housed within FAA but involving several federal partner agencies,[1] to conceptualize and plan for the Next Generation Air Transportation System (NextGen). NextGen is envisioned as a major redesign of the air transportation system that will move from largely ground-based radars to precision satellite-based navigation and includes digital, networked communications; an integrated weather system; layered, adaptive security; and more. The reauthorization of FAA and the Airport and Airway Trust Fund provides a unique opportunity to examine how the agency is managing the operation and safety of the current air traffic control system as it prepares to implement NextGen. My testimony today focuses on these questions: (1) What progress is FAA making in implementing initiatives that could provide a solid foundation for NextGen? (2) What are the key issues that need to be addressed to help ensure a successful transition to NextGen? and (3) What key safety areas need to be addressed for the continued safe operation of the current and future air transportation system? My statement is based on our recent reports as well as ongoing work for this subcommittee assessing FAA's performance metrics for its acquisitions, runway safety, and safety issues concerning the operation of unmanned aircraft systems in the national airspace. We conducted this work in accordance with generally accepted government auditing standards.

In summary:

- Over the past few years, FAA has made significant progress in moving to more businesslike and cost effective operations and modernizing the air traffic control

[1]JPDO was authorized by the Vision 100—Century of Aviation Reauthorization Act (Pub. L. No. 108-176), which requires the office to operate in conjunction with multiple government agencies, including the Departments of Transportation, Commerce, Defense, and Homeland Security; FAA; the National Aeronautics and Space Administration (NASA); and the White House Office of Science and Technology Policy. JPDO also involves industry and other stakeholders through the Next Generation Air Transportation System Institute.

system, which should better position the agency for the complex implementation of NextGen. However, further work remains to fully address past problems in the modernization program. FAA has improved its financial management, including implementing a new cost accounting system and developing a cost allocation methodology; however, it is not yet clear if the cost allocation methodology is sufficiently valid and reliable to derive the administration's proposed new cost-based funding for FAA. FAA has also sought to improve its financial management with efforts to control and reduce costs. For example, FAA plans to produce cost savings through outsourcing such as with its planned contracting out of new surveillance technology, and through facility consolidations. In addition to improvements in financial management, FAA has improved its acquisition management, which will be critical to a successful transition to NextGen. For example, FAA has begun reviewing its major systems acquisitions and has established guidance for using a project management technique known as Earned Value Management[2] in its acquisition management system, although institutionalizing these improvements will continue to be a challenge for FAA. FAA has also established performance measures and targets for its critical acquisitions. While the acquisition and deployment of NextGen technology are key issues facing the agency, it will be critical that FAA continue to maintain existing systems and phase out existing systems using a risk-based approach. And, although FAA has initiated numerous financial, management, and acquisition process improvements, the agency must work to institutionalize these changes while at the same time finding new leadership—due to losses of key leaders at FAA and its Air Traffic Organization (ATO)—that can continue to enforce an agencywide commitment to change and continuous improvement.

- As FAA begins implementing NextGen, key issues remain that will need to be addressed, such as coordinating with JPDO, funding for NextGen-related programs, and ensuring that FAA has both the technical and contract management expertise that will be required to oversee this complex undertaking. FAA has become steadily more focused on NextGen over the past few years and is expanding and revamping its Operational Evolution Plan—renamed the Operational Evolution Partnership—to integrate with JPDO activities and become its implementation plan for NextGen, including details of required technologies, procedures, and resources. This is a step in the right direction. JPDO recently reported that the total cost for NextGen infrastructure may range between $15 billion and $22 billion. The agency also noted that it expects a corresponding cost to system users, who will have to equip themselves with the advanced avionics necessary to realize the full benefits of some NextGen technologies, in the range of $14 billion to $20 billion. Another transition challenge for FAA and JPDO is to address questions about which entities will fund and conduct some of the necessary research, development, and demonstration projects that will be key to achieving certain NextGen capabilities and keeping the development of new systems on schedule. We have also recommended that FAA examine its strengths and weaknesses with regard to the technical and contract management expertise that will be needed for NextGen implementation. In response

[2] Earned Value Management combines measurements of technical, schedule, and cost performance with the intent of providing an early warning of problems while there is time for corrective action.

to our recommendation, FAA is considering convening a blue ribbon panel to study the issue and make recommendations to the agency. We believe that such a panel could help FAA begin to address this challenge.

- To deal with current and future safety issues, it will be important for FAA to also address several issues as it works to ensure that its safety programs are aligned to meet future demand. First, ground safety is an area of increasing concern because air traffic is forecast to grow substantially during the coming decades, which will result in more aircraft and increased congestion and safety hazards in the complex airport environment. FAA needs to keep on schedule to deploy NextGen technology that warns controllers of imminent ground collisions and implement recommendations by the National Transportation Safety Board (which continues to place runway incursions on its Most Wanted Transportation Safety Improvements list). Second, FAA needs to establish an appropriate regulatory approach for some current airspace users, such as air ambulances, and new users such as the emerging space tourism industry. For example, we suggested that Congress should consider revisiting FAA's dual role for ensuring safety and promoting the emerging space tourism industry and decide whether the elimination of FAA's promotional role is necessary to alleviate a potential conflict of interest. Third, to maintain and expand the margin of safety—especially if substantial growth in air traffic materializes—FAA cannot rely on its current oversight approach, which focuses on labor-intensive inspections. Accurate, complete safety data would provide FAA with an early warning of hazards that can lead to accidents. We have recommended that FAA improve the accuracy and completeness of its safety data and its analysis of that data. FAA is in the early planning stages of addressing our recommendations, but more work remains. Fourth, FAA's ability to ensure safety in NextGen will be affected by its ability to manage its human capital, including safety inspectors, engineers, technicians, and air traffic controllers. FAA faces challenges in improving its staffing processes, addressing human factors issues associated with significant increases in the automation of air traffic management, replacing the large percentage of staff expected to retire, and addressing the contentious relations with its employee unions, which have the potential to hinder the agency's ability to retain and recruit skilled staff.

Improved, Businesslike Operations Should Better Position FAA to Implement and Manage NextGen, but Further Work Remains

Although the NextGen effort involves multiple government agencies and the private sector, FAA will be the entity largely responsible for implementing the policies and systems necessary for NextGen while safely operating the current air traffic control system 24 hours a day, 7 days a week. This means that FAA will be responsible for keeping a number of large NextGen systems acquisitions on budget and on schedule as it manages and sustains the current system. Historically, FAA has had serious weaknesses in its financial management as well as chronic cost and schedule difficulties with air traffic control system acquisitions. During the past few years, FAA has made significant progress in implementing businesslike processes and procedures for financial management, acquisitions, and organization structures. The implementation of these

types of initiatives has improved FAA's management of the current system and should better position the agency to manage the enormously complex transition to NextGen. However, further work remains to fully address past problems and institutionalize these changes throughout the agency, especially given the changing leadership within both FAA and its ATO.

FAA Has Improved Its Financial Management, although the Soundness of Its Cost Allocation Methodology is Uncertain

Sound financial management, including sound cost accounting and cost allocation systems, is important for the current operation of FAA and lays the foundation for the transformation to NextGen and proposed changes to the agency's funding system laid out in the administration's reauthorization proposal. In 1999, we placed FAA on our high-risk list for its financial management practices, noting weaknesses that rendered the agency vulnerable to fraud, waste, and abuse by undermining its ability to manage operations and limiting the reliability of financial information provided to Congress. In 2005, we removed FAA's financial management from our high-risk list because the agency had made significant progress, including implementing a new financial management system called Delphi[3] and receiving unqualified opinions from auditors on its annual financial statements for fiscal years 2001 through 2005. Nonetheless, external auditors issued a qualified opinion on FAA's fiscal year 2006 financial statements and repeated a material internal control weakness that was reported in 2005. The concerns that led to the qualified opinion stemmed from FAA's inability to support the accuracy and completeness of its construction-in-progress account, reported in the financial statements as $4.7 billion. FAA is working to address the problem.

As part of its improved financial management, FAA has developed a cost accounting system and a cost allocation methodology, which are critical to the successful implementation of the new cost-based funding system included in the administration's reauthorization proposal.[4] The proposal would change FAA's financing system from one based mainly on excise taxes to one that provides a better link between revenues and the costs that users of the national airspace system impose on the system, according to the agency. FAA also says the proposal would improve revenue adequacy, equity, and efficiency.[5] While the reauthorization proposal may address some of the equity and efficiency concerns that FAA has raised with the current funding structure, we have reported that it is not yet clear if FAA has developed a sound cost allocation

[3]Delphi is a commercial off-the-shelf financial management system that was acquired by the Department of Transportation and fully implemented in FAA in 2003.
[4]FAA has proposed changes in its reauthorization proposal that include, among others, introducing direct user charges for commercial aircraft based on the cost of the air traffic services they receive, eliminating many current taxes, substantially increasing the fuel taxes general aviation operators pay, charging both commercial and general aviation a fuel tax to pay for airport capital improvements, and linking the contribution to FAA's budget from the General Fund of the U.S. Treasury to the public benefits FAA provides. Under FAA's proposal, these changes would begin in fiscal year 2009.
[5]Revenue adequacy refers to the ability of FAA's funding system to produce revenues commensurate with workload changes over time. Equity refers to the equitable distribution of costs to aviation users. Efficiency refers to incentives that encourage the efficient use of the national airspace system.

methodology from which to derive the new cost-based funding.[6] We are reviewing FAA's cost allocation methodology and expect to issue a report later this year.

FAA has also improved its financial management through increased efforts to achieve cost savings and cost avoidance throughout the agency. For example, FAA is outsourcing flight service stations and estimates a $2.2 billion savings over 12 years. Similarly, FAA is seeking savings through outsourcing its planned nationwide deployment of Automatic Dependent Surveillance-Broadcast (ADS-B), a critical element of NextGen. FAA is planning to implement ADS-B through a performance-based contract in which FAA will pay "subscription" charges for the ADS-B services and the vendor will be responsible for building and maintaining the infrastructure. (FAA also reports that the ADS-B rollout will allow the agency to remove 50 percent of its current secondary radars, saving money in the program's baseline. The remaining radars will serve as a back-up system to ADS-B.) As for consolidating facilities, FAA is currently restructuring ATO's administrative service areas from nine offices to three offices, which FAA estimates will save up to $460 million over 10 years.

We previously reported that FAA should pursue further cost control options, such as exploring additional opportunities for contracting out services and consolidating facilities. However, we recognize that FAA faces challenges with consolidating facilities, an action that can be politically sensitive. In recognition of this sensitivity, the administration's reauthorization proposal presents a "BRAC-like" initiative in which the Secretary of Transportation would be authorized to establish an independent, five-member commission, known as the Realignment and Consolidation of Aviation Facilities and Services Commission, to independently analyze FAA's recommendations to realign facilities or services. The commission would then send its own recommendations to the President and Congress. In the past, we noted the importance of potential cost savings through facility consolidations; however, it must also be noted that any such consolidations must be handled through a process that solicits and considers stakeholder input throughout and fully considers the safety implications of both proposed facility closures and consolidations.

Progress Has Been Made but Further Work Remains to Institutionalize Recent Improvements in Management and Acquisition Processes

A successful transition to NextGen will depend, to a great extent, on FAA's ability to manage the acquisition and integration of multiple NextGen systems. Since 1995, we have designated FAA's air traffic control modernization program as high risk because of systemic management and acquisition problems. However, in recent years, FAA has made significant progress toward improving its acquisition management. Realization of NextGen goals could be severely compromised if FAA's improved processes are not institutionalized and carried over into the implementation of NextGen, which is an even more complex and ambitious undertaking than past modernization efforts.

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[6]GAO, *Federal Aviation Administration: Observations on Selected Changes to FAA's Funding and Budget Structure in the Administration's Reauthorization Proposal,* GAO-07-625T (Washington, D.C.: Mar. 21, 2007).

To its credit, FAA has taken a number of actions to improve its acquisition management. By creating ATO in 2003 and appointing a chief operating officer (COO) to head ATO, FAA established a new management structure and adopted more leading practices of private sector businesses to address the cost, schedule, and performance shortfalls that have plagued air traffic control acquisitions. ATO has worked to create a flatter organization, with fewer management layers, and has reported reducing executive staffing by 20 percent and total management by 16 percent. In addition, FAA uses a performance management system to hold managers responsible for the success of ATO. More specifically, to better manage its acquisitions and address problems we have identified,[7] FAA has

- undertaken human capital initiatives to improve its acquisition workforce culture and build towards a results-oriented, high-performing organization;
- developed and applied a process improvement model to assess the maturity of its software and systems acquisitions capabilities resulting in, among other things, enhanced productivity and greater ability to predict schedules and resources; and
- reported that it has established a policy and guidance on using Earned Value Management (EVM) in its acquisition management system and that 19 of its major programs are currently using EVM.[8]

Institutionalizing these improvements throughout the agency will continue to be a challenge for FAA. For example, the agency has yet to implement its cost-estimating methodology, although, according to the agency, it has provided training on the methodology to employees. Furthermore, FAA has not established a policy to require use of its process improvement model on all major acquisitions for the national airspace system. Until the agency fully addresses these residual issues, it will continue to risk program management problems affecting cost, schedule, and performance. With a multibillion dollar acquisition budget, addressing these issues is as important as ever.

FAA's Methodology for Tracking and Reporting Performance on Critical Acquisitions is Subject of Ongoing Work for this Subcommittee

In another effort to improve agency processes, FAA expanded its use of performance measures to track its performance. In its fiscal year 2007 portfolio of goals, FAA lists 30

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[7]GAO, *Federal Aviation Administration: Stronger Architecture Program Needed to Guide Systems Modernization Efforts,* GAO-05-266 (Washington, D.C.: Apr. 29, 2005); *Air Traffic Control: System Management Capabilities Improved, but More can be Done to Institutionalize Improvements,* GAO-04-901 (Washington, D.C.: Aug. 20, 2004); and *Information Technology: FAA Has Many Investment Management Capabilities in Place, but More Oversight of Operational Systems is Needed,* GAO-04-822 (Washington, D.C.: Aug. 20, 2004).

[8]EVM is a project management technique that combines measurements of technical performance, schedule performance, and cost performance with the intent of providing an early warning of problems while there is time for corrective action.

performance measures. As part of our ongoing work,[9] we are currently reviewing how FAA selects and measures two of these goals in particular: critical acquisitions on budget and critical acquisitions on schedule.[10] FAA has reported exceeding targets for both of these measures for the past 3 fiscal years. FAA's targets for fiscal year 2006 were to have 85 percent of critical acquisition programs within 10 percent of budget, as reflected in its capital investment plan, and to have 85 percent of critical acquisition programs on schedule. For fiscal year 2006, FAA reported that its critical acquisitions were 100 percent on budget and over 97 percent on schedule. This represents a major turnaround in a program that remains on our high-risk list.

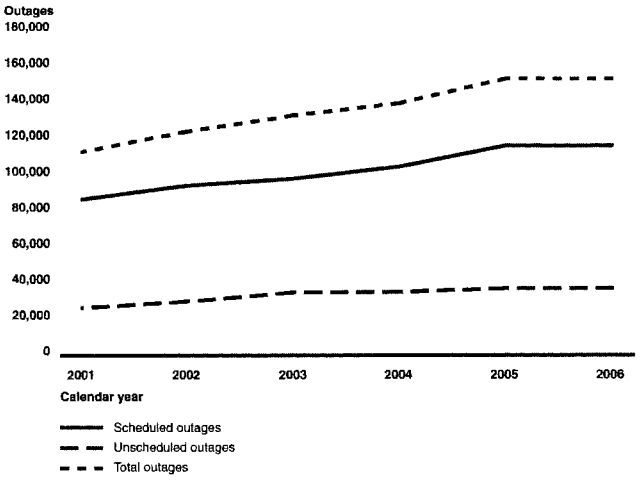
It will be important, as FAA begins to implement NextGen systems, to maintain critical acquisitions on schedule and on budget in order to meet the goal of transitioning to NextGen by 2025 and to prevent escalation of the costs of NextGen. Our ongoing work is examining FAA's performance and reporting on its critical acquisitions, including applicable performance measures. We are also exploring FAA's use of the most recently approved cost and schedule baselines, which may have changed significantly since the start of an acquisition, to measure program performance. Rebaselining acquisitions is an accepted practice and there are valid reasons for doing so, such as when changes in a program's requirements fundamentally alter the acquisition and make the originally approved schedule unrealistic. Because rebaselining resets the cost and schedule variances to zero, we want to verify that FAA's practice is not masking acquisition performance problems. We expect to issue a report on these issues later this year.

Although FAA Is Now Focusing on NextGen, It Must Continue to Manage and Sustain the Current System

While the acquisition and deployment of NextGen technology are key issues facing the agency, it will be critical for FAA to continue to maintain existing systems and phase out existing systems using a risk-based approach. The adequacy of FAA's maintenance of existing systems was raised following a power outage and equipment failures in Southern California that caused hundreds of flight delays during the summer of 2006. Investigations by FAA and the Department of Transportation Inspector General into these incidents identified a number of underlying issues, including the age and condition of equipment. Nationwide, the number of scheduled[11] and unscheduled outages of air traffic control equipment and ancillary support systems has been increasing (see fig. 1). Increases in the number of unscheduled outages indicate that systems are failing more frequently.

[9]This work is in response to a joint request from this subcommittee and the Subcommittee on Aviation of the Senate Commerce, Science, and Transportation Committee.
[10]ATO has the lead responsibility for both of these goals.
[11] Scheduled outages occur for scheduled maintenance.

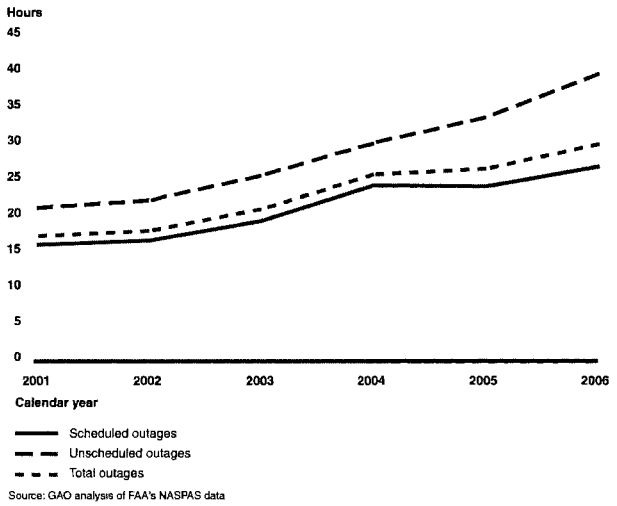
Figure 1: Number of Scheduled and Unscheduled Equipment Outages, Calendar Years 2001-2006



Source: GAO analysis of FAA's NASPAS data.

In addition, the duration of unscheduled equipment outages has also been increasing in recent years from an average of about 21 hours in 2001 to about 40 hours in 2006 (see fig. 2), which may indicate, in part, that maintenance and troubleshooting activities are requiring more effort and longer periods of time. However, according to FAA, it considers user impact and resource efficiency when planning and responding to equipment outages. As a result, according to the agency, although some outages will have longer restoration times, the agency believes they do not adversely affect air traffic control operations. It will be critical for FAA to monitor and address equipment outages to ensure the safety and efficiency of the legacy systems, since they will be the core of the national airspace system for a number of years and, in some cases, will become part of NextGen.

Figure 2: Average Duration of Scheduled and Unscheduled Equipment Outages, Calendar Years 2001-2006



Source: GAO analysis of FAA's NASPAS data

Institutionalizing Change Within FAA Will Require Continued Strong Leadership

While FAA has implemented many positive changes to its management and business processes in recent years, it currently faces the loss of key leaders. We reported that the experiences of successful transformations and change management initiatives in large public and private organizations suggest that it can take 5 to 7 years or more until such initiatives are fully implemented and cultures are transformed in a sustainable manner. Such changes require focused, full-time attention from senior leadership and a dedicated team.[12] However, the agency will have lost two of its significant agents for change—the FAA administrator and the COO, who heads ATO—by the end of September 2007. The administrator's term ends in September 2007; the COO left in February 2007, after serving 3 years. This situation is exacerbated by the fact that the current director of JPDO is new, having assumed that position in August 2006. For the financial, management, and acquisition improvements to further permeate the agency, and thus provide a firm foundation upon which to implement NextGen, FAA's new leaders will need to demonstrate the same commitment to improvement as the outgoing leaders. This continued commitment to change is critical over the next few years, as foundational NextGen systems begin to be implemented. Because this is a critical time for FAA, the agency needs to move expeditiously to find a new COO for ATO. It could be useful to have a COO whose tenure lasted the length of the current statutory 5-year term. This

[12]GAO, *National Airspace System: Transformation will Require Cultural Change, Balanced Funding Priorities, and Use of All Available Management Tools,* GAO-06-154 (Washington, D.C.: Oct. 14, 2005).

would allow for stable leadership at ATO during this critical transition from planning to early implementation of NextGen.

Key Issues Remain in the Transition From Planning to Implementing NextGen

Several key issues will need to be addressed to help ensure a successful transition to NextGen as FAA moves from the conceptualization and planning of NextGen, handled largely through the interagency collaborative efforts of FAA's JPDO, to the implementation of NextGen technologies and systems. Those issues include (1) continuing to focus on the coordination between ATO and JPDO and stakeholder involvement; (2) determining which entities will fund the necessary research, development, and demonstration projects for NextGen; and (3) determining whether FAA has the technical and contract management expertise necessary to oversee the complex implementation of NextGen.

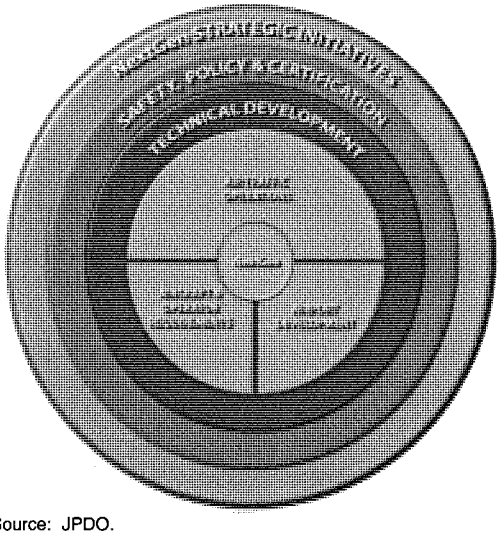
FAA Has Improved Coordination with JPDO, but Some Key Stakeholder Involvement is Absent

FAA has become steadily more focused on NextGen implementation, but some key stakeholders, such as FAA technicians who will maintain NextGen systems, are not currently involved. One of the most important changes FAA has made with regard to NextGen is the expansion and revamping of its Operational Evolution Plan (OEP)—renamed the Operational Evolution Partnership—to become FAA's implementation plan for NextGen. This is a step in the right direction. The OEP is being expanded to apply to all of FAA and is intended to become a comprehensive description of how the agency will implement NextGen, including the required technologies, procedures, and resources.[13] (Figure 3 shows the OEP framework.) An ATO official told us that the new OEP is expected to be consistent with JPDO's key planning documents and partner agency budget guidance.[14] According to FAA, the OEP will allow it to demonstrate appropriate budget control and linkage to NextGen plans and will force FAA's research and development to be relevant to NextGen's requirements. According to FAA documents, the agency plans to publish the new OEP in June 2007.

[13]Prior to expansion of the OEP, the document centered on plans for increasing capacity and efficiency at 35 major airports.

[14]The planning documents include the Concept of Operations, Enterprise Architecture, and Integrated Work Plan. The Concept of Operations describes how the transformational elements of NextGen will operate in 2025. It is intended to establish general stakeholder buy-in to the NextGen end state, transition path, and business case. The Enterprise Architecture follows from the Concept of Operations and describes the system in more detail. It will be used to integrate planning efforts and drive partner agency guidance. The Integrated Work Plan lays out a timeline for deploying and integrating NextGen systems.

Figure 3: New OEP Framework



Source: JPDO.

Note: The concentric rings indicate the nature of initiative development from the outer ring (NextGen strategic initiatives), in which new programs and concepts are analyzed and demonstrated; to the second ring, where decisions are made regarding safety, operating policy, performance standards, and certification requirements; to the third ring (technical development), where concepts are prototyped and investment analysis decisions are made. The progression through the rings is not necessarily linear, and a program may be in more than one ring at a time. Data communications, for example, is in the technical development ring and also in the middle ring as policy and rulemaking is considered. The core is divided into three sections, which indicate the FAA offices that implement the final NextGen program.

In an effort to further align FAA's efforts with JPDO's plans for NextGen, FAA has created a NextGen Review Board to oversee the OEP. This review board will be co-chaired by JPDO's director and ATO's vice president of operations planning services. Initiatives, such as concept demonstrations or research, proposed for inclusion in the OEP will now need to go through the review board for approval. Initiatives are to be assessed for relation to NextGen requirements, concept maturity, and risk. An ATO official told us that the new OEP process should also help identify some smaller programs that might be inconsistent with NextGen and could be discontinued and it will assist in project integration. Additionally, as a further step towards integrating ATO and JPDO, the administration's reauthorization proposal calls for the JPDO director to be a voting member of FAA's Joint Resources Council and ATO's Executive Council.

Some stakeholders, such as current air traffic controllers and technicians, will play critical roles in NextGen, and their involvement in planning for and deploying the new

technology will be important to the success of NextGen. In November 2006, we reported that air traffic controllers were not involved in the NextGen planning effort.[15] Controllers are beginning to become involved as the controllers are now represented on a key planning body. However, the technicians do not participate in NextGen efforts. Input from current air traffic controllers who have recent experience controlling aircraft and current technicians who will maintain the new equipment is important is considering human factors and safety issues. Our work on past air traffic control modernization projects has shown that a lack of stakeholder or expert involvement early and throughout a project can lead to cost increases and delays.

FAA Has Begun Budgeting for NextGen Programs, although Questions Remain About the Funding of NextGen Research and Development

JPDO recently reported some estimated costs for NextGen, including specifics on some early NextGen programs.[16] JPDO believes the total federal cost for NextGen infrastructure through 2025 will range between $15 billion and $22 billion. JPDO also reported a preliminary estimate of the corresponding cost to system users to equip themselves with the advanced avionics that are necessary to realize the full benefits of some NextGen technologies may range from $14 billion to $20 billion. JPDO, in its recently released 2006 Progress Report, noted that this range for avionics costs reflects uncertainty about equipage costs for individual aircraft, the number of very light jets that will operate in high-performance airspace, and the amount of out-of-service time required for installation.

In its capital investment plan for fiscal years 2008-2012, FAA includes estimated expenditures for 11 line items that are considered NextGen capital programs.[17] The total 5-year estimated expenditures for these programs is $4.3 billion. In fiscal year 2008, only 6 of the line items are funded for a total of roughly $174 million; funding for the remaining 5 programs would begin with the fiscal year 2009 budget. According to FAA, in addition to capital spending for NextGen, the agency will spend an estimated $300 million on NextGen-related research and development from fiscal years 2008 through 2012. The administration's budget for fiscal year 2008 for FAA includes a total of $17.8 million to support the activities of JPDO.

The administration's reauthorization proposal would allow for $5 billion in Treasury debt financing authority for NextGen-related capital needs for fiscal years 2013-2017. Projects that might be appropriate for such financing include safety-critical and mission-essential

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[15]GAO, *Next Generation Air Transportation System: Progress and Challenges Associated with the Transformation of the National Airspace System,* GAO-07-25 (Washington, D.C.: Nov. 13, 2006).
[16]JPDO, *Making the NextGen Vision a Reality: 2006 Progress Report to the Next Generation Air Transportation System Integrated Plan* (Washington, D.C.: March 2007).
[17]FAA has six capital investment programs that it considers transformational NextGen programs slated to receive funding in fiscal year 2008: ADS-B nationwide implementation, System Wide Information Management (SWIM), NextGen Data Communications, NextGen Network Enabled Weather, National Airspace System Voice Switch, and NextGen Technology Demonstration. In addition, five other programs are slated to begin funding in 2009: NextGen System Development, NextGen High Altitude Trajectory Based Operations, NextGen High Density Airports, NextGen Networked Facilities, and NextGen Cross-Cutting Infrastructure.

software and systems that controllers and traffic flow managers will use to support certain aircraft operations in the NextGen system, according to the proposal. However, the proposed borrowing authority seems unlikely to have a major impact on FAA's ability to pay for capital investment associated with moving to NextGen because the payback period is relatively short. With a maximum payback period of 5 years, the advantage of matching the time period for paying for a capital investment with the time period in which the benefits of that investment are realized is unlikely to be achieved. Therefore, the advantage of borrowing versus receiving appropriations for a period of up to 5 years is unclear.

While FAA and JPDO have begun to release estimates for FAA's NextGen investment portfolio, questions remain over which entities will fund and conduct some of the necessary research, development, and demonstration projects that will be key to achieving certain NextGen capabilities and keeping the development of new systems on schedule. In the past, a significant portion of aeronautics research and development, including intermediate technology development, has been performed by NASA. However, NASA's aeronautics research budget and proposed funding shows a 30-percent decline, in constant 2005 dollars, from fiscal year 2005 to fiscal year 2011. To its credit, NASA plans to focus its research on the needs of NextGen. However, NASA is also moving toward a focus on fundamental research and away from developmental work and demonstration projects. FAA and JPDO face the challenge of determining the nature and scope of the research and technology development necessary to begin the transition to NextGen. They also have to identify the entities that can conduct that research and development and the source of funding to support it.

FAA Needs to Explore whether It Has the Technical and Contract Management Expertise Necessary to Implement NextGen

In the past, a lack of expertise contributed to weaknesses in FAA's management of air traffic control modernization efforts, and industry experts with whom we spoke questioned whether FAA will have the technical expertise needed to implement NextGen. In addition to technical expertise, FAA will need contract management expertise to oversee the systems acquisitions and integration involved in NextGen. In November 2006, we recommended that FAA examine its strengths and weaknesses with regard to the technical expertise and contract management expertise that will be required to define, implement, and integrate the numerous complex programs inherent in the transition to NextGen.[18] In response to our recommendation, FAA is considering convening a blue ribbon panel to study the issue and make recommendations to the agency about how best to proceed with its management and oversight of the implementation of NextGen. We believe that such a panel could help FAA begin to address this challenge.

[18]GAO-07-25.

Aviation Safety Record Remains High, but Some Areas Need to be Addressed for Current and Future Safety as FAA Transitions to NextGen

As FAA works to develop the policies and systems to transition to NextGen, it will be important for the agency to also ensure that its safety programs are aligned with these changes. While recent safety trends are generally positive, improving upon those trends will be necessary simply to maintain the same level of safety if air traffic doubles or triples during the coming decades. Moreover, certain recent trends—such as the commercial air carrier fatal accident rate—may warrant immediate attention. Although this accident rate has steadily declined in recent years, FAA did not meet its performance target in this area for fiscal year 2006 due to four accidents, including two accidents on runway and ramp areas and one runway overrun. FAA's ability to deal with current safety issues and the transition to NextGen would be enhanced by (1) acquiring and deploying new safety enhancing technologies; (2) establishing appropriate regulatory approaches for current airspace users and emerging sectors; (3) improving the accuracy and completeness of its safety data; and (4) addressing human capital issues associated with hiring, training, and deploying its skilled workforce of air traffic controllers, safety inspectors, engineers, and technicians.

FAA Faces Challenges in Implementing Advanced Technology and Other Measures to Improve Safety in the Airport Environment

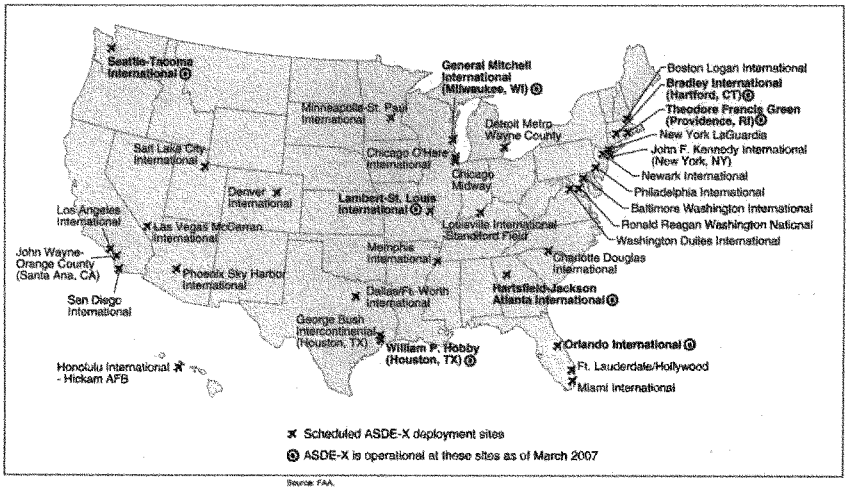
Safety in the airport environment is an area of increasing concern because air traffic is forecast to grow substantially during the coming decades as the system transforms to NextGen. More aircraft and congestion at the airport will make maintaining safety even more critical, as the airport environment involves enormously complex interactions between air traffic controllers and the people who operate on the airport surface, including pilots, mechanics, maintenance technicians, and airport employees. FAA's efforts to improve safety in the airport environment include deploying NextGen technology, such as the Airport Surface Detection Equipment Model X (ASDE-X),[19] evaluating runway status lights, and testing a low-cost surface surveillance system. FAA pursues new technologies to improve runway safety because the incursion rate at U.S. airports was higher in fiscal year 2006 than it was in fiscal year 2002.[20] However, the deployment of new technology has faced schedule delays. FAA originally planned to deploy ASDE-X at 35 major airports by 2007, but the technology is operational at only 8 airports to date, and deployment at the remaining 27 airports is not scheduled to be complete until 2011 (see fig. 4). At the same time, FAA is evaluating the performance of runway status lights, another technology aimed at preventing runway incursions (potential collisions on the ground) by warning pilots when a runway is unsafe for crossing or departure. FAA expects to decide this year whether to deploy the system at 35 large airports at an estimated cost of $300 million. Although the 35 airports that are to receive ASDE-X—and may receive runway status lights—handle about 70 percent of

[19]ASDE-X is the upgraded digitally-based technology that enables air traffic controllers to detect potential runway conflicts by providing detailed coverage of movement on runways and taxiways. ASDE-X warns controllers of potential runway incursions.

[20]The rate was 5.4 incursions per 1 million tower operations in fiscal year 2006 and 5.2 incursions per 1 million tower operations in fiscal year 2002.

enplanements in the United States, they represent only about 6 percent of the country's 573 commercial service airports. Therefore, FAA is also evaluating a low-cost surface surveillance system that could meet the needs of small- to medium-sized airports. The system is designed to alert controllers of potential conflicts and hazards and provide direct warnings to pilots entering or approaching active runways.

Figure 4: Airport Surface Detection Equipment Model X (ASDE-X) Deployment Sites



Source: FAA.

The number of serious incursions—incidents where a collision was narrowly avoided—rose from 28 in fiscal year 2004 to 31 in fiscal year 2006. As a result, NTSB continues to place runway incursions on its Most Wanted Transportation Safety Improvements list. FAA has not yet implemented any of the six runway incursion prevention recommendations that NTSB made in 2000. The recommendations include such things as implementing at commercial airports ground movement safety systems that provide a direct warning to flight crews of possible incursions and changing air traffic control procedures.[21] According to NTSB, FAA has not completed its evaluation and implementation of technology to address the recommendation on safety systems, and the two agencies have not reached agreement on the recommendations to change air traffic control procedures.

[21]Recommended changes to air traffic control procedures include clarifying authorized runway crossings, increasing the situational awareness of the flight crews for arriving aircraft at night or in poor visibility conditions without relying on the controllers, and the use of international landing clearance procedures and standard phraseology for airport surface operations.

FAA is also making efforts to prevent runway overruns, which occur when aircraft pass the ends of runways during aborted takeoffs or while landing, by the construction of runway safety areas or the installation of arresting material at the end of runways. In 2000, FAA established its Runway Safety Area program to accelerate the construction of runway safety areas—areas surrounding the runways designed to reduce the risk of damage to aircraft from overruns. Since 2005, commercial service airports have been required[22] to bring their runway safety areas into compliance with FAA standards by 2015. According to FAA, as of January 2007, 70 percent of the 1,020 runways at 573 commercial airports in the United States substantially comply with runway safety area standards, up from 55 percent in 2000. In fiscal year 2006, the Airport Improvement Program (AIP) awarded more than $240 million in grants for runway safety area improvement projects. FAA indicates that about $1.1 billion in AIP funds will be needed to complete the remainder. The administration's budget request for FAA calls for $2.75 billion in AIP funds in fiscal year 2008, a substantial reduction from the $3.5 billion funding levels for fiscal years 2006 and 2007. It will be important for FAA to consider these runway safety areas as it prioritizes AIP funds. FAA considers the installation of an Engineered Materials Arresting System (EMAS), a bed of crushable concrete designed to safely decelerate and stop overrunning aircraft, to be an acceptable alternative for meeting runway safety area standards. As of December 2006, EMAS was installed on 21 runways at 16 U.S. airports and had successfully stopped three aircraft from overrunning runways. We are conducting ongoing work for this subcommittee on runway and ramp safety and expect to issue our final report later this year.

FAA and Congress Should Address Regulatory Approaches to Some Current Airspace Users and Emerging Sectors

Future air traffic is expected to include not only increases in the number of traditional airspace users, but new users as well. It will be important for FAA to establish the appropriate regulatory approach for current users and new users such as the emerging space tourism industry and unmanned aerial systems. For example, we recently found that FAA's current oversight approach for air ambulances was not geared to the unique operating characteristics and risks associated with that sector.[23] Further, in 2006, NTSB recommended, among other things, that FAA require that all air ambulance operators comply with Part 135 of Title 14 of the Code of Federal Regulations during all flights with medical personnel on board.[24] Under FAA regulation, most air ambulances operate under rules specified in Part 135. However, pilots may operate under different standards, depending on whether they are carrying patients. Without patients or passengers on board, pilots may operate under rules specified in Part 91 of Title 14 of the Code of Federal Regulations. With patients on board, pilots are required to operate under Part 135 rules. Parts 91 and 135 flight rules differ significantly in two key areas—

[22] Public Law 109-115.

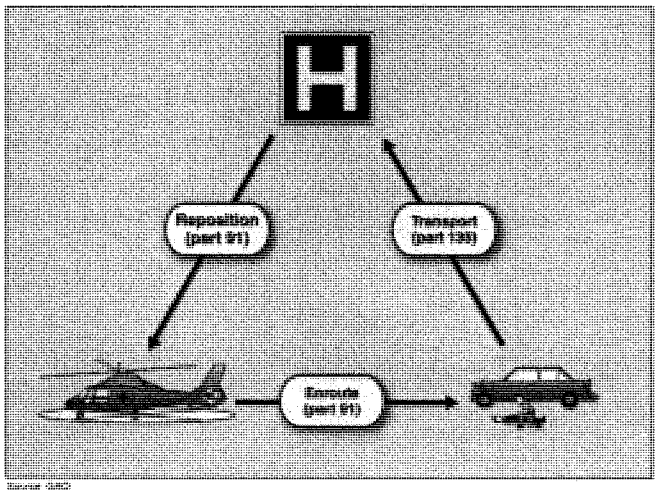
[23] GAO, *Aviation Safety: Improved Data Collection Needed for Effective Oversight of Air Ambulance Industry,* GAO-07-353 (Washington, D.C.: Feb. 21, 2007).

[24] NTSB, *Special Investigative Report on Emergency Medical Services Operations* (Washington, D.C.: 2006). According to NTSB, as of December 21, 2006, this recommendation and others made in this report were still open.

(1) weather and visibility minimums and (2) rest requirements—with Part 135 requirements being more stringent.

In many air ambulance trips, part of the trip may involve Part 135 rules, while another part may involve Part 91 rules. For example, scene response missions for air ambulance helicopters frequently have three legs—the flight en route to the accident scene, the transport of the patient to the hospital, and the reposition of the helicopter back to its base (see fig. 5). Only the leg during which patients or other passengers (medical crew members are not considered passengers) are on board must be flown under Part 135 flight rules. Of the 89 air ambulance accidents that we examined from 1998 through 2005, 64 took place during Part 91 flight and the remaining 25 took place during Part 135 flight. However, because air ambulance flights without patients or passengers could be flown under Part 91 requirements, there may be more than twice as many flights taking place under Part 91 compared with Part 135. A better understanding of the trends in the air ambulance industry, including accident data, will be important in deciding if the current regulatory approach is appropriate or if more fundamental changes, such as revising FAA regulations, need to be made.

Figure 5: Air Ambulance Scene Flight Response Legs



As another example, the need for a different regulatory approach for all-cargo operations has been raised. According to FAA, from 1998 through 2005, the accident rate for scheduled air cargo operators declined significantly but was still about 2.5 times higher than the accident rate for scheduled passenger operators. The Congressional Research Service pointed out that the size of aircraft, the range of operations flown by all-cargo operators, and the large growth in the all-cargo sector introduce unique risks to

operators, airports, and the public that may call for revisiting the safety standards that apply to all-cargo operations.[25]

In recent work, we also raised issues concerning FAA's regulation of the emerging space tourism industry.[26] Specifically, we suggested that Congress should consider revisiting the granting of FAA's dual mandate for ensuring safety and promoting space tourism and decide whether the elimination of FAA's promotional role is necessary to alleviate a potential conflict. FAA licenses the operation of commercial space launches and launch sites. Historically, these launches carried commercial payloads and were unmanned. The prospect for commercial space tourism materialized in 2004, after the successful launches of SpaceShipOne raised the possibility of an emerging U.S. commercial space tourism industry that would make human space travel available to the public. Several companies are planning to start taking paying passengers on suborbital flights within the next few years and a number of commercial spaceports are being planned. For example, Virgin Galactic intends to provide suborbital space flight from a planned spaceport in New Mexico starting in 2009. It plans to carry 3,000 passengers over 5 years, with 100 individuals having already paid the full fare of $200,000. Figure 6 shows current and planned spaceports. In 1984, the Commercial Space Launch Act gave DOT the authority to license and monitor the safety of commercial space launches and to promote the industry. It is important that FAA's statutory responsibility to promote the commercial space launch industry does not interfere with its safety oversight of the industry as the space tourism sector develops. We have no evidence that FAA's promotional activities, such as sponsoring an annual industry conference and publishing economic impact studies, have conflicted thus far with its safety regulatory role, but conflicts could occur as the industry matures.

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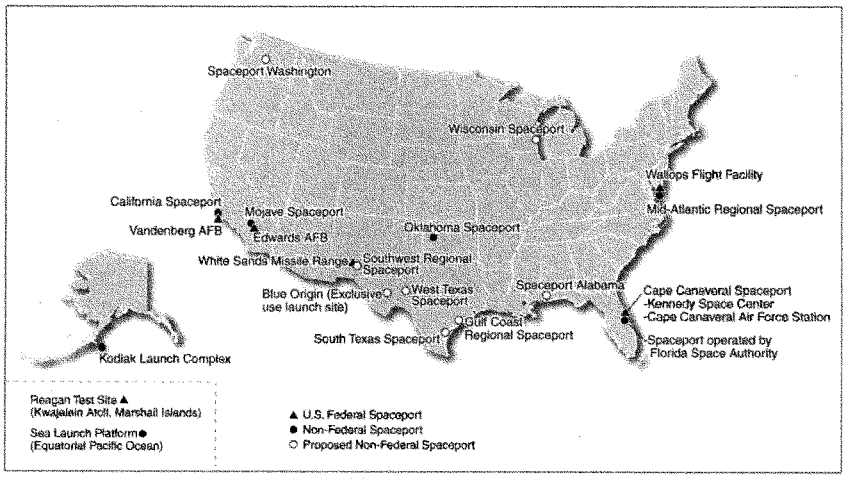
[25]Congressional Research Service, *Reauthorization of the Federal Aviation Administration: Background and Issues for Congress* (Washington, D.C.: Jan. 29, 2007).
[26]GAO, *Commercial Space Launches: FAA Needs Continued Planning and Monitoring to Oversee the Safety of the Emerging Space Tourism Industry*, GAO-07-16 (Washington, D.C.: Oct. 20, 2006).

Figure 6: Existing and Proposed Spaceports in the United States, August 2006



Source: FAA, GAO

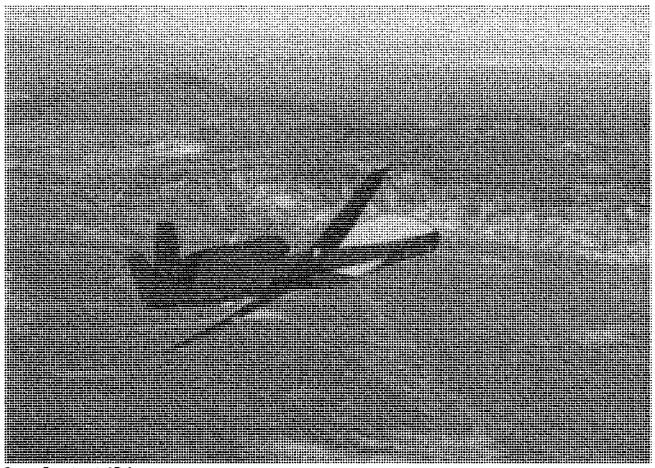
In addition, FAA faces the challenge of determining the circumstances under which it would regulate the safety of crew and space flight participants. In 2004, the Commercial Space Launch Amendments Act prohibited FAA from regulating crew and passenger safety before 2012, except in response to high-risk incidents, serious injuries, or fatalities. FAA has interpreted this limited authority as allowing it to regulate crew safety in certain circumstances and has been proactive in proposing regulations concerning emergency training for crews and passengers. However, FAA has not developed safety indicators by which it would monitor the developing space tourism sector and determine when to step in and regulate human space flight. We have recommended that the agency be proactive about safety rather than respond only after a fatality or serious incident occurs by identifying and monitoring safety indicators that might trigger the need for regulation before 2012. Actions have not been taken on our recommendations.

Another emerging sector that poses regulatory issues is unmanned aircraft systems (UAS)[27] (see fig. 7), which are expected to be part of the mix of aircraft that will operate in NextGen. A small number of UASs are currently used by government agencies for a variety of purposes, such as border security, search and rescue, firefighting, military training exercises, and other law enforcement and homeland security initiatives. Recent projections indicate that over 10,000 UASs could be in operation in the United States by 2015, but FAA believes that the number may be less. We have work ongoing for this subcommittee to assess issues such as the technological and regulatory issues that

[27]Unmanned aircraft systems do not carry a human operator; they are either programmed for autonomous flight (called a "drone") or are flown remotely by a ground operator.

remain in order for UASs to be safely integrated in the national airspace system, the timeframes for completing such work, and the identification of entities that should take the lead in such work. We expect to issue a report later this year.

Figure 7: U.S. Air Force's Global Hawk UAS



Source: Department of Defense.

Our preliminary work, indicates that UASs pose unique safety challenges and questions. For example, what standards should UASs meet to ensure that they detect, sense, and avoid other aircraft? What standards should be set for UAS safety and reliability? How should FAA classify UASs, which can range in size from very small, hand launched systems to those similar in size to a large passenger aircraft? What pilot qualifications are needed for UAS operators? FAA has begun to answer such questions by reviewing its existing safety regulations developed for manned aircraft to determine how or whether they need to be modified to enable UASs to be safely integrated into the national airspace system. FAA expects this to be a 5- to 10-year effort. In the meantime, FAA will continue its existing oversight approach and review each request to operate on a case-by-case basis. If FAA determines that a UAS can operate safely under specified conditions, the agency issues a certificate of authorization and the airspace is restricted during the period of operation.[28] In fiscal year 2006, FAA processed 96 applications for certificates of authorization and issued 62 certificates. FAA projects that it will receive over 400 applications in 2010. The agency may have difficulty handling such an increase under its

[28]A certificate of authorization allows an operator to use defined airspace for a specified time (up to one year, in some cases) and includes special provisions unique to each operation. For instance, a certificate may include a requirement to operate only under visual flight rules.

existing case-by-case process, which could serve as a *de facto* limit on the number of UASs operating in the next few years.

FAA Needs Improved Data and Analysis for Current Safety Oversight and for the Transition to NextGen

FAA cannot rely on its current oversight approach, which focuses on labor-intensive inspections to maintain and expand the margin of safety, especially if substantial growth in air traffic materializes. FAA acknowledges this situation and sees the need to establish a safety information system that can provide an early warning of hazards that may lead to accidents and help the agency manage risk. However, our past work has found problems with the accuracy and completeness of FAA's safety data. For example, FAA does not collect actual flight activity data for general aviation operators, air taxis, or air ambulances. As a result, FAA lacks information to monitor the rate of accidents and determine the effectiveness of its oversight. We have recommended that FAA improve the accuracy and completeness of its safety data and evaluate this information to identify nationwide trends. FAA is in the early planning stages of addressing our recommendations, but more work remains.

An important aspect of FAA's safety oversight is the use of over 13,000 private individuals and organizations, known as designees, to leverage inspector resources. Designees act as representatives of the agency to conduct many safety certification activities, such as administering flight tests to pilots, inspecting repair work by maintenance facilities, and approving designs for aircraft parts. In reviewing FAA's designee programs, we found that the agency's oversight of designees was hampered, in part, by limited data on designees' performance.[29] FAA is in the early stages of addressing our recommendation to improve the consistency and completeness of designee information. FAA is also changing and expanding the designee programs by replacing certain designee programs with an organizational designation authorization. By expanding the number and types of organizational designees, FAA's role is being further transformed to monitoring the performance of organizations rather than overseeing the individuals who perform the certification activities. It will be important for FAA to have the data, evaluative processes, and a well-trained inspector staff to effectively monitor the new program to make sure that safety is not adversely affected.

FAA is in the early stages of addressing some of these data issues as it begins planning a new system— Aviation Safety Information Analysis and Sharing System—that would provide access to large volumes of industry safety data. FAA began planning for the new system in 2006. Because this activity is in the early planning stages, our concerns about FAA's data remain relevant. The successful completion of this planning effort will be critical to FAA's ability to improve safety. In fiscal year 2008, FAA proposes budgeting $32 million for safety databases and computer systems. As FAA prioritizes the activities that it undertakes with these funds, it will be important to continue addressing these critical data limitations.

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[29]GAO, *Aviation Safety: FAA Needs to Strengthen the Management of Its Designees Programs,* GAO-05-40 (Washington, D.C.: Oct. 8, 2004).

In addition, FAA is shifting to a data-driven, risk-based approach to maintaining the agency's approximately 40,000 pieces of air traffic control equipment, but it has not yet determined its new data needs. FAA is in the very early planning stages of a 10-year or longer effort to switch to this new approach, termed reliability centered maintenance (RCM), which private industry and other federal agencies, such as the Department of Defense (DOD) and NASA, use to maintain equipment. FAA expects the new approach to improve equipment performance. However, we reported in November 2006 that FAA had not developed a plan to implement RCM, has not determined the data needs for RCM, and has not decided what training will be provided to staff.[30] As the agency moves forward with this approach, it will be important for FAA to address the issues we identified as well as work with stakeholders, including FAA maintenance technicians, to ensure that decisions are not driven entirely by cost savings and that the safety and efficiency of national airspace operations are not adversely affected.

FAA Faces Human Capital Challenges

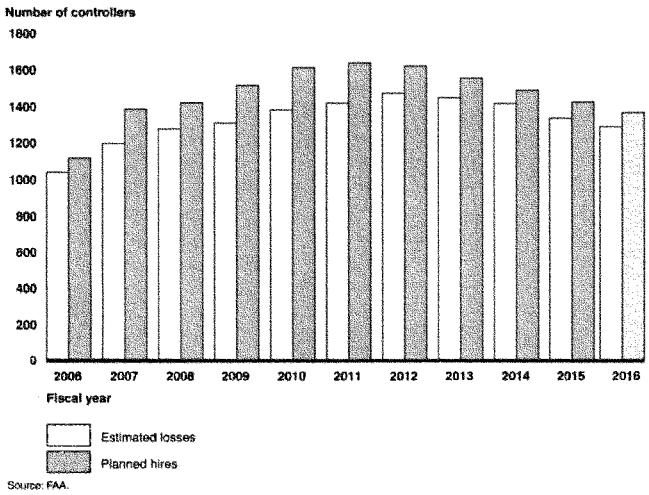
FAA's ability to ensure safety in NextGen will also be affected by its ability to manage its human capital, including air traffic controllers, safety inspectors, engineers, and technicians. FAA faces a challenge in managing human capital due to contentious relations with its labor unions. Fourteen unions represent more than 34,000 of FAA's 43,200 full time permanent employees. With the exception of two unions—the National Air Traffic Controllers Association (NATCA) and the Professional Airway System Specialists (PASS), which represent about 23,000 FAA employees—12 unions have negotiated a contract or memorandum of agreement with FAA, according to FAA officials. In April 2006, after reaching an impasse in negotiations with NATCA, FAA used its authority[31] to settle the impasse by imposing a contract on its air traffic controllers. After 4 years of contract negotiations with PASS, FAA reached an agreement in April 2006. The PASS membership, however, according to an FAA official, rejected this proposed contract. Subsequently, FAA filed a complaint with the Federal Labor Relations Authority claiming an unfair labor practice, according to the same FAA official. Until this complaint is adjudicated, the previous PASS contract remains in effect, according to the FAA official. Improving the contentious relationship between FAA and these unions could have positive effects on both the safety of FAA operations and the implementation of new air traffic management systems under NextGen. For example, delays in union approvals that may be needed to implement new systems could lead to delays in their implementation if labor management relations are acrimonious. In addition, the current contract situations have the potential to hinder FAA's ability to retain and recruit skilled technical staff.

FAA estimates it will lose about 72 percent of its air traffic controller workforce over the next 10 years. (See fig. 8.) To replace these controllers, FAA plans to hire 15,004 new controllers from fiscal years 2006 through 2016, according to the agency's March 2007

[30]GAO, *FAA's Proposed Plan for Implementing a Reliability Centered Maintenance Process for Air Traffic Control Equipment*, GAO-07-81R (Washington, D.C.: Nov. 9, 2006).
[31]49 U.S.C. §40122(a)(2).

controller workforce plan. This recent hiring target is higher than FAA's June 2006 hiring target[32] to reflect recent data indicating that controllers are retiring at a faster rate than FAA anticipated. To meet these higher targets, FAA has expanded its hiring sources, which had focused on individuals with prior FAA or DOD air traffic control experience and graduates from FAA's collegiate training initiative program to include the general public. This strategy is needed, according to FAA officials, because DOD has recently become less of a hiring source for controllers due to military incentives for retaining controllers and DOD's higher salaries than FAA's entry-level salary.[33] However, those new hires that lack prior air traffic control experience will require more training to become certified controllers.[34] Additionally, since it can take up to 3 to 5 years for a controller to become certified, within a few years, a large portion of the controller workforce may be trainees and not fully certified. Based on FAA's hiring and retirement projections, by 2010, about 40 percent of the air traffic controller workforce will have 5 or fewer years of experience. This high percentage of newly hired controllers will continue for a number of years, making it important for FAA to carefully balance the ratio of trainees to certified controllers at each air traffic control facility.

Figure 8: Estimated Controller Losses and Planned Hires, Fiscal Years 2006-2016



Source: FAA.

Note: Numbers for fiscal year 2006 represent actual losses and hires.

[32]In June 2006, FAA planned to hire 11,851 new air traffic controllers from 2006 through 2015. FAA's revised plan calls for hiring 13,641 new controllers for the same time period.
[33]Under FAA's recently implemented contract with air traffic controllers, most current controllers continue to receive their existing base salaries and benefits, while new controllers are hired at lower wages.
[34]Only newly hired controllers without any previous experience or specialized education are required to complete 5 weeks of initial qualification training.

In addition to the challenge of hiring and training new air traffic controllers, it will be important to deploy them in an optimal manner to reflect changing air traffic demands. FAA's recent controller workforce plan includes facility-by-facility staffing standards for fiscal year 2007 expressed as ranges.[35] The staffing standards are intended to take into consideration facility-specific information, such as air traffic operations, productivity trends, expected retirements, and the number of controllers in training. These new standards are an improvement over FAA's historical approach, which was to compute the number of controllers needed systemwide and negotiate the distribution of these totals to the facility level. However, FAA's current staffing does not align with the new standards at about one-third of FAA's 314 facilities—93 of which are currently overstaffed and 11 understaffed. This situation adds further complexity to the controller hiring, training, and staffing issues that FAA must carefully manage in the upcoming years. Furthermore, FAA has not factored into its staffing standards or its projected hiring targets the effect of new NextGen technologies on controller workload. The new technologies will result in a more automated system that, over time, is expected to change the role of controllers as well as productivity. In future updates of the controller workforce plan, it will be important to begin to factor in this impact.

Furthermore, having the right skill mix of safety inspectors and technicians and deploying them to make best use of their skills is especially important as new and developing sectors emerge. By 2010, 44 percent of FAA's inspector workforce of about 3,865 will be eligible to retire. To begin addressing this situation, FAA has requested funding to hire an additional 87 inspectors in fiscal year 2008. In addition to maintaining a sufficient number of safety inspectors, it will be important to deploy them where they are most needed. However, FAA lacks a staffing model to accomplish this. The National Academy of Sciences recently completed a study that analyzed FAA's staffing processes for safety inspectors and identified a number of issues that the agency needed to address. For instance, the study indicated that the current staffing process does not focus resources in the areas of greatest need and the match between individual inspectors' technical knowledge and the facilities and operations they oversee is not always optimal. In response to academy recommendations, FAA expects to develop a staffing model, but the agency does not have a specific time frame for initiating this effort. In addition, FAA lacks staffing standards for its approximately 6,100 technicians, who are responsible for maintaining the agency's air traffic control equipment. The development of staffing models for safety inspectors and technicians is important in the changing aviation environment and is critical to FAA's ability to ensure that its safety programs and workload are aligned to meet the future demands for which NextGen is preparing.

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[35]For example, the staffing range at the Seattle-Tacoma International Airport is from 23 to 29 controllers.

Dyer, Kevin Egan, Colin Fallon, Jim Geibel, Bob Homan, Rosa Leung, Ed Menoche, Taylor Reeves, Richard Scott, Jeremy Sebest, Larry Thomas, Pam Vines, and Carrie Wilkes.

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Testimony of Patrick Forrey

President, National Air Traffic Controllers Association

Before the House Committee on Transportation and Infrastructure

Subcommittee on Aviation

March 22, 2007

A Review of FAA Operational and Safety Programs

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Testimony of National Air Traffic Controllers Association President Patrick Forrey
Before the House Transportation and Infrastructure Subcommittee on Aviation
March 22, 2007

Executive Summary

Introduction
The current prevailing attitude at the Federal Aviation Administration (FAA) defies the recommendations of the Government Accountability Office (GAO) and the Department of Transportation Inspector General (IG). Despite numerous revelations that failure to work in cooperative collaboration with employees and stakeholders has cost taxpayers billions of dollars, delayed by decades the deployment of new safety/modernization technology, and exacerbated foreseeable and addressable safety issues, the FAA continues to "go-it-alone," ignoring sound expert advice and imposing its will to the detriment of the modernization of the air traffic control system, the aviation industry, and the American flying public.

It is in the best interest of all stakeholders that the FAA work more collaboratively with stakeholders in the development and deployment of new air traffic control technology. The failure of the Agency to consult its controller and technician workforce in its attempts to modernize the ATC system, according to the IG, cost the American taxpayer $35 billion dollars since 1981.

With no new technologies on the horizon, and only vague concepts like NGATS and NextGen being tossed around by the FAA, it is imperative that air traffic control facilities be adequately staffed to maintain the current level of safety. Unfortunately, the Agency is on its way to underestimating the number of controller retirements for the fourth consecutive year and was recently forced to admit that its imposed work rules are actually exacerbating the controller staffing crisis. In response, the Agency has unwisely decided to instead unilaterally impose vague new controller staffing ranges which do little to staff to traffic, but instead focus on staffing to budget.

This ill-advised approach is leaving towers, TRACONs, and en route centers around the country understaffed and equipped with out-of-date technology, compromising safety throughout the system. Without Congressional mandate to refocus the Agency on safety through collaboration and cooperation, safety will continue to be compromised and our economy will suffer.

Contract
There are tens of thousands of Federal Aviation Administration (FAA) employees working without a contract – most of whom are represented by the National Air Traffic Controllers Association (NATCA), Professional Airways Systems Specialists (PASS), and American Federation of State, County and Municipal Employees (AFSCME). In July 2005, the FAA unilaterally imposed work rules on 11 NATCA bargaining units consisting of many aviation safety professionals, including Operations Engineers, Aviation Safety Engineers, Aircraft Certification Engineers, Test Pilots, Nurses, Lawyers, Drug Abatement Inspectors, and others. On September 3, 2006, the FAA employed that same tactic and imposed work rules and a two-tier pay scale on air traffic controllers. Although the FAA continually refers to a contract, the truth is that thousands of FAA employees – air traffic controllers, test pilots, nurses, lawyers and others represented by NATCA – are working under imposed work and pay rules, not a contract.

Let us be clear: no labor law considers imposed work rules to be a contract. The Agency's actions are antithetical to the definition of collective bargaining.

Morale among FAA employees is extremely low. Retirements are far exceeding FAA's planning. Fatigue among those employees remaining is a major concern. And these are all effects of the unilaterally imposed work rules. We have seen a reduction in air traffic controllers nationwide and an unnecessary compromise of safety to the flying public.

Without a concerted effort to attract experienced controllers and retain our current workforce, the ATC system will continue to lose controllers and that will mean flight delays, runway incursions and increased chance of aviation disasters.

Controllers are leaving the workforce at a rate of exactly three per day since the start of the current fiscal year. At the current pace, the number of controller losses would be 1,095 – nearly 400 more than the FAA's projected retirements for FY2007 released earlier this month. This FAA miscalculation would not represent an unusual occurrence, as the Agency has missed its retirement projections for three straight years, by an increasing margin each year. But it does represent a paradigm shift away from "safety first," as the FAA has always previously maintained.

It is important to note that the FAA is not currently hiring air traffic controllers, it is hiring trainees. It takes an average of three years for a trainee to become fully-certified. Exacerbating the training process is the fact that when we lose veteran controllers, we are removing the on-the-job instructors that assist with the development of new hires. With the pool of instructors continually shrinking, the length of time it takes trainees to become fully-certified and able to work traffic will continue to increase.

That gap, from the day a veteran controller retires to the day their replacement reaches full certification level, is where we have the most reason to worry about the agency's continued ability to maintain the margin of safety in the system by ensuring there is redundancy. Our greatest challenge today is maintaining the margin of safety knowing the level of redundancy has been whittled away to its bare minimum. We need more eyes watching the skies.

It is likely that those controllers that are retirement-eligible will choose to leave the system unless something can be done to keep them, like returning to the negotiating table under fair conditions with the intentions of reaching a mutually-agreeable contract.

Staffing Authorization Plan

What the FAA has instead done is to intentionally blur the lines of safety in every air traffic control facility in the country. Unwilling to plan for the controller retirement crunch that could be seen decades in advance, underestimating the number of controller retirements three years in a row, and failing to recognize the accelerating effect the work rules they imposed upon the controller workforce would have on controller retirements, the FAA this month replaced the controller staffing authorization numbers developed in tandem with NATCA in 1998 with vague staffing ranges that fail to staff to traffic.

As traffic continues to rise while the number of controllers continues to decrease, inefficiencies will become more rampant and delays will become the norm rather than the exception. Fearfully, the likelihood of runway incursions or in-air accidents is also increased.

Modernization

The FAA is hanging its hat on modernization of the system to help offset the loss of retiring controllers and to make the system more efficient to meet expected growth in air traffic. But according to the IG, the FAA has spent $35 billion on modernization projects since the 1980s without the significant deployment of new technology. To the GA community, aviation industry, pilots, distinguished members of this panel, and other stakeholders, including the American flying public who are counting on NextGen to revolutionize the system, I say: don't count on it.

In a time when capacity has rebounded and is expected to perhaps triple by 2015, we have not witnessed a single new modernization program of any significance started under the current administration. Meanwhile, the GAO has specifically blamed the cost overruns and limited deployments on a lack of input from controllers. Because the FAA has taken no steps to seek input from controllers on the development of NextGen or other technologies, we are holding out little hope that any significant strides will be made in the near future.

The aviation community, including the 14,000 air traffic controllers that I represent, has been awaiting modernization in many different forms for literally decades. Controllers were supposed to be using GPS-based navigation systems by 1997; in 2007 we are still using ground-based radar throughout the system.

In 2004, FAA Administrator Marion Blakey spoke to the advice of the GAO when she said that "One of the great lessons we've learned is that controller involvement – early and continuous controller involvement –

makes a big difference when it comes to deployment. We've stressed the need for controllers to be there each step of the way." But only a few short months later the FAA instead eliminated a very important partnership, the liaison program, and with it made it more likely that new equipment implementation will be over-budget and behind schedule.

The GAO has specifically cited the lack of input from stakeholders, including air traffic controllers, as reasons why modernization tools such as LAAS, WASS, STARS, CPDLC, ACDs, ASR-11, ATCBI-6, and ASDE-X had cost overruns, schedule extensions and/or performance problems. It should be noted that STARS cost more than $520 million above its original 1994 estimate of $940 million, according to GAO. For this extra half-billion dollars, the American taxpayer saw STARS deployed 5 years late in only 29 facilities, rather than the 172 as originally slated. In addition, WAAS costs have grown by 227 percent from its original price tag of $509 million while complete implementation has extended by 13 years.

The truth is that the promises of all of these technologies were never fulfilled. In the real world, the FAA would have a tough time finding capital investment with a pitch that includes going 0-8 on modernization and over $35 billion in misplaced taxpayer investment. But while most corporate board rooms would laugh their NextGen proposal out of the room, I fear that Congress is going to fail to hold them accountable and write them another blank check, leaving controllers to handle an increased workload and users to bear the consequences.

Collaboration Quickens Modernization

When the FAA works in partnership with air traffic controllers, great things can be accomplished. The Domestic Reduced Vertical Separation Minimum (DVRSM), for example, was made possible by the partnership the FAA had with the air traffic controllers. ASDE-X (Airport Surface Detection Equipment – Model X) was a modernization project the air traffic controllers brought to the FAA and is a key instrument in mitigating runway incursions according to the NTSB. Former FAA COO Russ Chew praised the collaborative efforts of the air traffic controllers, technicians, union and management that worked together successfully implementing ATOP (Advanced Technologies and Oceanic Procedures) at New York Center.

These three systems are just a few of the many examples of how important it is to have collaboration between the FAA and the air traffic controllers. Since the FAA chose to eliminate a very important partnership (liaisons) the chance of successfully implementing new equipment within cost and time schedules will most assuredly be impaired.

No one would like to see more efficient air traffic control technology put into place than those who will be using the equipment. The proper tools in place will allow air traffic controllers to make faster and better decisions, making the entire system safer and more efficient. Air traffic controllers want it and we demand it, but we have learned from countless FAA disappointments to not expect it.

I think the FAA, the aviation industry, and the American flying public would be better served if the Agency invested some good faith in their employees and took the advice of the GAO to work in collaboration, not alienation, with their air traffic controllers in the development of new ATC technologies.

Administration's FAA Reauthorization Proposal

The battle over FAA Reauthorization and the Administration's agenda concerning policy and budget has begun in earnest. And NATCA is both watching and participating in this pivotal battle over how the National Airspace System and the FAA will be funded over the next five years.

NATCA's position concerning user fees has not changed. We are opposed to a user fee-based system for three main reasons:

First, it has clearly been documented that in order to commercialize – or to state more accurately – PRIVATIZE the air traffic control system, a separate funding stream must be enacted to allow the provider the ability to manage system resources. NATCA considers air traffic control and its associated occupations inherently governmental functions and we will meet any move to allow a contracted service provider to

manage our ATC system with vigorous opposition. We view the Administration's proposal as the first step to privatizing air traffic control in the United States.

Second, the current method of funding the system, through ticket taxes, PFCs and fuel taxes, provides more revenue than the president's proposed user fees, and provides a simple user-based structure that is projected to provide robust funds well into the future. It seems ironic that the same FAA that is boasting of "NextGen" systems that aren't even fully conceptualized advocates a funding mechanism that provides less revenue needed to pay for modernization.

Third, a user fee-based system is vulnerable to problems that disrupt aviation and commerce, much like 9/11 and SARS did a few years ago. Disruption to system funding will not only impact the maintenance and modernization of the airspace system, it will also affect staffing and workforce issues. A government-based system, such as the Aviation Trust Fund, provides stable and predictable funding for maintenance and modernization and general fund resources to account for the services and benefits all Americans receive from the NAS. It also guarantees that the provider won't be coming back to the government looking for a bailout that other privatized systems have already had to do and will do with the next world disruption.

The Administration's FAA Reauthorization plan also contains a BRAC-like system for closing and consolidating air traffic control facilities. NATCA's position has always been that we can support consolidation where it makes sense from both a fiscal and safety standpoint. However, without collaboration with all of the FAA stakeholders, including controllers and Members of Congress, I have significant doubts that the BRAC-like system proposed would maintain the system with the current level of redundancy necessary to maintain the current level of safety.

NATCA is also concerned about the changes to the contract tower program contained in the reauthorization proposal. The local-federal cost-sharing effectively provides air traffic control services to communities that would otherwise go without. Predominantly smaller, rural airports benefit from the contract tower program. Redefining what a contract tower is, however, simply to contract out more inherently governmental air traffic control positions opens up a Pandora's Box to the compromise of safety of the entire national airspace.

Executive Summary Conclusion

NATCA would like to aid in the modernization of the air traffic control system. Rather than seeing another 25 years and $35 billion wasted, we'd like to see the FAA heed the advice of the GAO and the Inspector General and work in collaboration with air traffic controllers in the development and deployment of NextGen. Congress should insist that the FAA reinstate the liaison program and mandate that the Agency utilize controller input in order to prevent the waste, fraud, and abuse of the money and confidence of the American taxpayer.

Symptomatic of the FAA's repeated inability to work with its employees collectively and in collaboration is its complete failure to negotiate fairly with its employees and failure to make a good-faith effort to reach a mutual-agreement with the unions that represent its employees. NATCA believes that the quickest solution to this safety-related staffing crisis is to require the FAA to return to the bargaining table with its employees, provide a clear impasse procedure, similar to the process that has been consistently successful for the US Postal Service for over 30 years, preserve the rights to ratification and agency head review, and provide jurisdiction for the federal courts to hear disputes and enforce the law.

We would like to return to the contract negotiating table with the FAA and fix this critical problem immediately before the margin of safety in our beloved National Airspace System is further compromised. I believe this will decelerate the attrition levels we are currently seeing.

The Impact of FAA's Unilaterally Imposed Work Rules on Air Traffic Control

There are tens of thousands of Federal Aviation Administration employees working without a contract including many employees represented by National Air Traffic Controllers Association (NATCA), Professional Airways Systems Specialists (PASS), and American Federation of State, County and Municipal Employees (AFSCME), who are working without contracts for their respective bargaining units.[1] In July 2005, the FAA unilaterally imposed work rules on 11 NATCA bargaining units consisting of many aviation safety professionals, including Operations Engineers, Aviation Safety Engineers, Aircraft Certification Engineers, Test Pilots, Nurses, Lawyers, Drug Abatement Inspectors, and others. On September 3, 2006, the FAA used that same tactic and imposed work rules and a two-tier pay scale on air traffic controllers. Currently the NATCA-represented aviation safety professionals do not have a contract with the FAA and air traffic controllers are working under imposed work and pay rules without a contract. Although the FAA continues to tell the big lie that there is a contract, that doesn't make it true.

It is axiomatic that in order to form a contract the parties must have a meeting of the minds. NATCA and FAA did not and do not have a meeting of the minds over the terms and conditions of employment for the three Air Traffic Controller bargaining units. Instead FAA unilaterally implemented its last proposal, so employees are working under imposed work and pay rules rather than a contract. No labor law considers imposed work rules to be a contract. In fact, unilateral implementation is a form of economic warfare not unlike a strike or lockout in the private sector.[2]

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[1] In fact, over the past five years, only one union, the National Association of Air Traffic Specialists (NAATS), has reached a collective bargaining agreement with the FAA and shortly thereafter nearly all of the employees in its Flight Service Station (FSS) bargaining unit were separated from service or transferred to other parts of the Agency when their work was contracted out. FAA subsequently moved unsuccessfully to void the agreement for the remaining employees in Alaska when it petitioned the Federal Labor Relations Authority to decertify the NAATS FSS Alaska bargaining unit.

[2] When an impasse in bargaining is reached, the duty to bargain is not terminated but only suspended. *NLRB v. Tex-Tan*, 318 F.2d 472 (5th Cir. 1963) However, the fact of impasse enables the employer to make unilateral changes in working conditions that are "not substantially different or greater than any which the employer... proposed during negotiations." *Atlas Tack Corp.*, 226 NLRB 222, 227 (1976), enfd. 559 F.2d 1201 (1st Cir. 1977).

Impasse, in effect, temporarily suspends the usual rules of collective bargaining, by enabling the interjection of new terms and conditions into the employment relationship even though no agreement was reached through the proscribed collective bargaining process. As the Supreme Court in *Charles D. Bonanno Linen Serivce v. NLRB*, observed:

As a recurring feature in the bargaining process, impasse is only a temporary deadlock or hiatus in negotiations "which in almost all cases is eventually broken, through either a change of mind or the application of economic force." Furthermore, an impasse may be "brought about intentionally by one or both parties as a device to further, rather than destroy, the bargaining process." 454 U.S. 404, 412 (1981).

In short, the impasse doctrine is designed, in part, to allow an employer to exert unilateral economic force by establishing new terms and conditions of employment as set out in the employer's bargaining proposals. However, the impasse is always viewed as a temporary circumstance, and the impasse doctrine allowing implementation of employer proposals is legitimated only as a method for breaking the impasse. The parties, thus, remain obligated to continue their bargaining relationship and attempt to negotiate an agreement in good faith. The impasse doctrine, therefore, is not a device to allow any party to continue to act unilaterally or to engage in the disparagement of the collective bargaining process. *NLRB v. Crompton-Highland Mills*, 337 U.S. 217, 224 (1949). In the instant dispute, even *assuming arguendo* that the Parties reached impasse, FAA has interpreted its unilateral implementation as a contract, rather than a means of pressuring NATCA into reaching a contract. It has, in the Supreme Court's language, disparaged the entire process of collective bargaining.

Morale among FAA employees is extremely low. Retirements are far exceeding FAA's planning. Fatigue among those employees remaining is a major concern. A lack of trust between employees and their supervisors creates additional tension. Decisions based upon the desire to display authority rather than based upon safety needs or common sense have become pervasive. Thousands of grievances are awaiting disposition. The failure of FAA to reach agreement with the unions that represent its employees has caused urgent safety concerns. Congress must act now to alleviate these problems by requiring the FAA to return to the bargaining table with NATCA. The current law is unclear. Unless the process is changed and clarified, FAA will have no motivation to reach agreement, and it will, unfortunately, once again fail to reach agreement. Congress must act to send the FAA back to the table, provide a clear impasse procedure similar to the process that has been consistently successful for the U.S. Postal Service for over 30 years, preserve the rights to ratification and agency head review, and provide jurisdiction for the Federal Courts to hear disputes and enforce the law. [3]

AIR TRAFFIC CONTROLLER STAFFING

The National Air Traffic Controllers Association has been warning of a retirement wave and subsequent staffing crisis since 1999, when it began looking ahead to the day when air traffic controllers hired after the PATCO strike in 1981 would reach retirement eligibility and decide to leave the workforce. Controllers can retire at age 50 with 20 years of service and at any age with 25 years of service. Because of the increasing stresses of the job, the rise in traffic volume, the worsening staffing crisis and the Federal Aviation Administration's imposed work rules and pay bands, more controllers are leaving the workforce sooner than the FAA anticipated and well short of when they would be forced to retire.

In 2004, just after reaching a high point in controller staffing levels nationwide, the FAA hired only 13 controllers and to this day has not been able to keep up with the rate of attrition, losing more than 1,100 controllers than it has hired in the past three and a half years.

NATCA believes the FAA's updated staffing plan, released on March 7, is three years too late in arriving to address this critical safety issue. Because it takes an average of three years to train a new hire to full certification level, and because retirements have exceeded FAA projections for three straight fiscal years and are on track for a fourth (FY07), the FAA will continue to have a serious problem adequately staffing its facilities for the next several years. Controllers are deeply concerned about the effect on the margin of safety this staffing crisis is already having, and how bad the situation could get.

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[3] Currently the Federal Courts do not have jurisdiction over these disputes. This is distinguished from the attempt to change the personnel regulations in the Department of Homeland Security. Under its statute (5 U.S.C. §9701(a) (Supp. II 2002), DHS was to create a new system through the issuance of regulation (70 Fed. Reg. 5272, Feb. 1, 2005 codified at 5 C.F.R. Part 9701), making it subject to Federal Court jurisdiction under the Administrative Procedures Act. When the courts reviewed DHS' proposed regulations it found that the Department had exceeded its scope by effectively eliminating collective bargaining, among other things. *Nat'l Treasury Employees Union v. Chertoff (Chertoff I)*, 385 F.Supp. 2d 1 (D.D.C. 2005) , and *Nat'l Treasury Employees Union v. Chertoff (Chertoff II)*, 394 F.Supp.2d 137 (D.D.C. 2005), enf'd 452 F.3d 839 (D.C. Cir. 2006).

However, not unlike what has occurred in the negotiations between FAA and the unions that represent its employees, the United States Court of Appeals for the District of Columbia Circuit wrote in enforcing the *NTEU v. Chertoff* cases, "the regulations effectively eliminate all meaningful bargaining over fundamental working conditions (including even negotiations over procedural protections), thereby committing the bulk of decisions concerning conditions of employment to the Department's exclusive discretion. In no sense can such a limited scope of bargaining be viewed as consistent with the Act's mandate that DHS 'ensure' collective bargaining rights for its employees." *Id.* at 844. Similar to DHS, the FAA reserved to its own discretion all of the newly negotiable subjects under 49 U.S.C. 40122(a) in its last, best offer to NATCA, effectively nullifying the first section of the law, where negotiations are provided for, even though it relied upon the next section to unilaterally implement such discretion.

This new FAA report reflects what the FAA wants to spend to staff its control facilities, not what is needed to safely staff them. In fact, two of the FAA's chief architects of this plan are financial officials at the Agency. The FAA has replaced longstanding agreements on safe staffing levels at each facility by offering up a range of staffing for each facility. But controllers believe calling that safe or acceptable is wrong. The FAA has not acknowledged the depth of the staffing crisis and has brought down its numbers to try and hide the fact that it has lost over 1,000 controllers in three years and does not have enough controllers to fully staff its facilities. These ranges were designed to meet what the current staffing levels are, not what they should be.

The FAA did not include controllers in coming up with this plan and has not offered an explanation for why it now needs between nine and 26 percent fewer air traffic controllers than ever before (the difference between the new ranges of staffing and the established authorized levels).

Rather than 'staffing to traffic' as the FAA states publicly is its new mission, the agency appears to be following a new policy; 'staffing to budget." And the FAA is currently hiring trainees; it is not hiring controllers. No amount of new hires the agency has made over the past two years or will make over the next few years is going to fix the current staffing problem.

By the FAA's own admission, and verified by the DOT Inspector General, the FAA miscalculated the detrimental effect the work and pay rules would have on retirements and recruitment. Thirty percent more controllers left than the FAA expected after having work and pay rules forced down their throats. NATCA would like to return to the contract negotiating table with the FAA and fix this critical problem immediately before the margin of safety in our beloved National Airspace System is further compromised. The FAA must hold onto its veteran controllers instead of giving them incentives to leave. These controllers are the on-the-job trainers for the new hires and are the glue that is currently holding the system together.

The Relationship between Understaffing and Safety, Fatigue and Productivity

NATCA has found a direct relationship between staffing and safety, one that becomes even clearer over time as the cumulative effect of long shifts, forced overtime, increased time on position and decreased personal time for family, rest and relaxation take a brutal toll on the mind and the body. This in turn affects reaction times, judgment, focus and alertness. Fewer controllers in a facility means a rise in operational errors and runway incursions and a higher risk of safety problems due to the decreased margin of safety and lack of any room for error.

Facilities that are understaffed often are easy to spot due to several factors: The use of forced overtime by FAA managers, the combining of positions due to the inability to staff every position needed to run the operation, an increase in operational errors, the prevalence of scheduled six-day weeks for controllers whose normal workweek is five days/40 hours, and a rapid decline in morale in the workforce and loss of passion for the job.

At the Southern California TRACON (SCT), traffic is up beyond pre-9/11 levels, to a point where they are handing 2.2 million operations per year. Meanwhile, the facility is operating with only 188 of its authorized 261 controllers, and they are being told that the Palm Springs facility, along with its 220,000 annual operations, will be consolidated into SCT. Meanwhile, and not coincidentally, the number of operational errors at the Southern California TRACON was eight in 2004, and it has grown to 22 in 2006. That represents a near 300 percent increase in operational errors over a two year period as the staffing levels have dropped.

Air traffic controllers' concern is that we are pushing the controller workforce to the breaking point and we can't afford for it to break. We have so few controllers at some of these facilities, like the Southern California TRACON where we are short 73 controllers, that there is no margin for error. Controllers are people, and things happen to people – they get sick, or there is a family emergency and they have to take a sudden and unexpected leave of absence. With staffing so critically low, and with retirements at their current rate, we don't see how we can keep this up before real tragedy strikes.

The situation is so dire at Southern California TRACON that the FAA has had no choice but to place new trainees – straight out of CTI programs or off the street – into the facility to rush them into the training process and desperately work to try and get them to full performance level within three years. This is an extremely reckless and dangerous course. Until now, Southern California TRACON was a destination for experienced controllers, not a starting point for new controllers, because of the incredible complexity of the operation. SCT is the busiest TRACON in the United States. Veteran controllers there didn't start at that facility, they moved through the system, graduating from less busy facilities and gaining valuable experience before earning a well-deserved promotion to SCT. But because of the staffing crisis, controllers do not move up through the system anymore because their current facilities couldn't afford to lose that person. So the FAA is putting brand-new trainees – with no prior experience at an FAA facility – at Southern California TRACON. This is like taking a high school baseball player and putting them in the starting lineup for the New York Yankees and expecting them to play error-free baseball and hit a home run every day.

At the world's busiest airport control tower – Atlanta Hartsfield – the situation is bleak. The tower is authorized by the FAA to be staffed with 55 controllers. Yet currently, there are only 34 veteran, fully-trained controllers on staff. Twelve of them (35 percent) are eligible to retire this year and nine of those have declared that they will indeed leave the workforce this year. There are only five trainees on board. So far in FY07, the facility has lost four veteran controllers to retirement. To put the situation in perspective, the tower has 11 fewer fully certified controllers than O'Hare Tower in Chicago, yet works slightly more traffic than ORD. And ORD is also understaffed by 12 controllers, by the way.

The understaffing at Atlanta is causing the workforce to suffer a tremendous burden of fatigue and burnout. This has potentially dire consequences for safety. "If a controller is working 15 planes at the same time, and you're on #15, you don't want the controller to forget you," said Atlanta controller Gary Brittain. "But when I talk to my colleagues, I hear the exhaustion in their voices and see the fatigue in their eyes and in their faces."

On Jan. 10, a controller cleared Delta Flight 1606 for takeoff, without realizing that the runway was not in the proper configuration for departing flights. It was an erroneous clearance. The Delta jet began its takeoff roll and got up to nearly full speed, 140 knots. At the last moment before takeoff, the controller, having caught his own error, instructed the pilots to abort the takeoff. The plane did stop, but in applying the brakes in a very hard fashion, it blew out multiple tires on the aircraft and resulted in very hot brakes. The plane exited the runway but could not get back to the gate. Passengers were taken off the aircraft out on the airport field and taken back to the gate in buses. There were no injuries and no fire, thankfully.

The FAA took disciplinary action against two controllers in the tower, decertifying them. An FAA supervisor researching the event verbally disciplined the two controllers involved, and told them that if the aircraft had gotten airborne that it would have been 'catastrophic.' Controllers regularly work more than six hours per day on position, well above safe levels that had been in place since World War II but scrapped by the FAA in its imposed work rules last September. Atlanta controllers routinely are forced to work almost three straight hours at a time without a break, 50 percent longer than what is widely regarded as a safe period of work on position.

As for the Jan. 10 incident, it was ironic that the decertification of the controllers involved was only to occur if the performance was deemed seriously deficient, yet the certification process was only a few hours long The FAA told a local Atlanta TV station that the incident was not serious and did not jeopardize safety. However, the NTSB investigation team was on site almost immediately to look into the incident, a first in Brittain's 28-year career. The fire and crash crews were called out to investigate all the smoke. The aircraft had to be repaired on the taxiway before it could even move.

At New York's John F. Kennedy International Airport Control Tower, flights are at record high levels:

1999: 355,677 operations
2000: 358,951
2001: 317,746

2002: 301,160
2003: 291,299
2004: 332,816
2005: 362,680
2006: 396,734
2007: 37,108 through January, meaning a projected yearly total of 450,000-475,000

As shown, the JFK Tower traffic count is up considerably since 9/11. Conversely the controller staffing level is down 30 percent during that same period. Common sense suggests safety and efficiency should dictate a 30 percent increase of the tower's pre-9/11 authorized staffing numbers considering the FAA's motto is, "the safe, efficient, expeditious movement of air traffic." Yet, the FAA's "new" plan has ceased the practice of staffing to traffic but instead, staffing to its budget.

In 2006, JFK Tower lost four veteran controllers. This year, another three will leave; and as many as eight have expressed their desire to retire. Five of these retirements are mandatory (age 56) by 2008. That equates to more than a 40% reduction in staffing. While we are encouraged by management's intent to hire three controllers this year, they will not be fully certified until 2009 or later. During that two-plus year period, even more controllers will be retiring, thus putting JFK even further behind the eight ball.

BY THE NUMBERS: Staffing Levels and Retirements the Past Several Years

According to the FAA's most recent "Administrator's Fact Book," published in December 2006, there are 14,206 air traffic controllers working in the United States.

That represents a drop in controller staffing levels for the third straight year and provides a strong indication that despite the FAA's attempts to hire the next generation workforce to offset the long-expected retirement wave that has now arrived, the agency is losing more controllers than it is hiring. This is mostly due to the FAA's imposed work rules and pay bands that have removed any incentive for veteran controllers to either transfer to busier facilities in need of more controllers or even to stay in the workforce altogether.

A 30 percent pay cut for new controllers and reduced pay bands are also forcing many of the agency's new hires to reconsider their career plans. Over 60 new hires have resigned since June 2006. One new controller in Memphis just recently left to start a lawn mowing business because it provided a higher salary. Two Department of Defense controllers turned down job offers at the FAA control facility in Louisville, Ky., because it would have meant a $20,000 pay cut.

Even FAA management officials at the facility level are acknowledging that veteran controllers are leaving sooner than ever upon reaching retirement eligibility, thereby depleting available ranks of fully certified controllers and also removing the on-the-job trainers to assist with the development of new hires. Below is a report on the situation at Washington Air Route Traffic Control Center, from FAA supervisor Ed Macknight, who wrote the following on a supervisor's web site known as SUPCOM:

"At ZDC, they are bailing at first opportunity which is a marked change from 2 years ago. Even with a mass arrival of CTI (Controller Training Initiative) students, we are way behind the curve. We also have had new students resign, transfer out of the FAA, or just not accept the job at all. Never, ever saw that prior to this past year.

"Overtime is available almost every week to those who wish to work it. Holdover is a daily occurrence. It all reminds me greatly of FAA circa 1983-1987, when I recall that constant 6 day weeks were very fatiguing and led to other issues at home and at work."

As for the FAA's imposed work rules and pay bands removing incentives for controllers to want to seek a transfer to a larger, busier air traffic facility, where their services are desperately needed, such as Atlanta

Hartsfield Tower (ATL), an FAA manager at Providence Tower (PVD) named Ed Angel wrote the following on SUPCOM:

"We have a controller at PVD (ATC 8) who was offered a job at ATL. It was not a paid move, and he was offered a 1% pay raise. That raise came before locality. So after locality is figured in, he will take a $4,000 pay cut, and lose the rest of his CIP on the go (another 4%). His new pay would be in the lower half on the ATL pay band, so there was room to actually offer him a pay raise, and still be within the new band. Of course this employee had to decline the offer. Can anyone blame him??

"ATL missed out on a controller who I think would be successful at any ATC facility."

The FAA "Administrator's Fact Book" reports that the total number of controllers at the FAA's 314 air traffic control facilities dropped from a high of 15,386 in September 2003 to 14,736 by October 2004 as the long-expected controller retirement wave began to increase in size. The total fell again, to 14,227, at the end of fiscal year 2005. The 14,206 total is listed as being current as of Oct. 31, 2006, taking into account hiring and attrition statistics a full month into the current, 2007 fiscal year.

Controllers are currently leaving the workforce through retirements, resignations and promotions to FAA supervisor positions (where there exists the only possibility of a pay increase due to the imposed pay bands) at a rate of three per day since the start of the current fiscal year; a total of 467 through March 1, 2007, according to NATCA's facility-by-facility research. This is ahead of the FAA's projected pace of attrition for FY07.

Overall, the FAA has missed its retirement projections for three straight fiscal years, by an increasing margin each year, as the information below shows:

FISCAL YEAR 2004
FAA-projected retirements: 329
(SOURCE: Page 9 of a PowerPoint presentation by FAA Administrator Marion Blakey in December 2004, produced after the original FAA Workforce Plan was released publicly.)

Actual retirements: 362
(SOURCE: Page 9 of the same PowerPoint presentation; also found in the graph at the top of page 32 in the updated workforce plan (released in August 2006).)

FISCAL YEAR 2005
FAA-projected retirements: 341
(SOURCE: Page 32 of the updated FAA workforce plan (dated June 06 but released in August 06)

Actual retirements: 465
(SOURCE: Page 32 of the updated FAA workforce plan)

FISCAL YEAR 2006 (Oct. 1, 2005 – Sept. 30, 2006)
FAA-projected retirements: 467
(SOURCE: Page 32 of the updated FAA workforce plan)

Actual retirements, according to FAA: 583
(SOURCE: FAA internal documents and attributed comments in media accounts)

FISCAL YEAR 2007 (Oct. 1, 2006 – Sept. 30, 2007)
FAA-projected retirements: 643
(SOURCE: Page 32 of the updated FAA workforce plan)

Actual retirements as of March 1, 2007, according to NATCA research: 351

The reason for the high number of retirements thus far in FY07 is clearly the FAA's imposed work rules and pay bands on the controller workforce; something that NATCA never agreed to and which cannot under any definition be accurately referred to as a "contract."

Even the FAA has admitted that the imposed work rules and pay bands are exacerbating the retirement crisis. Furthermore, the Department of Transportation Inspector General reaffirmed this in its Feb. 9, 2007 report on controller staffing, stating on page 7 that, "Beginning in April 2006, actual retirements began exceeding FAA's projections when negotiations between the Agency and NATCA over a new collective bargaining agreement reached an impasse. ... By September, when FAA began unilaterally implementing its own proposals for open Articles, actual retirements were nearly three times higher than FAA had projected (97 actual retirements compared to 39 projected). According to FAA officials, the large jump in actual retirements was a result of the breakdown in contract talks. In our opinion, those events underscore the need for FAA to refine its methodology to consider future events that could trigger a similar reaction. For example, there may be a significant jump in controller retirements during January 2007 when many controllers will see a reduction in their pay checks as FAA begins phasing out Controller Incentive Pay. This one-time event could adversely impact the retirement estimates for 2007 and beyond."

The FAA's about-face on the impact of the imposed work rules and pay bands on the retirement crisis is remarkable, given the Agency's vehement public denials in early 2006 that such an outcome would occur. Both the FAA Administrator and her chief public spokesperson used strong language in flatly denying that controllers would ever feel as though they had no incentive to leave. Yet under the FAA's imposed work rules and pay bands, over 90 percent of veteran controllers will never see another raise. If they retired today, they would get the annual cost of living raise afforded federal employees. But if they stay in the FAA, they do not receive that raise under the imposed pay rules. Combine that with the fact that controllers cannot take leave in the summertime – when their kids are out of school – because of understaffing, cannot take a guaranteed break after two strenuous hours on position at a time and cannot leave the facility to get a cup of coffee and relax in fresh air without taking vacation time to do so, and the FAA has now given controllers EVERY reason to leave the profession. And these veterans are indeed leaving in record numbers, at levels far exceeding Agency projections.

Rather than 'staffing to traffic' as the FAA states publicly is its new mission, the agency appears to be following a new policy; 'staffing to budget." And what concerns NATCA the most is that no amount of new hires the agency has made over the past two years or will make over the next few years is going to fix the current staffing problem. That's because it takes an average of three years to train a new controller before that professional is fully certified. The FAA is currently hiring trainees; it is not hiring controllers.

That gap, from the day a veteran controller retires to the day their replacement reaches full certification level, is where we have the most reason to worry about the agency's continued ability to maintain the margin of safety in the system by ensuring there is redundancy. Our greatest challenge today, besides the distraction of the imposed work rules, is maintaining the margin of safety knowing the level of redundancy has been whittled away to its bare minimum. We need more eyes watching the skies.

While there is less margin for error than ever before, efficiency is suffering too. Controllers working in en route centers are having to put more space between planes to keep them safe because of low staffing. Controllers have flight strips and other documentation that clearly indicates that staffing is the cause of some flow control restrictions.

We acknowledge that the FAA is hiring more controllers than in years past. However, to repeat, it will take three years for these new hires to be fully trained and able to sit down and work traffic by themselves. That's a big problem. We needed those hires to be made at least three years ago so they could step in today for the retiring controllers. Second, we are currently working to find out how many of the new hires have turned down the job because we have substantial anecdotal evidence to suggest the 30 percent pay cut the FAA forced through, combined with the imposed work rules have led many to choose another line of work.

NATCA officials have personally visited with new hires at the FAA's training academy in Oklahoma City and report that they are not happy about the current state of the FAA. Many military controllers are staying

in the Department of Defense as well, rather than pursue FAA employment that in many cases means as much as a $20,000 annual pay cut. The current crop of trainees is also coming to the FAA without any military or CTI experience. NATCA Executive Vice President Paul Rinaldi visited with Academy recruits on Feb. 26-27 and reports that approximately 80 percent of them are "off the street," meaning no formal education at a CTI school or military training or service.

First-Hand Accounts from Controllers Choosing To Leave the FAA

Many air traffic controllers who have either retired early (before the mandatory age of 56) or resigned, all because of the FAA's imposed work rules and pay bands, have chosen to express their thoughts on paper. Below are excerpts from five of these letters that NATCA has obtained:

Albuquerque Air Route Traffic Control Center
Resigned October 16, 2006

"I am hereby resigning from the FAA effective the 16th of October 2006. I am returning to my previous position with Midwest ATC Services. After comparing my experiences with both employers, the choice was simple. Under the FAA's new imposed work rules I can not justify staying with the agency. I do not feel I can continue to work in an environment that is so vindictive or for an employer who is more worried about the bottom line rather than safety.

"My take home pay will go up, my quality of life will improve, and my workload will decrease. My only regret is the time I have wasted making this move to Albuquerque, coupled with expense, only to find out I will not be making the money that the FAA told me I would be making. This was the number one factor that prompted my decision to take what I thought would be a career with the FAA. Therefore, this new pay scale is the number one reason for my leaving the FAA."

New York Terminal Radar Approach Control
From a former Navy air traffic controller
Resigned February 28, 2007

"I am writing to regretfully inform you that I'm resigning my position as an air traffic control specialist at the New York TRACON effective close of business February 28, 2007.

"The pay and compensation changed dramatically from the time I submitted my application until I was hired in November 2006. While much of what transpired between the FAA and NATCA in the intervening time does not concern me, the reduction in pay has had a dramatic negative effect on my ability to remain in this profession.

"The cost of living in New York is too great to survive adequately on the new pay scale. I have explored every alternative, including forgoing health coverage to save the additional money. I therefore find myself facing one of the most difficult decisions of my life; to leave the career that I love to regain financial stability."

Minneapolis Air Route Traffic Control Center
Retired October 2, 2006

"Solely as a result of what I perceive to be hostile and intolerable working conditions, I have elected to retire from my position as an air traffic controller effective Monday, October 2, 2006. Although it would be financially beneficial to continue working until the mandatory retirement age (56), recent well-documented changes in the national and local work environment have compelled me to accelerate my retirement plans.

"After learning of some of the details of the FAA's "best and final offer" back in late July, I elected to begin the process of preparing my retirement forms. Even as I did so I continued to hold out hope that a more fair and rational agreement could be reached. Unfortunately for all parties on September 3, 2006 the FAA elected to impose the terms of what is becoming known among controllers as the 'Non-Tract'."

Boston Air Route Traffic Control Center
Resigned after less than a year on the job

"I was hired well over a year ago by the FAA. My initial hire letter stated that I would have a salary of almost $46,000, which included locality. Upon completion of my A sides, I was told I would receive a raise of approximately $20,000, which would be given to me within about two months. Throughout the course of my first year and completion of my D sides, I was told I was going to get additional raises, which by the end of my first year would put me at over $90,000.

"Before I left for Oklahoma, I purchased a townhouse in New Hampshire close to the center, basing my budget on all the figures I had previously been told. I left a job in Florida, where I was making a considerable amount of money, but based on all the benefits of the FAA and the salary I was promised, not to mention how much I loved the opportunity of starting such an amazing profession, how could I be anything but ecstatic about what was about to happen.

"Shortly after arriving to the center I sat in on a briefing where I learned that there were many changes being forced on all the controllers, taking away and changing their benefits. When the topic of pay came up no concrete answers were given. It was a series of "I don't know's" or "They'll be a pay briefing in a few weeks.

"During my initial group meeting with Fran Bujak, the Director of Training, he asked if we had any questions or concerns. Half-joking I said, "Yea, how am I going to pay my mortgage?" He said that I wasn't looking at the big picture. I was told that in 3-5 years when I am fully checked out and after nights, Sunday pay, holidays and locality, I would be making around $82,000. With no warning I went from making $90,000 in the first year to $82,000 after three to five years. Then he basically said if anyone doesn't like it they could leave. The comment wasn't directed at me, and it was said rather nonchalantly, but it got me thinking.

"No one could justify to me the fact that trainees who had been there a year were making over $90,000 and frozen there, but it would take me three to five years to get even close to that number and after being fully checked out I wouldn't even reach that. I chose this career because it is highly rewarding and there is so much responsibility, but I also wanted to be financially secure. In order to make ends meet I would have to get a second job, which would be nearly impossible, due to the fact that my schedule would constantly fluctuate and there is so much to learn the first few months I felt I would get behind. Mainly I took this job and moved up North to have a better way of life and to be able to see my family. Working seven days a week and struggling to pay my bills is not a way I feel comfortable living. If there was a light at the end of the tunnel I would suck it up, but there seems to be no one who can give me a definite answer about the future, and after being mislead from the beginning I wouldn't know what to believe anymore."

Albuquerque Air Route Traffic Control Center

"In November 2005, I accepted an offer to work for the Federal Aviation Administration. I voluntarily left the Department of Defense, resulting in a reduction in pay and benefits. However, I was expecting that as outlined in my initial offer I could anticipate seeing this as temporary and I would be able to progress through training and receive compensation accordingly.

"Having completed my training in Oklahoma, I arrived at Albuquerque ARTCC to begin training as an En Route Controller. As I was training, I was watching what was developing between the Agency and the Union regarding contract negotiations. The entire time, I and other developmentals were informed that we would be "grandfathered" in and would not be negatively impacted with our pay, regardless of the outcome of the negotiations.

"I began to understand that the Agency had no intention of protecting developmental pay. We were informed in April that the negotiations had reached an impasse and the final offers were sent to Congress. I was able to locate and interpret the information and began to worry that I might not be compensated in accordance with what I had expected when I transferred to the FAA. As the developmentals began to ask about our pay, management at the facility level became resentful for our inquiries. It appears to me that we were not "allowed" to ask what we would make and that there might be reprisal. I have never been treated so badly by an employer. It should be appropriate for an employee to ask what they will be paid or compensated. People have families to feed and decisions to make.

"In June I began to seek a transfer back to my position at the DoD. I was not surprised that the DoD immediately provided me with all pay and benefits information when I requested them."

The Impact of FAA Imposed Pay Cuts on Ability to Attract and Retain Military (DOD) Controllers

The starting salary for an air traffic controller, according to the FAA's imposed pay bands, is $32,300. For many military air traffic controllers, accepting this offer to enter the FAA would mean a drastic pay cut from their military salary and benefits. This marks a fundamental shift in the pipeline between the DOD and FAA. The Agency, for decades, got many of its very best air traffic controller candidates from the military and it was a common career path to move into an FAA facility and enjoy a long and successful tenure in service to the country.

But now, many military controllers are turning down employment offers with the FAA because of the imposed pay bands and work rules. This is a devastating development because of two reasons: First, these controllers would make excellent replacements for retiring controllers and help build the foundation for the next generation workforce; and second, these controllers, having brought several years of experience in air traffic control, would likely require far less time to successfully train and certify as Full Performance Level controllers than a trainee who was hired either from a college program or off the street.

Below are passages from three letters rejecting FAA offers of employment, written by military controllers:

Stephani Stykowski: *"In November 2005, I accepted an offer to work for the Federal Aviation Administration. I voluntarily left the DoD, resulting in a reduction in pay and benefits. However, I was expecting that as outlined in my initial offer I could anticipate seeing this as temporary and I would be able to progress through training and receive compensation accordingly.*

"Since I have arrived in the FAA, I have been disgusted with the way the Agency treats its employees, particularly developmentals in training. ... I was amazed that a federal agency could treat employees as such.

"Having completed my training in Oklahoma, I then arrived at Albuquerque ARTCC to begin training as an enroute controller. From the moment I walked in the door, I was treated with the utmost disrespect for my experience and abilities. Having worked for the DOD as an air traffic controller for three years, plus four years in the Air Force, I was subjected to a training program which was inferior to any I have seen to date. It amazed me that so much time and resources were devoted to repeating portions of training already received.

"This occupation is stressful and demanding enough without the added anxiety of worrying about pay and unfair treatment."

William Urena: *"I am a 29 year old Army Veteran with seven years air traffic control experience. I am currently a D.O.D. air traffic controller working at Waynesville Regional Airport at Forney Army Airfield. I have recently applied to the F.A.A. and have been selected as a primary candidate for two different positions. One was throughout Tennessee, and the other was a pinpoint location at Augusta, GA. I have turned down these positions due to the starting salaries.*

"I have the experience you are looking for, and was very excited about the opportunity to work for the F.A.A. But I cannot afford the drastic pay cut. I am currently GS-10 step 2, and would not accept a position for any less than what I'm making now. The D.O.D. has given the air traffic controllers locality pay as well as ATC premium pay. I understand the reason air traffic controllers are receiving these incentive pays are to be competitive with the F.A.A. The starting salary I was offered was approx. 32,000. I don't see how the F.A.A. can compete with the D.O.D. with the current pay scale."

Jessica Dickey: *"My name is Jessica Dickey and I have been in the military for 10 years. I am facility rated (FWS) and CTO Certified Air Traffic Controller with a Bachelors Degree in Psychology and 16 credits into my Masters Degree. I recently submitted my paperwork to become a controller in the FAA. I was up for reenlistment in September of 2006 but I did not intend to reenlist because I wanted to be a controller in the FAA. After I submitted my paperwork I received three letters requesting more information in reference to the jobs that I applied for. I resubmitted my paper for the Texas Terminal area and waited for a response back.*

"A few weeks later I received a letter from the FAA with a pay chart informing me of the new salaries being implemented in the system. The starting salary for a Center Controller was $32,500. When I saw these numbers I was shocked to think that they would expect me to give up my military salary, which

is much higher, to be employed by the FAA. If I would give up my military salary I would also be giving up my medical insurance, living expenses, and food allowance, which adds up to a nice amount. After giving up this money to take a $32,500 salary job I would also have to consider the additional money that I would have to spend such as medical insurance, housing, gas, and food. Not to mention my non-taxable allowances.

"Do you think that someone would actually give up all the benefits of the military to take a pay cut? I am a perfect example of that answer, which was no. I extended on my contract and received a pay raise with more benefits and after I do get out of the military I will not consider the FAA because of the new salary. Thanks to all the new changes that have occurred in the FAA it has convinced hundreds of qualified controllers to pursue other jobs and just let expert control qualities go to waste."

FAA Officials Say There Is a Staffing Problem

NATCA is not alone in reporting an understaffing problem in the controller ranks. FAA supervisors and managers and other officials report that as well.

At Fort Myers Tower in Florida, FAA management sent out a memorandum on Feb. 20, 2007 that addressed the issue of forced overtime after a controller's shift has ended, stating, "You are employed in an occupation where holdover OT is becoming quite routine. Your shift work and overtime assignments are included as conditions of employment." Then, in denying the requests of at two controllers to be excluded from mandatory overtime to attend to child care issues, the FAA memo states, "You must understand that the facility has a need for your services that may conflict with your childcare routine."

Clearly, staffing is a problem at that facility or else mandatory overtime would not be needed.

On Jan. 10, 2007, FAA Regional Administrator Douglas R. Murphy, in denying a hardship transfer of a New York TRACON controller to another facility via a letter to Congressman Lynn Westmoreland, wrote, "With limited incoming resources, it is imperative for N90 to maintain adequate staffing due to losses resulting from retirements, transfers, training failures, etc. Since only about 50 percent of the persons in training assigned to N90 progress to a fully certified level, it is necessary to retain all individuals that we anticipate will be successful."

Last December, FAA Deputy Administrator Robert Sturgell told *Gannett News Service* that "Atlanta's tower is understaffed." That would be Atlanta Hartsfield, the busiest tower in the world. If the FAA cannot even keep its busiest tower properly staffed, we believe that is a symptom of this large, nationwide problem.

How the FAA's Imposed Work Rules Are Destroying Workforce Morale, Diminishing the Margin of Safety and Creating a Divide between Controllers and FAA Management

The FAA is doing significant harm to the once proud and beloved profession of air traffic control with its imposed, jailhouse-like work rules for air traffic controllers. The imposed work rules are causing strife between employees and management, decimating staffing levels by driving out veteran controllers at a record pace and destroying morale in the facilities. Here are some examples of what is occurring:

- At Jacksonville Air Route Traffic Control Center, on March 2, 2007, an air traffic controller called the facility from home to request sick leave. The controller was running a fever and vomiting. An FAA supervisor denied the request – twice. The controller reported for work as directed. But 90 minutes later, the controller vomited on the sector while attempting to work live traffic. The employee was then released on sick leave. On the very same shift on this same day, an FAA supervisor also called in to request sick leave. FAA management approved the request.

- The FAA, upon imposing its work rules last September, banned all radios in control towers – even weather radios – despite the fact that controllers used them to monitor local weather bulletins provided by local stations and the Emergency Broadcast System. Specifically, tornado warnings were crucial for controllers to hear about since no technology was available to them in the tower to spot tornadoes.

  But just days after the radio ban took effect, a severe weather system spawned tornadoes near both DuPage Tower in Illinois and Lincoln Tower in Nebraska. With FAA management having removed radios from all towers under the imposed work rules, neither facility's controllers knew of the impending danger nearby. At LNK, two controllers were on duty with no supervisors at a late hour in the day. Tornado sirens sounded, an event that, according to controllers' own orders, mandates the use of weather radios, radios and televisions to monitor the weather. But there was nothing in the tower to use. At DuPage, a tornado came within two miles of the tower. But controllers had no way of seeing it because heavy rains reduced visibility to a quarter of a mile. The controllers eventually evacuated when one controller received a personal call alerting him of the situation. The next day, the controllers notified the supervisor and stated that the radio that was in the tower, which management took away, would have alerted the staff sooner. The supervisor replied, "You should have looked out the window."

  Then, on December 25, 2006, a tornado roared within 150 yards of the Daytona Beach, Fla., Tower – with no warning given to the six controllers on duty who had their radio removed by the FAA – before carving a destructive path through Embry-Riddle Aeronautical University. Had the controllers had their radio, they would have received the tornado warnings that were broadcast to the public. At the time, the tower controllers were vectoring a Comair regional jet (Delta Connection) to the airport but, without any knowledge of the tornado embedded in the severe weather, could not warn the pilots. Fortunately, the aircraft landed safely, but, as the *Daytona Beach News-Journal* wrote in a Jan. 25, 2007 editorial:

  "Maybe the new (FAA) work rules are the FAA's attempt to pressure its employees. Maybe they're just work rules that may or may not survive the next contract. Either way, the ban on weather radios seems foolish. Controllers obviously should focus on their job. But safety is part of that job. The FAA can police how weather radios are listened to. Banning such radios, especially at airports in Florida, is going too far and defies intuitive safety measures."

- At Boston Consolidated TRACON in Merrimack, N.H., a female controller was taken by ambulance to a hospital after falling down two flights of stairs as a result of being forced to wear dress shoes in direct contradiction to her doctor's orders – delivered to BCT management – that she wear sneakers for medical purposes. BCT managers ignored the orders and imposed their dress code, prohibiting sneakers. As a result, she slipped and fell down the stairs. In a similar incident at New York Center, a female controller tripped, damaged her leg and broke her elbow after ZNY managers didn't accept the validity of her medical certificate specifying her need to wear tennis shoes as a result of serious knee problem.

- At Caldwell, N.J., Tower, a supervisor, after consulting with the air traffic manager, denied a sick leave request for a controller who was scheduled for the 2-10 shift, claiming "operational necessity." The controller, incapacitated and unable to come to work and perform his duties, was charged AWOL by the supervisor. Knowing one person would be left in the tower from 8 p.m. until closing the facility at 11 p.m., the supe decided not to call in overtime. The lone controller was not only responsible for all operational positions for those three hours but all administrative duties and supervisory responsibilities as well.

- At Fairbanks, Alaska, Tower, a controller, after calling in sick, was ordered to report for duty to complete a series of administrative tasks related to his ID card, which

managers had failed to complete months earlier when the controller notified them of the impending expiration date. The controller risked not only his safety but that of the general public by driving while physically impaired by his illness. He then exposed his fellow employees to a highly contagious illness.

- At Indianapolis Air Route Traffic Control Center, the FAA pre-imposed work rules requirement for scheduling was to allow no later than an 11 a.m. shift start time on the third day of a controllers' week, if the fifth day was a 10 p.m. mid shift. But ZID managers are now scheduling noon shifts and even 1 p.m., which results in a controller having shifts on their last three days of: Noon-8 p.m., 6 a.m.-2 p.m., and 10 p.m.-6 a.m. That's 24 hours worked in a span of 42 hours.

- At New York-LaGuardia Tower, not long after starting a 4-12 shift, a controller informed his supervisor that he left his prescription eyeglasses in his car. The supervisor told the controller he was prohibited from leaving the building to go to the parking lot and retrieve his glasses, and instructed him to return to the tower cab – wearing the prescription sunglasses he had on – after his break. He was ordered to work local control and told he could perform CIC duties. He worked local control until the sun went down and then requested to be relieved from position after temporarily losing visual sight of a C206 which dropped off the radar on short final while two MD-80s were crossing the arrival runway. The supervisor then told the controller he was required to take leave to go get his glasses and return to work.

- At Tampa, Fla., Tower, just days after a controller was ordered by a supervisor to drop his pants to make sure they did not contain denim, another controller reported for an evening shift and put his dinner in the refrigerator. A supervisor entered the break room and performed a scheduled clean-out of that same refrigerator, which sat next to another refrigerator that was already full of controllers' food as a result of prohibitions against leaving the facility to purchase meals. The controller's dinner was thrown out. He went to the supervisor to plead his case. The supervisor then called the facility manager with the story and they decided the controller would not be allowed to walk outside the facility to get food. Controllers soon after retreated to a patio on break holding signs that read, "Controllers Need Food."

A Look at Staffing Conditions in Selected States

CALIFORNIA

The 38 FAA air traffic control facilities in the state are authorized by the FAA to have a total of 1,624 controllers on staff. But currently, there are only 1,107 fully certified controllers working, with an additional 351 in training. NATCA has found that 92 controllers retired in FY06 and 33 have retired thus far in FY07, with an additional 303 – 27 percent – of the veteran controllers eligible to retire this year.

An example of a key airport control tower in the state that is suffering through the effects of understaffing is Los Angeles (LAX).

The effects of short staffing on safety are documented quite clearly at LAX. From the fatal accident in 1991, throughout the decade of the 1990s, LAX was at or near the top of the national statistics on airport runway incursions. During this time period, LAX was, by the FAA's own written admission, in a Feb. 5, 2002 letter to NATCA from the facility's FAA Air Traffic Manager, "critically short staffed." In the early 2000s, the FAA made a concerted effort to staff LAX tower to our historic authorized staffing numbers of between 47-50 controllers. The result was a startling reduction in runways incursions and surface incidents, from 24 in 2000 down to only nine in 2004. In fact, LAX went roughly two years and three months without one single controller error. This was an unprecedented period of safety and staffing at LAX. However, in the past few years the FAA has allowed staffing to drop back down to the 2000 level,

around 35, and safety is once again a problem. The weekend of February 24 and 25, 2007 saw two runway incursions and one near-mid-air collision.

After staffing issues and controller fatigue were listed as probable causes of a near fatal runway incursion in the fall of 2004, the FAA put in writing that the safety and the efficiency of the air traffic system required it to add two extra night shifts, bringing the total to 13. Since this time, staffing has dropped to the point that it has become mathematically impossible for the FAA to staff to these numbers. A breakdown of this current year, from Jan. 1, 2007 until Feb 28, 2007, has revealed some alarming statistics: Despite averaging almost two overtime shifts per day, not one night shift began with the 13 controllers the FAA said it needed for safety. Ninety-three percent of these night shifts began at least two controllers short. Four of these shifts started with only nine of the required 13 controllers. These are only the numbers for the night shifts. Similar problems exist on the day shifts.

It is difficult to understand how the FAA allowed LAX to fall into this situation given the letters the agency has written to NATCA officials clearly stating there is a known link between safety and staffing.

As LAX controller numbers continue to dwindle, with seven controllers expected to retire this year, things are fast approaching the "critical" levels of the 1990s. Since all other facilities in the Los Angeles area are also short-staffed and the new imposed pay scale would cost experienced controllers money to transfer here, LAX tower can expect to receive only raw, inexperienced trainees. Without a concerted effort to attract experienced controllers and retain our current workforce, LAX will continue to lose controllers and that will mean flight delays, runway incursions and an increased chance of another fatal crash.

ILLINOIS

The 13 facilities in the state are authorized by the FAA to employ a combined 813 controllers to safely staff the system. Currently, however, there are just 657 fully certified controllers working. There have been 16 retirements thus far in FY07. Another 164 controllers can retire this year, offsetting gains of a possible 101 controllers that are currently in training.

MASSACHUSETTS

The four FAA air traffic control facilities in the state are authorized by the FAA to have 84 controllers on staff. But currently, there are 67 fully certified controllers working. Twenty-seven of these veterans are eligible to retire this year.

At Bedford Tower, an FAA supervisor on Feb. 27 posted the following report on conditions at the facility on a web chat board exclusively for supervisors:

"We have 2 people eligible to retire in the next 6 months. If either of them decides to do so, we will not be able to legally staff the facility during its hours of operation. That's even with me working 10 hours a day 6 days a week like everyone else! This is simply a result of p#ss poor planning on the part of the previous manager and the pathetic compensation package we are offering potential hires.*

"We are severely short staffed and leave is not even a possibility. Overall, the outlook is dim. The controllers here are overworked with the staffing needed to fill the schedule, train the developmentals, and never getting leave. We have made job offers to CTI and military recruits, but the pay has been reduced to a laughable level so we are being turned down right and left.

"Overall very discouraging, especially for those who want to move on in their careers."

MISSISSIPPI

The three FAA facilities in the state are authorized by the Agency to staff 52 controller positions. But there are only 42 fully trained controllers working today. Nearly one in four – nine total – are eligible to retire this year and 14 more could retire in 2008.

WEST VIRGINIA

The three FAA air traffic control facilities in the state are authorized to employ 63 controllers. But currently, there are just 45 on staff. Ten of those are eligible to retire this year and 10 more can retire in 2008.

STAFFING CONCLUSION

The FAA currently is staffing to budget in its 314 air traffic control facilities. It is not staffing to traffic. That is why we are short 1,100 controllers from what we had working the system just over three years ago. In fact, the same FAA Air Traffic Organization official in charge of staffing is the very same official in charge of finance. That is a conflict of interest.

And contrary to Agency claims that an aggressive hiring spree will ensure full staffing and overcome the losses that have resulted from many more controllers retiring and leaving the workforce through other attrition reasons than the Agency ever expected, the simple fact of the controller training process suggests otherwise. It takes three years to fully certify a controller to work traffic alone. Therefore, the FAA is hiring trainees. It is not hiring controllers.

The bulk of the current veteran controller workforce was hired between 1981 and 1984, following the PATCO strike, and they are eligible to retire at age 50. Anyone could have seen this retirement swoon coming down the pike decades in advance.

Yet, when we look at the numbers, we see that the FAA only hired 13 controllers in 2004. But this year, the FAA is going to hire 1,100.

Conveniently, but we're sure not coincidentally, the increased controller hiring is taking place after the FAA unilaterally imposed work rules and pay bands. A skeptic would argue that the FAA had its plan for how it was going to handle the staffing crisis: do nothing until the agency pushes through a new pay structure, and then fill the empty positions with cheaper labor.

By the FAA's own admission, it miscalculated the detrimental effect the work rules would have on retirements and recruitment, and last month DOT Secretary Mary Peters has said that delays in the system could cost the aviation industry and the U.S. economy $22 billion a year.

We are faced with a similar staffing crisis in the nursing profession, as hospitals around the nation are struggling to get enough nurses trained and plugged into the system. A quick Google search pulls up federal and state efforts to provide incentives to recruit nurses into the profession. Yet we're dismayed that the FAA is actually doing everything it can to dis-incentivize recruits from joining the ranks as controllers while at the same time pushing the veteran controllers out the door towards retirement.

This approach is bad for our economy, bad for the safety of the flying public, and bad for the nation.

We would like to return to the contract negotiating table with the FAA and fix this critical problem immediately before the margin of safety in our beloved National Airspace System is further compromised.

NATCA AND FAA DO NOT HAVE A CONTRACT

Statutory Background

On November 15, 1995, Congress enacted Section 347 of the 1996 Department of Transportation Appropriations Act,[4] directing the FAA to develop and implement a new personnel management system, to address "the unique demands on the agency's workforce." Section 347(b) specifically stated that Chapter 71 of Title 5 of the U.S. Code would not apply to the new personnel management system, except for the prohibition of the right to strike in §7116(b)(7).[5]

On March 28, 1996, the FAA issued a new Personnel Management System (PMS), organized in chapters addressing Staffing, Compensation, Performance Management, Training, Labor Relations, and Executive Systems. Chapter V, Labor Relations provided:

> EMPLOYEE RIGHTS
>
> The FAA, all FAA employees, and all labor organizations representing FAA employees shall have the same rights, and be subject to the same responsibilities and limitations, as are available to all Federal agencies, employees, and labor organizations under 5 U.S.C. Chapter 71.

On March 29, 1996, Congress passed the House Joint Resolution 170,[6] which amended Section 347 of the 1996 DOT Appropriations Act, to require the applicability of Chapter 71 of Title 5, relating to labor-management relations, to the FAA's new PMS.

On October 9, 1996, Congress enacted the Air Traffic Management System Performance Improvement Act of 1996,[7] (the 1996 FAA Act) to establish a procedure for "developing and making changes to the personnel management system initially implemented by the Administrator... on April 1, 1996...."[8] The FAA Act requires FAA to negotiate with its employees' exclusive collective bargaining representatives over any changes to the FAA PMS, and to engage in mediation if such negotiations do not produce an agreement. However, if negotiations end in an impasse, the 1996 FAA Act "provide for the Administrator to transmit its proposals, along with the bargaining representative's objections, to Congress. Proposed changes to the PMS will not take effect until sixty days after the Agency's submission to Congress."[9] At the same time Congress stipulated that all labor-management agreements then in effect were to remain in effect until their expiration dates.[10]

In 2000, Congress codified the provisions of House Joint Resolution 170 by adding subsection (g)(2)(C) to 49 U.S.C. Section 40122 to specify that Chapter 71 of Title 5, "relating to labor-management relations"

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[4] Pub. L. No. 104-50, § 347, 109 Stat. 460 (1995).

[5] *Id.* At §347(b).

[6] Pub. L. 104-122, 110 Stat. 876 (1996).

[7] Pub L. 104-264, Title II, 110 Stat. 3227 (1996).

[8] 49 U.S.C. §40122(a).

[9] *Id.*

[10] 49 U.S.C. §40122(f).

would apply to the FAA PMS.[11] Yet, the statute still remains unclear as to how bargaining impasses are to be resolved.[12]

Air Traffic Controllers Dispute

NATCA and FAA began negotiations for a successor to the 2003 two-year extension to the Collective Bargaining Agreement in July of 2005. During those negotiations and NATCA did not reach agreement with FAA. In fact, FAA from the beginning of the process, until the end, failed to adjust its proposals on pay and several other issues, believing that if it failed to reach agreement, it would submit its final proposal to Congress, Congress would not act, and after 60 days it could unilaterally impose its last best offer on the employees. Rather than engaging in collective bargaining, the result was *a fait accompli.* FAA would engage in what is referred to as surface bargaining[13] until it found an opportunity to end negotiations, submit its proposal to Congress, and unilaterally implement.

After nine months of meeting, on April 5, 2006, the day FAA unilaterally declared impasse in negotiations, NATCA presented a new proposal for Pay, Article 108. FAA's Rick Duscharme inquired about whether this was NATCA's "best and final offer," presumably meaning last, best offer. NATCA's Barry Krasner responded that he didn't want it to be considered that, that he didn't see a lot of movement, and wanted to see movement from the FAA. FAA's Joe Miniace responded that he would reject or accept the proposal after looking at it during lunch. Previously the shortest time period between a Union pay proposal and an FAA response was approximately six weeks: December 7, 2005 (NATCA's second proposal on pay) to

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[11] Pub. L. No. 106-181, Title III, §307(a), 114 Stat. 124 (2000).

[12] When FAA and NATCA failed to reach agreements over terms and conditions of employment for 11 bargaining units, NATCA filed a formal Request for Assistance on July 8, 2003 with the FSIP (Case No. 03 FSIP 144). PASS filed similar formal Requests for Assistance on various dates in July 2003 (Case Nos. 03 FSIP 149, 150, 151, and 157). The FAA filed statements of position with the Panel on September 22, 2003, asserting that the Air Traffic Management System Performance Act of 1996 completely divested the Panel of any jurisdiction over the impasses. After soliciting legal positions from all of the parties, on January 9, 2004, the Panel declined to address the impasses "because it is unclear whether the Panel has the authority to resolve the parties' impasse[s].... This determination to decline to assert jurisdiction is made without prejudice to the right of either party to file another request for assistance if the underlying threshold question is resolved in the appropriate forum consistent with the Union's interpretation of the applicable statutory provisions."

NATCA and PASS filed Civil Action No. 04-0138 in the United States District Court for the District of Columbia on January 30, 2004. The District Court ruled that it did not have jurisdiction to hear the underlying claim. *Nat'l Air Traffic Controllers Assn. v. FSIP,* 2005 WL 418016 (D.D.C. 2005). The United States Court of Appeals for the District of Columbia Circuit agreed that it did not have jurisdiction to resolve the complaint on the merits. Instead it deferred to the Unfair Labor Practice processes within the Federal Labor Relations Authority's auspices. *Nat'l Air Traffic Controllers Assn. v. FSIP*, 437 F.3d 1256 (D.C. Cir. 2006). Yet, the FLRA does not have any background in issues involving Title 49. This creates an inherent problem.

[13] The FLRA has not ruled on surface bargaining, however the National Labor Relations Board has significant case law the subject. In *Teamsters Local 515 v. NLRB,* 906 F.2d 719 (D.C. Cir. 1990) the U.S. Court of Appeals for the D.C. Circuit reiterated some of the factors that the Board will consider in determining whether bad-faith bargaining had occurred. These include among others: unreasonable bargaining demands that are consistently and predictably unpalatable to the other party, unilateral changes in mandatory subjects of bargaining, and insistence to impasse on nonmandatory subjects of bargaining, all of which are present in the bargaining dispute between NATCA and FAA evidencing the Agency's design to frustrate a bargaining agreement.

January 25, 2006 (FAA's third proposal on pay). On April 5, Miniance's statement that a response could be generated while reviewing the Union's proposal during lunch serves as a further indication that FAA's intention to declare impasse on April 5, regardless of the proposals was *a fait accompli*. The conversation that followed further emphasized the FAA's premeditation:

> Miniace: We're taking a very hard look at your proposal. I will take exception with your number as soon as our folks are finished.
>
> Krasner: You're not finished. You don't know that you'll take exceptions.
>
> Miniace: I think your clarifications make it even lower. I will ensure it gets the due consideration it deserves during our lunch, so we can plug in another number that you clarified today that we had not figured in. We'll be able to do that.
>
> Krasner: That doesn't sound like, it sounds a little, we'll give it due consideration it deserves during lunch . . .

As part of the pay proposal package, NATCA also tendered a new proposal on Article 106, Duration.

On April 5, 2006 NATCA also provided a U-3 proposal on Article 36 Pay Administration. FAA never responded to this proposal, yet declared impasse that same day. NATCA also provided FAA with formal requests for declarations of non-negotiability on several articles. FAA rejected Articles 116 Child Care Subsidy and 143 Student Loan Repayments "on (their) merits." Regarding Article 150, Facility ATC Levels, FAA's Joe Miniace responded, "We will respond to 150. We'll respond to all of them. I'm makin no other statement on Article 150 for the record."

NATCA then presented a proposal on Article 38 Overtime and provided FAA with a formal request for a declaration of non-negotiability for that article since FAA had previously made unsolicited statements regarding the negotiability of portions of that proposal. NATCA provided proposals on Article 24 Annual Leave and Article 28 Holidays. FAA then presented a proposal on Article 106 Duration and the Parties broke for lunch.

After lunch FAA presented a proposal on Article 108 Pay. FAA also made new proposals on Article 18 Controller-in-Charge, which NATCA has alleged to constitute bad faith bargaining, and Article 33 Positio Rotation and Relief Periods. FAA termed both proposals as their "best and final" offers.

FAA then proposed Article 28 Holidays and gave planned speeches regarding impasse.

> Ducharme: Let me address one issue – it's been a hell of a process. Aside from the stuff in pay and upgrades and demotions, I want to thank you and Bob for your efforts and professionalism and I want to acknowledge the rest of the team. Based on what we've exchanged today, I see no value in reentering into mediation. I'm not the FAA Administrator, I don't see it. It's our intention to forward all of our outstanding articles to Congress as an impasse package. If there are any articles that you think we can work, the door is always open. If we can reach agreement on these articles, great. It's not my call. I believe we're at impasse, based on what we've seen today and I see no point in exchanging paper. I wanted a voluntary agreement. I acknowledge your team, but I'm disappointed that it didn't work out. I think we're done.
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> Miniace: I want to acknowledge this team as well, ours as well as yours. I don't think I've worked with a more professional group ever. We knew this would be hard and difficult. We came to a stall, went to mediation for four weeks. There's some fundamental issues we just can't get over. Because of the philosophical differences between the union and the agency – particularly on the long term goals of the agency – they're going to be issues that remain between us. Rick said our intent is to take this through its process, which would be a congressional process. You said your pay proposal

> would be your congressional proposal. I think more mediation at this point is not in the cards. But I, too, extend an offer that we will continue to talk through any process if we can narrow the issues and complete the issues during this period of time, I think we'd be better people for it. The door is absolutely open on that. On behalf of the FAA, I feel that the Agency is declaring impasse.

No Impasse

It is NATCA's position that since Federal Mediation and Conciliation Service Mediator Kurt Saunders did not certify impasse nor release the Parties, and since the Parties provided each other with new proposals on April 5, some within minutes of the FAA's unilateral declaration of impasse, the Parties were not at impasse on April 5, nor have they subsequently reached impasse. Furthermore, since the state of impasse requires that the Parties reach impasse over the entirety of the negotiations, the fact that there were ongoing discussions on April 5 over nearly all of the outstanding subjects precludes the finding of impasse over those subjects where no proposals were exchanged on April 5, and even those subjects where the Parties had not made any movement in some time.[14]

Impasse is a bilateral process, not just the cutting off of negotiations by one party.[15] In the instant dispute, the FAA terminated negotiations immediately upon providing NATCA with substantively different proposals than had been provided previously on nearly every subject other than pay, which did not substantially change at any point during negotiations. Further, NATCA had, earlier in that day, provided FAA with substantively different proposals than had been offered previously.

Moreover, if there are subjects or proposals of questionable negotiability, it is not proper to proceed with impasse resolution procedures until the FLRA can determine the negotiability. In *Commander Carswell AFB and AFGE,*[16] the Authority held that interest arbitrators and the FSIP may apply settled case law determinations of negotiability when a proposal's language is substantially similar to one previously found negotiable or non-negotiable. Further, the Authority held, when it is a matter of first impression, it is inappropriate for any other third party empowered to resolve the impasse to resolve the issue. That responsibility is within the exclusive jurisdiction of the FLRA. The Authority has consistently upheld *Carswell* even as a two member panel.[17] The FLRA is currently only two members since President Bush has not nominated a Democrat to fill the third and final position.

Since the negotiability of the Union's proposals have not yet been determined by the Authority, the Parties never reached a state of impasse. The Authority has ruled that where the Union's proposal has been ruled to be negotiable, it only requires that the Parties' return to the table to negotiate over that proffer. It does not require the third-party impasse adjudicator or other impasse body to accept the Union's proposal, nor

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[14] Former NATCA President John Carr announced to the news media that negotiations had broken down several days prior to April 5, however that was due to the FAA wishing to terminate mediation at that time. It was also prior to NATCA developing its April 5 proposals. Moreover, since FAA provided new proposals on April 5, and NATCA had no opportunity to respond to those proposals before FAA unilaterally declared impasse, it is impossible to determine whether or not the Parties could have bridged the gap on those subjects.

[15] *VA, VAMC and AFGE Local 85*, 32 FLRA 855, 874 (1988) (ALJ Decision- Findings of Fact #13).

[16] 31 FLRA 620 (1988).

[17] See: *NTEU and U.S. Dept. of Homeland Security, Customs and Border Protection*, 61 FLRA 729 (2006) and *U.S. Department of the Air Force, Davis-Monthan Air Force Base, Tucson, Arizona and Local 2924, AFGE*, 05 FSIP 104 (2005).

does it establish that the Parties are at impasse. In *POPA v. FLRA,*[18] the Court of Appeals for the D.C. Circuit found that, "The Agency's refusal to bargain cannot be construed as an impasse which the arbitrator could rightfully resolve. The Agency's refusal to bargain was premised not merely on a disagreement with the proposals, but on a threshold claim that the proposals were not negotiable. So long as these negotiability issues remained unresolved, coupled with the parties' resulting failure to negotiate over the merits of the proposals, there could be no impasse on the merits. Thus, there was nothing to be considered by the interest arbitrator, for it is well-established that an interest arbitrator cannot resolve negotiability issues."

The Agency Cannot Grant Itself Discretion Over Mandatory Subjects of Bargaining

NATCA has argued that FAA's proposal to grant itself discretion over wages, facility classification, and other matters, constitutes a waiver of NATCA's right to bargain over working conditions. The Authority has ruled that such waivers are permissive subjects of bargaining and both the Authority and Board are clear that neither the Employer nor the Union may bargain to impasse over permissive subjects or proposals.[19] The U.S. Court of Appeals for the D.C. Circuit ruled on a similar matter for private sector negotiations in *McClatchy Newspapers v. NLRB* [20]. Summarizing the Board's opinion the Circuit writes, "In the Board's view this case was less about impasse than statutory waiver: an employer who proposes unlimited management discretion over wages is really proposing that the union waive its statutory right to be consulted about wage changes. That is fine, the Board reasoned-if the union agrees. **But impasse, by definition a lack of agreement, could not substitute for consent."** (emphasis added)[21]. As the Circuit wrote in *McClatchy Newspapers*, in the instant dispute, it seems "somewhat anomalous to refer to the institution of a new wage regime as 'implementation of terms'" since here like in *McClatchy Newspapers*, the Employer's proposal has no terms.

The Circuit even went on to see value in the question of whether or not bargaining to impasse over this wholly discretionary matter (waiver) constitutes true impasse, but did not reach the question since it was not in the Board's holding.[22] NATCA, however, does make the argument that the Parties were not at impasse, so it is incumbent upon the Authority to answer this question. In *McClatchy Newspapers* this is even further supported since certain clauses could not be implemented specifically because they are over permissive subjects. While not specifically applicable in the Federal Sector under the 5 U.S.C. 71, the Board's treatment of the no-strike clause is entirely applicable to the overall concept argued by NATCA. "The Board has held that because the right to strike is 'fundamental,' it cannot be relinquished by employees except by consent-which implies a specific contractual waiver."[23]

McClatchy Newspapers clearly identifies the problem with the FAA's inappropriate unilateral implementation. The Circuit found circumstances identical to those in the instant dispute. "Rather than merely pressuring the union, implementation might well irreparably undermine its ability to bargain. Since the union could not know what criteria, if any, petitioner was using to award salary increases, it could not

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[18] 26 F.3d 1148, (D.C. Cir. 1994).

[19] NATCA is not arguing that wages and the classification of facilities are permissive subjects. They are clearly mandatory subjects under 49 U.S.C. 40122(a). However, the waiver of the right to bargain is a permissive subject. Under the Statute, FAA can neither bargain to impasse over the permissive subject of waiver, nor implement total discretion over mandatory subjects, including wages.

[20] 321 NLRB 1386, 1391 (1996), enfd. 131 F.3d 1026 (D.C. Cir. 1997), cert. denied 524 U.S. 937 (1998).

[21] *Id.*at 1028.

[22] *Id.* at 1030.

[23] *Id.*

bargain against those standards; instead, it faced a discretionary cloud."[24] The Board's interpretation highlights FAA's predetermined strategy when it wrote, "**the present case represents a blueprint for how an employer might effectively undermine the bargaining process while at the same time claiming that it was not acting to circumvent its statutory bargaining obligations**." (emphasis added).[25]

The Board's decision in *Mail Contractors of America and Des Moines Area Local, American Postal Workers Union*[26], reinforces NATCA's position. In adopting the ALJ's decision, the Board agreed that "an employer may not compel a union to grant it unlimited discretion on important mandatory subjects of bargaining even after bargaining to overall impasse. In addition, to allow an employer to do so unjustifiably affects the balance of power between labor and management and thereby undermines an important goal of the Act of encouraging the parties to reach a collective-bargaining agreement. This is so because, as this case shows, there are occasions when an employer may desire unlimited discretion on a mandatory subject of bargaining and may seek in bargaining to persuade a union to relinquish its right to bargain over the matter. In order to do so a union may seek concessions from the employer on other conditions of employment. But if an employer can relegate to itself this discretion a union's bargaining strength is diminished and the likelihood of reaching an agreement is decreased.... Certainly the Act, which was enacted for the purpose of 'encouraging the practice and procedure of collective bargaining,' forbids such a result."[27]

As NATCA has argued FAA's goal was not to reach agreement; it intended to reach impasse and unilaterally implement a vested right of full discretion over pay, facility classification, and other matters to itself with no duty to bargain, something abhorrent to the Statute itself. As in *Mail Contractors of America*, it would not be unreasonable to believe that the Union would have sought other concessions (i.e. retaining the *status quo ante* pay bands and work rules) and agreed to the Agency's discretion on future annual raises and increases to the bands. However, the Agency instead had no desire to reach agreement. Its intention was to grant itself full discretion through a manipulation in the process, while not conceding on any particular issue. The Agency's actions are antithetical to the definition of collective bargaining as well as the Statute.

Ratification Required to Form Contract

NATCA's position has always been that it has a right to ratify the contract once a complete agreement has been reached or the appropriate impasse procedure has been determined by the FLRA and has been concluded by the appropriate body. On May 12, 2005, the date the Parties agreed to the ground rules for negotiations, NATCA provided notice to the FAA regarding its Constitutional requirement to ratify as a precondition to a binding final agreement between the Parties. Specifically, the letter from Barry Krasner, NATCA Chief Negotiator, to Melvin Harris, then FAA Chief Negotiator, stated,

> Although not specifically addressed in the Parties' Memorandum of Agreement Concerning Ground Rules Governing the Conduct of Negotiations of a successor collective bargaining agreement, dated, May 12, 2005, the Union provides the following notice to the Agency. The ratification of a tentatively agreed upon contract by NATCA's membership is a precondition to a final and binding agreement between the Parties. In the event the membership rejects the tentative contract, NATCA will notify the Agency that the membership has failed to ratify the contract. The Agency is obligated to resume negotiations with NATCA. NATCA will be willing to meet and resume negotiations in

[24] *Id.* at 1032.

[25] *Id.*

[26] 347 NLRB No. 88 (Aug. 31, 2006).

[27] *Id.* ALJ decision at 7.

> order to complete our contract negotiations should a ratification of a tentative contract fail. The Agency's right to Agency Head Review is only triggered by execution of agreement, a condition not effective until ratification is complete.

Furthermore, the Parties have had a past practice for all other collective bargaining over term contracts that NATCA's Constitution and Standing Rules require ratification by the membership. The Parties have never deviated from that practice.

In the instant dispute FAA provided NATCA with a final offer on April 5, 2006 and immediately and unilaterally declared impasse without NATCA having the opportunity to respond to the proposals. Simultaneous with its declaration of impasse and in evidence of its predetermined posture to not reach agreement, FAA improperly submitted its proposals to Congress. NATCA has filed Unfair Labor Practice Charges over the improper submission to Congress, but the FLRA does not have expertise regarding Title 49 of the United States Code, so it is unclear how it will resolve the issue, if at all. Since NATCA disagrees with the FAA's use of Congress as the appropriate impasse procedure, NATCA cannot submit the FAA's imposed agreement for ratification or risk acquiescence to the FAA's improper impasse procedure. Only after a clear and final impasse procedure is completed would a full and complete collective bargaining agreement be ripe for a ratification vote by NATCA's membership.

In *SSA and AFGE Council 220,*[28] the Authority adopted the ALJ's decision that provided that the Union's right to ratification need not be expressed in ground rules as long as, as in the instant dispute, the Union provides the Agency with notice of the ratification as a precondition to a final and complete agreement between the Parties and does not waive its right to ratification. In the instant dispute NATCA's past practice has been to require ratification as a precondition to a complete agreement and NATCA provided FAA with a letter to that effect the same date as the ground rules were agreed to.

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[28] 46 FLRA 1404, 1415 (1993) (ALJ Decision).

National Air Traffic Controllers Association
AFL-CIO

June 7, 2007

The Honorable John Mica
Ranking Member
House Transportation and Infrastructure Committee
2167 Rayburn House Office Building
Washington, D.C. 20515

Congressman Mica,

I write to clarify that the National Air Traffic Controllers Association has adequately answered your questions for the record from the Aviation Subcommittee hearing on March 22, 2006. The questions that you raised were addressed in my letter to you dated April 18, which I've attached for your reference.

As we both agreed in our meeting in your office in January of this year, abrasive hyperbole on both sides of the FAA-NATCA dispute last year was counter-productive to the mutual responsibilities we share in overseeing the safety of the National Airspace System. While you and I have disagreed on a number of issues, I sincerely hope that we can maintain our commitment to civility as our discussions continue, even when our points of view diverge. I continue to look forward to reaching another mutually-agreeable contract with the FAA in the near future and remain optimistic that you can play a constructive role in that process.

I sincerely hope to put any public disputes between you and NATCA behind us so that we can concentrate on the safety and integrity of the National Airspace System.

Once again I appreciate the correspondence.

Sincerely,

Patrick Forrey
NATCA President

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National Air Traffic Controllers Association
AFL-CIO

April 18, 2007

The Honorable John Mica
Ranking Member
House Transportation and Infrastructure Committee
2167 Rayburn House Office Building
Washington, DC 20515

Dear Congressman Mica,

Thank you for your letter in follow-up to my testimony before the House Aviation Subcommittee on March 22nd. I appreciate having the opportunity to correct some mischaracterizations you continue to embrace about the National Air Traffic Controllers Association (NATCA) and obvious misunderstandings you have about the state of the air traffic control system.

Let me begin by addressing the concerns you have with union dues. In January of this year, in what you yourself termed "a productive meeting," you and I met in your Congressional office to discuss issues facing the air traffic control system. During that meeting, you referred to your previous work as the Chairman of the Civil Service Subcommittee. Because of your experience in that capacity, you are aware that NATCA, like all unions, is required by statute to disclose statistics on the dues of its membership to the U.S. Department of Labor. Therefore, I will not use this forum to discuss these matters in detail, as they are already a matter of public record. I will simply remind you that every member of NATCA pays his or her dues voluntarily.

I'm sure that you are also familiar with the fact that grievances are a right provided in NATCA's negotiated 1998 agreement with FAA, the Federal Service Labor-Management Relations Statute, and even the FAA's unilaterally imposed work rules. Moreover, most of the grievances have been filed by individual employees represented by NATCA, rather than NATCA itself. The right of individual employees to file grievances on behalf of themselves is also protected under the FSLMR Statute.

In that same productive meeting, I reiterated that our nation's air traffic controllers do not expect, and have not asked for, more than they deserve: a fair, equitable negotiation process. You informed me that you regret having been "put in the position of defending the Administration" during last June's House floor debate on H.R. 5449 and that you felt FAA Administrator Marion Blakey had "taken too big a bite of the apple." Subsequently, you vowed to help me in your new capacity as Ranking Member of the full Transportation and Infrastructure Committee to fix the contract negotiation process during FAA Reauthorization.

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Since that meeting, you have made no effort that I am aware of to fix the negotiation process or to involve NATCA in any of your discussions about the Administration's FAA Reauthorization proposal. In fact, I find it baffling and completely contradictory that you have reverted to defending the Administration's choice to unilaterally impose work rules on its employees and to attack, rather than engage, the nation's air traffic controllers. I look forward to working with you and your committee staff to restore collective bargaining rights to our nation's air traffic controllers and other aviation safety professionals at the FAA, so that we can get back to the mutually-desired task of modernizing the air traffic control system. However, I have yet to see a good-faith effort on your part to address the work rules imposed by the Agency or to work with NATCA in any meaningfully collaborative manner.

The Department of Transportation's Inspector General has said the imposition of the work rules in September of 2006 has led to an increase in controller retirements. Unfortunately, the Agency recognizes, but has thus far failed to address, this simple but potentially dangerous fact. In February, Administrator Blakey acknowledged the "bump up" in controller retirements due to the imposed work rules. However, she responded not by making efforts to reach out to her disgruntled workforce, but rather to unilaterally release new controller-staffing levels that hide the problem of inadequate staffing instead of correcting it. The Agency decided to reduce its personnel requirements when it realized that its plan for adequately staffing the nation's air traffic control facilities was going to fall short, much like a batter moving the fence in when he realizes that his hit won't clear the wall.

In 1998, the controller-staffing levels, set through collaboration between the FAA and NATCA, were based on scientific data related to air traffic levels and airspace complexity. It is unclear what the Agency's new authorized staffing levels are based upon but it is clear that the FAA has felt no obligation to consult those who work the National Airspace System and are intimately familiar with the traffic. Unfortunately, this go-it-alone approach by the FAA is not unique to controller-staffing levels. Air traffic controllers and other stakeholders have routinely been shut out of nearly every facet of the Agency's operations. NATCA is on record with you and the Agency requesting a more collaborative process. We ask your help in that again.

It is important to note that aviation safety personnel represented by NATCA were impacted by similarly-imposed work rules in July of 2005, 14 months prior to the work rules imposed on air traffic controllers in September of 2006. The Agency's latest Employee's Attitude Survey of 2006 shows that since the imposition, Aircraft Certification employees' satisfaction with the pay system (now being forced to work under the imposed core compensation system) has dropped 20 percentage points since 2003 to a low of 35 percent. Many of these employees are aerospace engineers who are charged with the safety of aircraft designs. Without a fair contract, the Agency's own survey shows that 40-plus percent of these aviation safety employees will be leaving the Agency in the next five years. These statistics are true in other NATCA bargaining units as well.

As stated in my testimony and repeated during questioning, NATCA fully supports efforts to modernize the air traffic control system, as long as we are engaged in the development and deployment of new technology. As the GAO and IG have both concluded, the FAA's failure to involve stakeholders, including air traffic controllers, has resulted in the insufficient deployment of new technology and/or equipment. Despite claims to the contrary, the greatest impediment to modernization is not controller salaries but rather FAA mismanagement of the planning and development process, which is exemplified by the Agency's lack of collaboration with the workforce. We welcome the opportunity to be reengaged in modernization programs, including the development of NextGen and other areas vital to the modernization and maintenance of the air traffic control system, such as the consolidation/collocation of air traffic control facilities, facility classifications, controller-staffing and collective bargaining rights for FAA employees.

As the former Chairman of the House Aviation Subcommittee, you are aware that with 1,000 fewer controllers today than just a few years ago, the implications of increased retirements and inadequate controller-staffing levels include increased delays, decreased efficiency, lost revenue, and decreased safety margins. While others choose to ignore the problems of the understaffing air traffic control facilities across the nation and hang their hat on the Agency's latest modernization failures as a means to accommodate the expected increase in air traffic, we choose instead to point to the obvious contradictions and short sightedness of this approach and offer our expertise to truly address the needs ot our air traffic control system. Until new technology is online and ready to make air traffic controllers more efficient and until the Agency heeds the calls of the IG and GAO to engage modernization stakeholders, we have little faith that NextGen or other modernization efforts will provide much relief in the near future. The Agency should concentrate on maintaining its veteran workforce, hiring and training the next generation of controllers, and on working hand-in-hand with its employees to develop and deploy new technologies that will accommodate our nation's air travel needs well into the 21st Century.

The National Transportation Safety Board (NTSB) report released just last week on the dangers related to controller fatigue provides credible, objective evidence that passenger safety is being compromised because controllers are overworked. Inadequate controller staffing has led to mandatory overtime, six-day weeks, longer time on position without a break and this cuts into the safety margin built into the aviation system. All these issues together factor into controller fatigue and, unfortunately, if inadequate staffing levels continue to persist, delays and errors will become more prevalent.

The Inspector General has concluded that work rules unilaterally imposed by the FAA on controllers in September have exacerbated and accelerated the controller staffing shortage. In fact, the FAA Administrator herself admitted to the direct correlation between the work rules and retirements in February. Now the NTSB is telling us that controllers are overworked, poorly-scheduled, and that the resulting fatigue is playing a role in the level of safety of the nation's skies.

NATCA welcomes the NTSB's report and its recommendations to work in collaboration with the FAA to address controller scheduling and fatigue issues, just as we have welcomed similar recommendations from the IG and GAO for stakeholders and the Agency to work collaboratively to address outstanding issues related to modernization, staffing and consolidation. It is my sincere hope that you will take the lead in directing the FAA to work cooperatively with its air traffic controller workforce to remedy all of these issues that are important to the future of U.S. aviation. We intend to reach out to the Agency and work with them to address the fatigue issues raised by the NTSB.

Once again thank you for the opportunity to respond to your inquiries. I look forward to working in good faith with you, Chairman Costello and Chairman Oberstar to help put these issues behind us and concentrate on the overdue and much-needed modernization of the nation's air traffic control system.

Sincerely,

Pat Forney
NATCA President

TESTIMONY OF

PATRICIA A. FRIEND
INTERNATIONAL PRESIDENT

ASSOCIATION OF FLIGHT ATTENDANTS –
CWA, AFL-CIO

BEFORE

THE SUBCOMMITTEE ON AVIATION OF THE
TRANSPORTATION AND INFRASTRUCTURE
COMMITTEE

U.S. HOUSE OF REPRESENTATIVES

WASHINGTON, DC

March 22nd, 2007

Association of Flight Attendants – CWA, AFL-CIO
501 Third St. NW
Washington, DC 20016
202-434-1300

Thank you, Chairman Costello for giving us the opportunity to testify today. My name is Patricia A. Friend and I am the International President of the Association of Flight Attendants – CWA (AFA-CWA), AFL-CIO. AFA-CWA represents over 55,000 flight attendants at 20 different airlines throughout the United States and is the world's largest flight attendant union. Flight attendants, as the first responders in the aircraft cabin, have a unique perspective on a number of the safety programs of the Federal Aviation Administration (FAA) and we are pleased to have a seat here today to discuss many of the issues which remain for the FAA to address.

Unfortunately, I'm here to tell you that the FAA has repeatedly failed to take action on several fronts to improve the overall safety and health of the employees that work under its jurisdiction. We firmly believe that the FAA's mentality of denial and delay towards these serious health and safety issues only threaten the overall safety of the aviation system for the traveling public as well. That is why the continued vigilance and oversight of the FAA by the members of this Committee is necessary and vital. We look forward to working with this Committee in the coming months as you draft an FAA Reauthorization bill to address a number of the matters we will highlight today.

FLIGHT ATTENDANT FATIGUE

We all know that the FAA's failure to address the growing problem of fatigue for numerous aviation industry workers – not just flight attendants, but pilots and air traffic controllers as well – could lead to an incident resulting in the loss of many lives. I know that you will hear from our brothers and sisters at ALPA and NATCA about their ongoing concerns with the FAA and its inability to address fatigue amongst their members. I am here to tell you that fatigue is a very real and serious concern for the flight attendant workforce in this country as well. As the deep concessions demanded of flight attendants during the recent and ongoing financial turmoil of the airline industry have taken hold it has become clear that airline management hopes to keep our members working for as long as possible with greatly reduced time off between duty. Some air carriers are routinely taking advantage of a "reduced rest" provision in the Federal Aviation Administration's Flight Attendant Duty Time and Rest Regulations which

allows the minimum rest of nine hours to be reduced to eight. The exception has become the rule and flight attendants are so exhausted that they have informed us that they have in some cases forgotten to perform critical safety functions, including the arming of doors and even fallen asleep on the jumpseats. Even more troubling is that the FAA continues to allow the carriers to schedule reduced rest periods, making them more routine, and has failed to recognize or show any concern for the impact that flight attendant fatigue has on the overall safety of the aviation system.

Multiple studies have shown that reaction time and performance diminishes with extreme fatigue – an unacceptable situation for safety and security sensitive employees. Flight attendants are required to be on board to assist in case an aircraft emergency evacuation is necessary. In addition, they are inflight first responders who are trained to handle inflight fires, medical emergencies including CPR and emergency births. Furthermore, since 9-11 the security responsibilities of flight attendants have greatly increased. It has become even more important for flight attendants to be constantly vigilant of the situation in the aircraft cabin and aware of their surroundings at all times. An inability to function due to fatigue jeopardizes the traveling public and other crewmembers.

According to the Federal Aviation Regulations (FAR's), flight attendants must have a minimum rest period of at least nine hours following any duty period of less than 14 hours. The nine-hour period can be reduced to as little as eight hours, if the employer schedules a 10-hour rest period following the next duty period. I'd like to make a further clarification at this point. Using the term "rest period" can be misleading because much more must be done during this period of time other than simply sleeping. The "rest period" can begin as soon as fifteen minutes after an aircraft pulls into the gate and continues until one hour prior to their next departure. This "rest period" must also include travel through an airport, waiting time for a shuttle to the layover hotel, travel to the hotel, checking-in, possibly finding time to eat a meal since many of our carriers in an effort to cut costs have removed flight attendant crew meals from the flights, getting prepared for bed, getting dressed and prepared for work the next morning, travel back to the airport and last, but certainly not least is sleep time. Our members are continually

reporting that the actual sleep time this schedule allows is in many cases between only 3-5 hours of actual sleep before beginning another full duty day.

The airline industry practice has been to schedule as little as nine hours of rest for flight attendants. It is our understanding that the reduced rest period provision was originally meant to accommodate "day of" scheduling when carriers encounter delays out of the carriers' control such as bad weather or air traffic control delays. The FAA has chosen to ignore the routine implementation of this provision by airline management and the further erosion of meaningful rest periods for flight attendants. To further highlight the FAA's turning of a blind eye to this practice, an FAA spokesperson, in response to a question from the media on this issue stated, "The FAA rules on flight time and rest for both pilots and flight attendants are fundamentally sound. They serve aviation safety very well." We fundamentally disagree.

Congress also has expressed concerns. The Omnibus Appropriations for FY '05 contained an appropriation for $200,000 directing the FAA to conduct a study of flight attendant fatigue. The FAA was to report back to Congress by June 1, 2005 with their findings. The report language stated: "The Committee is concerned about evidence that FAA minimum crew rest regulations may not allow adequate rest time for flight attendants. Especially since the terrorist attacks of September 11, 2001, the nation's flight attendants have been asked to assume a greater role in protecting the safety of air travelers during flight. Current flight attendant duty and rest rules state that flight attendants should have a minimum of nine hours off duty, that may be reduced to eight hours, if the following rest period is ten hours. Although these rules have been in place for several years, they do not reflect the increased security responsibilities since 2001, and only recently have carriers begun scheduling attendants for less than nine hours off. There is evidence that what was once occasional use of the 'reduced rest' flexibility is now becoming common practice at some carriers."

The FAA delayed release of the report for over one year, even though the study itself was completed. The FAA repeatedly ignored requests from AFA-CWA and members of

Congress to release the report and explain the delay in reviewing the study by the Administrator's office. Finally, after AFA-CWA staged an all night "sleep-in" by flight attendants in front of the FAA headquarters in order to draw attention to the issue, the FAA released the report.

In order to complete the required study, representatives of the FAA from the Civil Aerospace Medical Institute (CAMI) initiated an agreement with NASA Ames Research Center to perform an evaluation of the flight attendant fatigue issue. Due to the short internal deadline for conducting the report, the researchers were unable to conduct a thorough and comprehensive study of flight attendant fatigue. It primarily consisted of a review of existing literature on the issue, an evaluation of flight attendant duty schedules and a comparison of those schedules to the current regulations regarding rest. Based just on this limited research, the report concluded that flight attendants are "experiencing fatigue and tiredness and as such, is a salient issue warranting further evaluation." They also stated that "not all the information needed could be acquired to gain a complete understanding of the phenomenon/problem of flight attendant fatigue."

The report listed a number of recommendations for further study. They were:

1) A scientifically based, randomly selected survey of flight attendants as they work. Such a study would assess the frequency with which fatigue is experienced, the situations in which it appears, and the consequences that follow.
2) A focused study of aviation incident reports in order to determine what role fatigue played in already reported safety incidents.
3) The need for research on the effects of fatigue. This research would explore the impact that rest schedules, circadian factors and sleep loss have on flight attendants' ability to perform their duties.
4) The determination and validation of fatigue models for assessing how fatigued a flight attendant will become. Developing a reliable fatigue modeling system would be an important tool for the aviation industry in helping to determine when rest periods should be scheduled.

5) A study of International policies and practices to see how other countries address these issues.
6) Development of training material to reduce the level of fatigue that may be experienced by flight crews and to avoid factors that may increase fatigue levels.

Based on this limited report and its recommendations, AFA-CWA and other unions representing flight attendants have requested that the FAA be directed to continue research on this important aviation safety issue which would cover the recommendations from CAMI. Furthermore, it's crucial that such a study receive adequate funding to be completed. Most importantly, we feel that based on the FAA's clearly stated belief that "...rules on flight time and rest for both pilots and flight attendants are fundamentally sound." and their demonstrated efforts to stonewall and delay release of the initial report, that Congress must provide firm and strong guidance to the FAA to address this growing problem to aviation safety.

WORKPLACE SAFETY AND HEALTH PROTECTIONS

For well over 30 years AFA-CWA has been fighting for even the most basic workplace safety and health protections for flight attendants. Those pleas have continued to fall on deaf ears at the FAA. Flight attendants encounter numerous occupational hazards while working aboard commercial flights, including but not limited to turbulence, severe air pressure changes, unwieldy service carts, broken luggage bins, balky exit doors and door handles, exposure to toxic chemicals mixed with the engine air that is bled into the passenger cabin, unruly passengers, communicable diseases and emergency evacuations. These hazards cause flight attendants to suffer occupational injuries and illnesses at rates far in excess of those experienced by workers in almost every other sector of private industry, as is evident from an analysis of survey data available from the U.S. Bureau of Labor Statistics (BLS). For example, occupational injury and illness rates among flight attendants and all scheduled air transport workers are historically several times greater than the rates for all private industry workers; and even significantly greater than the rates experienced by construction workers.

With respect to specific characteristics of injuries and illnesses experienced by flight attendants, detailed in data from the BLS surveys reveal that:

- Overexertion, contact with objects/equipment, exposure to harmful substances/environments, and falls are the most significant exposure events;
- Approximately 90% of injuries are traumatic in nature, and include sprains/strains/tears, effects of air pressure, and bruises and contusions;
- All body parts are affected, but injuries/illnesses to the trunk, head and extremities predominate.

1975 FAA Assertion of Jurisdiction over Crewmember Health and Safety

The reason that flight attendants continue to experience such high rates of injuries, is that flight attendants are not covered under the Occupational Safety and Health Act (OSHA) nor has the FAA made any effort to regulate the safety and health of flight attendants in the aircraft cabin. On July 10, 1975, the FAA published a statement in the Federal Register (40 Fed. Reg. 29114, 1975) asserting complete and exclusive jurisdiction over crewmember health and safety on "civil aircraft in operation...from the time it is first boarded by a crewmember, preparatory to a flight, to the time the last crewmember leaves the aircraft after completion of that flight,...even if the engines are shut down." In asserting such jurisdiction over crewmember health and safety, the FAA claimed that "with respect to civil aircraft in operation, the overall FAA regulatory program...fully occupies and exhausts the field of aircraft crewmember occupational safety and health."

Since 1975, the FAA has continued to assert complete and exclusive jurisdiction over crewmember health and safety aboard a civil aircraft; unfortunately, at all relevant times since 1975, the FAA has **declined** to exercise its asserted statutory authority to prescribe or enforce standards or regulations affecting the occupational safety and health of crewmembers. Significant areas of regulatory neglect include but are not limited to, recording and reporting of occupational injuries and illnesses; blood borne pathogens; noise; sanitation; hazard communications; access to employee exposure and medical records, and anti-discrimination protections for reporting safety and health violations.

1990 AFA Petition of Rulemaking

After years of inaction by the FAA, on May 8, 1990, AFA-CWA filed a petition for rulemaking with the FAA that asked the agency to adopt selected OSHA safety regulations and apply them to the crewmembers working in the airline industry, addressing such areas as the recording and reporting of injuries; access to employee exposure and medical records; right to inspections; safety definitions; the handling of hazardous materials; personal protective equipment; medical and first aid; fire protection, and toxic and hazardous substances. In submitting its petition, AFA-CWA was attempting to fill the void created when the FAA asserted jurisdiction over crewmember health and safety without actually exercising that authority. As AFA-CWA stated in its petition:

> This petition offers one solution to the gaps in crewmember health and safety coverage caused by the FAA's *de facto* industry-wide preemption of OSHA. Although this industry-wide preemption is probably incorrect as a matter of law, it is the rule currently followed by OSHA and the FAA, with the possible exception of OSHA's recordkeeping requirement. If the FAA is going to claim total jurisdiction over crewmembers, it should *exercise* that jurisdiction by providing protections equal to those provided by OSHA. It is for that reason that this petition asks the FAA to adopt the OSHA regulations and apply them to crewmembers. (Emphasis added).

FAA Rejection of AFA-CWA Petition for Rulemaking

Almost seven (7) years after AFA-CWA filed its petition for rulemaking, the FAA finally responded by letter dated June 6, 1997, in which it stated in part:

> The FAA has determined that the issues identified in your petition may have merit but do not address an immediate safety concern. Because of budgetary contraints, and the need to meet the demands of a changing aviation industry and a complex air transportation system, the FAA finds that it must dedicate its rulemaking resources to the most pressing problems and issues associated with safety. For

these reasons, we are unable to consider your petition for Rulemaking; therefore it is declined.

August 7, 2000 Memorandum of Understanding between FAA and OSHA

On August 7, 2000, after increased pressure from AFA-CWA, the FAA and OSHA entered into an historic Memorandum of Understanding (MOU), the purpose of which was "to enhance safety and health in the aviation industry." In the MOU, FAA and OSHA agreed to establish a joint team (FAA/OSHA Aviation Safety and Health Team or Joint Team) to identify the factors to be considered in determining whether the OSH Act's requirements could be applied to the working conditions of employees on aircraft in operation (other than the flight deck crew) without compromising aviation safety.

The MOU required the Joint Team to produce a first report within 120 days from the date of the MOU's execution that addressed whether and to what extent OSHA's existing standards and regulations with respect to six (6) specific health and safety areas could be applied to employees on aircraft in operation, without compromising aviation safety. In December 2000, the first report of the FAA/OSHA aviation safety and health team concluded that, with the exception of bloodborne pathogens and noise, the other five (5) subject areas under consideration cold be implemented for all employees in the aviation industry without implicating aviation safety concerns. Those five subject areas are recordkeeping, sanitation, hazard communication, anti-discrimination and access to employee exposure/medical records. With respect to bloodborne pathogens and noise, the report found that the "OSHA requirements that necessitate engineering and administrative controls may implicate aviation safety and would need to be subject to FAA approval."

The report also proposed that the team give further consideration to establishing "a procedure for coordinating and supporting enforcement of the OSH Act with respect to working conditions of employees on aircraft in operation (other than the flight deck crew) and for resolving jurisdictional questions." Although the December 2000 report recommended that the Joint Team continue to meet to resolve this and other issues, the

team did not meet again until January, 2002, at which time they could not agree on a timeline for implementation of relevant OSHA regulatory standards for employees on aircraft in operation.

September 2001 Report of the Office of Inspector General of the DOT

In September 2001, the Office of the Inspector General (OIG) for the Department of Transportation (DOT) issued a report titled: "Further Delays in Implementing Occupational Safety and Health Standards for Flight Attendants Are Likely" (the OIG Report). The OIG review was requested by a distinguished member of this Committee, Representative Peter DeFazio, who expressed concerns over the dearth of OSHA standards for airline employees in the areas of bloodeborne pathogens, repetitive motion injuries, noise, and unhealthy cabin air.

The OIG Report found that in the 26 years since the FAA asserted statutory authority for prescribing and enforcing occupational safety and health standards for aircraft crewmembers onboard aircraft;

> ...it has not issued industry standards to address employee safety and health issues associated with working conditions onboard aircraft in operation. Instead, FAA focused its resources on providing and enforcing industry standards for aircraft design and operational problems affecting safety.

Furthermore, the OIG Report concluded that "unless FAA and OSHA resume working together, we have no confidence that industry standards will be issued in the near future to address occupational hazards." Accordingly, the OIG Report recommended that within 90 days of the issuance of its report,

> FAA in conjuction with OSHA should establish milestones for the completion of work begun under the August 2000 MOU, and address the occupational safety and health concerns identified in the December 2000 joint report. Within this timeframe, FAA should also reinstitute its rulemaking procedures on injury and illness recordkeeping and reporting, which FAA can do without OSHA's assistance. This is necessary in order to identify the types and frequency of injuries and illnesses occurring. If FAA implements our recommendations, it will in our opinion, be a clear

> sign of forward progress. We will advise the Secretary of Transportation and the Congress of FAA's actions. ***If these recommendations are not implemented, it will, in our opinion, be apparent that after 25 years of limited progress, an alternative approach will be necessary. One approach would be to revoke FAA's exclusive authority to provide occupational safety and health standards for employees in aircraft, and have this function performed by OSHA. FAA would then intervene in any regulatory proceedings, when in FAA's judgement, a proposed OSHA regulation would negatively affect the safety of air traffic operations.*** (Emphasis added).

To date, although the FAA/OSHA Aviation Safety and Health Team met on several occasions since the September 2001 publication of the OIG Report, the FAA and OSHA have taken no steps to implement the recommendations of the OIG Report, or in any other way regulate the workplace health and safety of flight attendants.

Aviation Safety and Health Partnership Program

The FAA took one final step towards complete abandonment of its August 2000 MOU with OSHA when it announced on March 4, 2003 that it was creating the "Aviation Safety and Health Partnership Program" (ASHPP). In an announcement in the Federal Register (68 Fed. REg. 10145, 2003), the FAA claimed that the ASHPP was being created to provide "empirical data concerning injury and illness hazards on aircraft in operation" to allow air carriers to "voluntarily" provide "selective" safety and health protections for "employees not covered by OSHA." In addition, the FAA announced that the ASHPP

> would preserve the FAA's preeminent authority over aviation safety issues by reserving to the FAA complete and exclusive responsibility for determining whether proposed abatements of safety and health hazards would compromise or negatively affect aviation safety. The ASHPP would include electronic web based procedures for air carriers to report employees' injury and illness information, thereby enabling FAA to obtain the required data. This data will be used to determine if FAA should take additional measures, including rulemaking activities, to address safety and health issues in air carrier operations.

On March 31, 2003, AFA-CWA, along with many of the other affiliated unions of the Transportation Trades Department (TTD) of the AFL-CIO, wrote to the FAA Flight Standards Service informing them that the TTD unions were "disappointed with and

angered by the FAA's decision to create a voluntary program that will halt the progress we have made over the years towards providing the nation's flight attendants with the federal safety and health protections they need and deserve." Furthermore, the TTD wrote that it was troubled by the "fact that the ASHPP proposal relies solely on voluntary measures, with no underlying regulatory requirements or enforcement provisions."

Since its inception, the ASHPP has failed to propose or institute procedures, rules or guidelines for carriers to follow to improve airline employee health and safety protections. As a result of the voluntary nature of the ASHPP, air carriers have instituted no improvements to reduce or mitigate flight attendant injuries. As a direct result of the FAA's failure to exercise its asserted statutory authority, flight attendants are substantially more likely to be injured on the job then employees in other industries.

AFA-CWA Lawsuit Filed in US District Court

On September 19, 2005, AFA-CWA filed a complaint in the United States District Court for the District of Columbia against the Secretary of Labor and the FAA Administrator. The AFA-CWA complaint asked the court to issue an order declaring that the FAA has failed to exercise its asserted jurisdiction to establish occupational health and safety standards for flight attendants and crewmembers, and, as a result, the Secretary of Labor failed to fulfill her statutory duty under the OSH Act to ensure healthy and safe working conditions for flight attendants. On May 22, 2006, the District Court dismissed AFA-CWA's complaint for lack of subject matter jurisdiction; On January 10, 2007, AFA-CWA filed an appeal brief; on February 9, 2007, the FAA filed an appeal brief; on February 23, 2007, AFA-CWA filed a reply brief; and on March 26, 2007 oral arguments will be heard before the District of Columbia Circuit Court of Appeals.

In light of the continued stonewalling on the part of the FAA to act on behalf of the safety and health of flight attendants and its obvious attempts to totally disavow the 2000 MOU, we believe that it is time for Congress to act in order to force the FAA to relinquish the exclusive jurisdiction that it has claimed, without any subsequent action, for over 30 years.

AIRCRAFT CABIN AIR QUALITY

The issue of poor aircraft cabin air quality and in many cases the contamination of the air supply by potentially toxic chemicals continues to pose a threat to those that work onboard the aircraft as well as those that travel onboard the aircraft. At the heart of the failure of the US Federal Aviation Administration (FAA), the manufacturers, and the airlines to *resolve* problems with aircraft air quality is their failure to *acknowledge* problems with aircraft air quality. There are no standards for protective measures or access to information necessary to prove individuals' cases; there is effectively no government oversight, allowing the steady flow of "anecdotal" reports to be dismissed as unreliable, and therefore irrelevant.

It is no small task to describe and document problems with air quality on aircraft; hence, the length of this submission. The problems are varied, but the lack of oversight and protective measures is common to all and is in desperate need of remedy. Here, seven problems with aircraft air quality are described in detail. The highlights are described here:

Inadequate ventilation: In buildings, owners must meet minimum ventilation standards intended to protect occupant health and comfort. On aircraft, there is no ventilation standard, despite the fact that aircraft are the most densely occupied of any environment. In buildings, workers can request an OSHA investigation of indoor air quality. On aircraft, there is no government body assigned to investigate related illness reports. Further, there are no protections in place for flight attendants assigned to fly to areas affected by Severe Acute Respiratory Syndrome (SARS), even though crewmembers do not have the option of "postponing non-essential travel." The World Health Organization recognizes flight attendants as potential "close contacts"; the Centers for Disease Control and Prevention does not.

Polluted air supply on the ground. Exhaust fumes and heated deicing fluids can be ingested into the air supply systems, especially during ground operations.

Exposure to heated oils and hydraulic fluids. Heated oils and hydraulic fluids can leak or spill into the air supply systems during any phase of flight, potentially exposing passengers and crew to carbon monoxide and neurotoxins, such as tricresylphosphates. There are almost no protective measures in place to prevent air supply contamination, and contaminated aircraft can be – and are - dispatched as "airworthy." Chronic or even permanent neurological damage can result, although affected passengers and crew have little recourse without any record of air monitoring or access to maintenance records. Pilot incapacitation is an additional risk. The FAA has shown no signs that it plans to follow the recent National Research Council committee recommendation for requisite carbon monoxide monitoring on all flights.

Reduced oxygen in the ambient air during flight. During flight, the aircraft cabin is maintained at a reduced pressure, generally equivalent to an altitude of 6,000 – 8,000 feet, although sometimes higher. At an effective altitude of 8,000 feet, the supply of oxygen is reduced by 25% relative to sea level. There is evidence that the current "8000 feet standard", first issued in 1957, is based not on health, but on operating costs, and that the reduced oxygen supply may be inappropriately low for a substantial portion of the flying public.

Inadequate attention to the thermal environment. Providing air nozzles ("gaspers") at each occupant seat and work area allows flight attendants and passengers to adjust the temperature of their environment. This is especially important in areas where flight attendants are physically active. In addition, flight attendants regularly report that the galleys and jumpseats located near the aircraft doors can be uncomfortably cold at ankle level, presumably because the doors are poorly insulated. A standard that defines a target temperature range and maximum vertical and horizontal temperature differentials would address this problem. Door heaters have already proven an effective and practical remedy.

Exposure to ozone gas: Symptoms associated with ozone exposure are well documented and include respiratory distress and increased susceptibility to infection. Ozone levels

increase with altitude and latitude, and are highest in the late winter and early spring. The exposure limit for ozone cited in the Federal Aviation Regulations is 2.5 times higher than the workplace limit set by the National Institute for Occupational Safety & Health. Airlines are under no obligation to monitor or record ozone levels in the cabin.

Exposure to potentially high concentrations of pesticides: Some countries require that incoming aircraft are sprayed with pesticides to kill any insects that may be on board and may carry disease. The pesticides are applied in occupied or soon-to-be-occupied aircraft cabin without any measures to inform or protect the health of passengers or crew. Reported symptoms range from sinus problems and rash to anaphylactic shock and nerve damage. Differences in exposure levels and individual susceptibilities are described. The US Department of Transportation's investigation into the feasibility and efficacy of non-chemical methods to keep aircraft cabins insect free must be actively supported.

It is imperative that the members of this Committee keep the FAA focused on addressing this serious issue and supporting vital research that will help clarify and solve this ongoing problem.

FLIGHT ATTENDANT ENGLISH LANGUAGE STANDARDS

AFA-CWA believes that it is long past due for an English language regulatory standard for flight attendants that is similar to the existing standard for pilots, flight engineers and security personnel. The FAA requires flight attendants on board most commercial flights to protect the safety and security of the cabin and the passengers. Effective communication is essential to fulfilling these responsibilities.

Virtually every type of safety, security or health related cabin emergency requires effective communication with other flight attendants, with passengers and with the flight deck crew. For example, if there is a fire in the galley, the flight attendant must clearly, quickly and completely explain the problem to the flight deck so the captain in command can make the appropriate decision(s). In addition, the cabin crew needs to be able to coordinate the emergency response by clearly communicating with each other as well as

to the passengers. In the event of an emergency flight attendants would need to brief able bodied passengers to assist in an evacuation. It is crucial that the passengers completely understand the briefing and actions they would be expected to perform. Clear, distinct, and audible directions and commands are essential in the process of evacuating an aircraft. It is imperative that during an emergency the entire crew work as a team to prepare for or respond to an emergency in the cabin.

The FAA has been working on developing an English language proficiency standard for over a decade, but delays continue. In April of 1994, the FAA issued an Advanced Notice of Proposed Rule Making (ANPRM) on Flight Attendant English Language Docket No. 27694; Notice No. 94-11. "The FAA is considering rulemaking to establish requirements to ensure that flight attendants understand sufficient English language to communicate, coordinate, and perform all required safety related duties. If the FAA actually proposes such a requirement, it would be comparable to regulatory requirements for other crewmembers and dispatchers. Improvements in communication, coordination, and performance of required safety related duties that may result from this regulatory process would benefit crewmembers and passengers."

In February of 1996, the FAA announced the formation of an Aviation Rulemaking Advisory Committee (ARAC) to dispose of the comments made to the 1994 ANPRM No. 94-11 and recommend an appropriate rulemaking action (e.g. NPRM, withdrawal) or if advisory material should be issued. Represented on the group were representatives from various flight attendant unions and airlines. Midstream of the ARAC process the FAA withdrew the ANRPM stating that any possible rulemaking on the subject would be incorporated into the overall context of a crew training rulemaking project currently being developed internally at the FAA. This all, despite the ARAC working group voting 11-2 that an NPRM should be developed and 10-2 that an Advisory Circular should also be developed to provide guidance on implementation of such a rule.

In 2004, the Crewmember/Dispatcher Qualification Aviation Rulemaking Committee (ARC) was tasked with finishing the training rulemaking project that was started in 1997.

The proposed new regulatory section provides an English Language requirement for all crewmembers, including flight attendants, to help ensure that crewmember communication is in accordance with crew resource management objectives and that flight attendants can communicate with passengers. This rulemaking is still at FAA. The ARC proposed the following language to the FAA:

English language requirement

No certificate holder may use any person nor may any person serve as a pilot, flight engineer, or flight attendant under this part, unless that person has demonstrated to an individual qualitfied to evaluate that person under this part, the ability to do the following:

(a) Read, write, speak and understand the English language.

(b) Have their English language speech and writings understood.

AFA-CWA hopes that Congress will push the FAA to complete work on an English language regulatory standard for flight attendants.

CARRY-ON BAGGAGE LIMITATIONS

AFA-CWA strongly urges legislation which would direct the Transportation Security Administration (TSA) and the Federal Aviation Administration (FAA) to issue regulations that would set a limit on carry-on baggage that may be brought on an airplane. Current guidelines for carry-on bags were established more than two decades ago when air travel was much different than today. Carriers had to have individual programs to control the weight, size and number of carry-on bags. This created a maze of varying carrier programs making it difficult and confusing for passengers. This individual program philosophy is still in force today.

AFA-CWA has filed two petitions for rulemaking requesting the FAA to enhance their carry-on baggage rule, citing incidents involving carry-on bags that range from disruption in the cabin, delays in boarding and deplaning, physical and verbal abuses of flight attendants and passenger, and injuries and impediments to speedy evacuations. Despite these two requests for rulemaking the FAA has failed to establish a specific requirement

regarding size and number of carry-on bags allowed stating the FAA simply provides guidance to carriers on how to establish their programs. According to the FAA, this allows the carriers flexibility to create a program that fits their individual unique operations.

The September 11 terrorist attacks underscored the need for a comprehensive effort to improve security and further supported the need for a tighter limit on carry-on baggage. Reducing the size and number of carry-on bags would ultimately enhance security screening by reducing the number of bags that need to be screened and reducing the volume of the individual bag, both of which would allow for a better, clearer, uncomplicated e-ray image.

The concept of limiting the size, type and amount of carry-on baggage is nothing new and was recommended by an FAA Aviation Security Advisory Committee in 1996. International countries and bodies, such as the European Union (EU) which represents 25 member states, also recognize the security enhancements relative to limiting the number and size and have adopted a new rule effective April 2007 that would limit passengers to one carry-on item with a size limit of 56 cm by 45 cm by 25 cm (22 in by 17.75 in by 9.85 in approx).

FAA and Transportation Security Administration (TSA) recognizing the necessity to limit carry on baggage both issued guidance to carriers that limited passengers to one carry-on bag and one personal bag (such as a purse or briefcase). These restrictions are loosely enforced and neither agency is very explicit in their information to the public regarding the limit. In fact, the TSA website no longer even mentions the limit of one carry-on and one personal bag.

AFA-CWA will continue to fight for clear and concise limits on the number and size of carry-on bags to ensure continued enhancement of security and safety for the traveling public.

HUMAN INTERVENTION MANAGEMENT STUDY (HIMS)

Flight attendants and pilots work under nearly identical and strict regulations of the DOT and FAA regarding drug and alcohol abuse. Both groups are subjected to drug and alcohol testing on a random basis; following a serious aircraft accident or incident; or based on suspicion of co-workers and supervisors.

However, there is one major difference: Pilots who test positive for prohibited substances have access to a rehabilitation and recovery process called Human Intervention Management Study (HIMS) and, if a pilot complies with the recovery program, he/she may return to flying. On the other hand, flight attendants who test positive are terminated quickly and have little to no access to treatment making recovery improbable. It is time for the FAA to institute a HIMS program for the nation's flight attendants.

HIMS was formed and funded in 1992 by Congress, is administered by the FAA, and provides a comprehensive education and training program for alcohol and drug abuse prevention in the airline industry. Congress has appropriated approximately $500,000 to fund HIMS.

The success of HIMS for pilots is well documented and provides a glimpse at the potential assistance this worthy program can provide for flight attendants. Over 3,500 pilots have been returned to the flight deck through their own efforts with the support of the HIMS program. Importantly, over 57,000 pilots and their families at 47 carriers have received preventative educational services from the HIMS program.

Flight attendants earn their wings by first passing a company training program which includes mandatory FAA training requirements. The FAA orders that flight attendants pass proficiency tests during training. Training records and test results are a part of a flight attendants permanent personnel file and can be accessed at any time by management and by the FAA in post-serious aircraft incident and/or accident investigations. Following successful completion of the initial training course, the FAA

issues a certificate to the flight attendant who must attend on-going training courses and pass proficiency tests to remain certified each year throughout her/his career. Flight attendants are also subject to unannounced inspections by FAA Cabin Safety Inspectors and are subject to FAA enforcement action for non-compliance with FAA regulations.

This FAA oversight of flight attendants is nearly identical to the way in which the FAA governs and enforces federal regulations concerning other aviation professionals such as pilots and mechanics. Therefore, an effective HIMS program will provide parity for flight attendants and their aviation industry colleagues.

According to Employee Assistance Program (EAP) experts, flight attendants are at greater risk for developing addiction diseases because they may be exposed to multiple traumatic and near traumatic incidents while on the job. As the first responders in cabin safety and security incidents, flight attendants, like other emergency response professionals who experience traumatic incidents, can become vulnerable to substance abuse.

Company sponsored employee assistance programs are valuable but limited in their scope. They offer intervention with troubled employees by training supervisors to refer workers with observable performance problems for help. Unfortunately, these programs have a narrow capacity to identify "at risk" flight attendants simply because the vast majority of the time, a flight attendant is unsupervised, working in a distant environment at 30,000 feet.

HIMS can provide a safe harbor for flight attendants, as it does for pilots, who want to report fellow crewmembers they suspect of having an abuse problem. In a largely unsupervised work environment, fellow flight attendants are often the first to suspect and/or recognize substance abuse patterns of a co-worker. But currently, the practice of alerting management to a flight attendant that may be struggling with an addiction is the fast track to her/his unemployment with no health benefits to count on for help.

HIMS can prevent a wasteful human toll and can produce cost efficiencies at airlines that effectively promote and utilize the HIMS model. A HIMS model for flight attendants could save substantial training costs for carriers that currently have to hire new flight attendants to fill vacancies that result when management fires flight attendants for a first positive drug or alcohol test. Each time a flight attendant is terminated, the costs of training that flight attendant are a wasted investment.

Because HIMS promotes peer identification and intervention, it increases the chance that a flight attendant will get treatment early and avoid mounting medical bills that often result from a sustained substance abuse. Also, absenteeism and on the job injuries, costly bottom lines for management, may also improve with an effective HIMS program. Countless union and management dollars cold be saved as a result of HIMS. Airline expenses for grievances, system board and arbitration for substance abuse cases are substantial. With management and union endorsement, HIMS can reduce costly legal bills associated with substance abuse termination and/or discipline cases.

It's well past time to institute HIMS programs for flight attendants. It's time to give all flight attendants a chance at rehabilitation and recovery and a return to their careers. Too many of our colleagues have suffered in silence, afraid to speak up about their addiction struggles and management's draconian termination policies silence those who want to extend a helping hand. The warning signs often come too late to save careers. Expanding the HIMS program for flight attendants can usher in a cooperative environment that will work to ensure safety in the air and hope and recovery for those of our colleagues in need.

DEVELOPMENT OF A METHOD FOR ASSESSING EVACUATION CAPABILITY OF AIRCRAFT UNDER ACTUAL EMERGENCY CONDITIONS.

AFA-CWA urges Congress to have the National Academy of Sciences study the issues related to emergency evacuation certification of passenger transport aircraft and begin the process of developing a method for assessing evacuation capability of aircraft under real emergency conditions.

Design standards are used in the design phase of a project, and can be verified while the product, in this case, an airplane, "is still on the drawing board." i.e., before the airplane is built. Performance standards evaluate the performance of the product, often under the influence of factors that cannot be effectively integrated or evaluated during the design. Typically, a performance standard involves a test of the product after it is built. In the case of a full scale evacuation demonstration (a performance standard) of an airplane, the factors that must be evaluated are the performance of the passengers and crew.

The FAA made a change in policy that would allow new airplane designs or any increase in an existing design's capacity to be approved using analysis of data from past tests, rather than conducting a full scale test of the model requiring certification. But there is currently no analytical method that is capable of predicting failure of the crew and passengers to meet the performance standard after the design standard has been met. There have been such failures in the past. Since there are no analytical methods that can properly substitute for the full scale demonstration, the FAA cannot enforce their policy.

The requirement for full-scale emergency evacuation demonstrations was introduced by FAA NPRM 63-42 (28 FR 11507, October 23, 1963). This notice justified this proposal by stating: "Recently, the Agency observed several simulated passenger emergency evacuation demonstrations which were conducted by various air carriers using different types of airplanes. The time required to accomplish each of these demonstrations varied from 131 to 213 seconds using 178 to 189 persons. In all instances, it was evident that a more realistic assignment of functions within the cabin would have resulted in lesser time to evacuate the airplane satisfactorily. From these demonstrations, it has been concluded that a physical demonstration of an air carrier's ability to execute its established emergency evacuation procedures within a specific time period is necessary in the interest of safety and to insure a more realistic assignment of functions which, in turn, will result in satisfactory accomplishment of emergency evacuation procedures."

Clearly, the original intent of the evacuation demonstration was to show the satisfactory accomplishment of emergency evacuation *procedures*. The final rule reinforced this intent (30 FR 3200, March 9, 1965).

The following year, FAA Notice 66-26 (31 FR 10275, July 29, 1966) proposed to establish comparable requirements for the airplane manufacturers. This notice stated that "...traditionally, it has been considered sufficient to provide the necessary components for emergency evacuation through detailed quantitative requirements prescribed in the airworthiness rules. However, experience has shown that compliance with these requirements does not ensure that the airplane can be evacuated, during an emergency, within an acceptable time interval. Differences in the relationships between elements of the emergency evacuation system introduce a considerable variation in evacuation time, and this variation is expected to be even more marked on larger transport aircraft under development." Thus it was acknowledged that relationships between the various elements of the evacuation system, not just the elements themselves, had a critical influence on evacuation time. In other words, the whole was considerably more complicated than the sum of its parts. Since the manufacturer would be demonstrating the basic capability of a new airplane type without regard to crewmember training, operating procedures and similar items (such demonstration of procedures was still required under Part 121, the operational requirements), this new demonstration was not expected to validate the evacuation procedures of the air carriers or operators. FAA Notice 66-26 also proposed that once a manufacturer had successfully conducted an evacuation demonstration for a particular airplane type, the passenger seating capacity could be increased by no more than five percent if the manufacturer could substantiate, by analysis, that all the passengers could be evacuated within the prescribed time limit. This appears to be the first proposal to suggest the use of "analysis" in lieu of full-scale evacuation testing. However, this analysis was intended to provide comparison with the full scale evacuation actually conducted on the airplane. These proposals were adopted as a final rule (32 FR 13255, September 20, 1967).

The tests conducted by operators to show satisfactory accomplishment of emergency evacuation procedures and by manufacturers to show that the aircraft interior configuration and the relationship between the elements of its emergency evacuation system could be evacuated within a specified time period were allowed to be satisfied under a single test under Amendment 25-46 (43 FR 50578, October 30, 1978). Under this amendment, the FAA also stated that "A combination of analysis and tests may be used to show that the airplane is capable of being evacuated within 90 seconds under the conditions specified in 25.803(c) of this section if the Administrator finds that the combination of analysis and tests will provide data with respect to the emergency evacuation capability of the aircraft equivalent to that which would be obtained by actual demonstration." The FAA recognized the problems with this new provision and in its discussion of it concluded that: "Several commentators objected to the proposed amendment to 25.803(d) which would allow analysis in showing that the airplane is capable of being evacuated within 90 seconds. One commentator stated that analysis alone is an incomplete means of showing compliance and should not be allowed. Another commentator stated that extrapolations based on analytical testing have no practical relation to actual conditions which occur in accidents and evacuation demonstrations. The FAA agrees that the limitations on the use of analytical procedures should be made clear. The requirement that the Administrator find the analysis data acceptable was intended to *preclude approvals which might be based on insufficient test data, such as in the case of a completely new model or a model which has major changes or a considerably larger passenger capacity than a previously approved model"* (Italics ours.)

This intent was reinforced by the FAA Administrator in a 1986 Regulatory Interpretation and FAA Advisory Circular (AC) 25.803.1, Emergency Evacuation Demonstrations, issued November 13, 1989.

In 1985 testimony before the U.S. House of Representatives Subcommittee on Investigations and Oversight of this Committee (formerly named Public Works and Transportation Committee) and its Chairman, James Oberstar, the FAA Administrator

suggested that a reassessment of regulations pertaining to emergency evacuation of transport airplanes was warranted. Consequently, an Emergency Evacuation Task Force, open to the public, for that purpose was established in September, 1985. The continued use of full scale emergency evacuation demonstrations was one of the matters considered by that task force. One of the presentations, by Boeing, suggested that a rudimentary analytical procedure be used in lieu of full scale demonstrations. Basically, the manufacturers favored analysis, while the representatives of people who flew on the airplanes, either as crewmembers or passengers, opposed analysis. The task force was unable to reach consensus on when to accept analysis in lieu of a demonstration. A similar process was undertaken by an advisory committee to the FAA in the 1990s with the same failure to reach consensus.

The procedures used by the flight attendants in a full scale emergency evacuation certification demonstration are intended to become the baseline procedures for the aircraft type and model tested. This was the reason for the promulgation of the 1965 rule requiring operators to conduct full scale emergency evacuation demonstrations. These procedures are found in the Flight Standardization Board Report for each type and model of aircraft. Yet some demonstrations conducted since 1996 have utilized a procedure that makes it easier for the manufacturer to pass the test, but it is not a procedure that is used by U.S. scheduled operators. The intent of the regulation requiring full scale evacuation demonstrations is not being carried out by the FAA.

The analytical method does little more than calculate that, if the design standards are met, the aircraft could be evacuated within the requirements of the performance standard. Since the design requirements were intended to provide an airplane capable of being evacuated within the requirements of the performance standard, use of the analytical method is redundant.

Analysis is not a method that can predict failure of an emergency evacuation system, unlike a full scale demonstration utilizing appropriate evacuation procedures.

The result of the FAA's policy and of the currently inadequate "state of the art" analytical methods accepted under the policy, is that the first full scale evacuation of a new airplane will be performed by the traveling public under emergency conditions rather than by paid test subjects under the controlled test conditions of a demonstration. There is no assurance that the evacuation would be successful. For this reason, the FAA should be required to rescind its policy of allowing the use of analysis in lieu of the full scale demonstration until a scientifically valid method is developed.

The time is past due for development of a method for assessing the evacuation capability of aircraft under real emergency conditions. An independent blue ribbon panel needs to be established within the National Academy of Sciences (NAS) to examine these problems in depth and design a study to develop such a method, if not develop the method itself.

As you can tell from our testimony, AFA-CWA believes that there are a number of areas where improvements could be made by the FAA to improve aviation safety. We look forward to continuing our working relationship with this Committee and the Chairman to make progress on these important issues. Thank you again for the opportunity to testify today.

THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY

STATEMENT OF WARREN D. KROEPPEL

GENERAL MANAGER, LAGUARDIA AIRPORT

SUBCOMMITTEE ON AVIATION

COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE

U.S. HOUSE OF REPRESENTATIVES

HEARING ON THE REVIEW OF FAA OPERATIONAL AND SAFETY PROGRAMS

2251 RAYBURN HOUSE OFFICE BUILDING

UNITED STATES HOUSE OF REPRESENTATIVES

MARCH 22, 2007

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Chairman Costello, Congressman Petri, Congressman LoBiondo, Congressman Hall and other distinguished Members of the Subcommittee, good morning. I am Warren Kroeppel, General Manager of LaGuardia Airport for The Port Authority of New York and New Jersey. On behalf of the Port Authority, I would like to thank you for organizing this hearing and giving me the opportunity to testify today and to share with you our thoughts regarding the management of the nation's largest airport system and some of our current challenges. My comments will be brief and I request that my entire statement be entered into the record. While the focus of my remarks will be on the Administration's proposal for managing congestion at LaGuardia Airport, I will also take this opportunity to comment on other aspects of H.R.1356 Next Generation Air Transportation System Financing Reform Act of 2007 (NextGen).

The Port Authority of New York and New Jersey is a bi-state public authority created in 1921 by our States with the consent of Congress. Its mission on behalf of the States of New York and New Jersey is to identify and meet critical transportation infrastructure needs of the bi-state region and provide access to the rest of the nation and to the world. The Port Authority of New York and New Jersey operates many of the busiest and most important transportation links in the region. In addition to the airports which I will note in a moment, these facilities include AirTrain JFK and AirTrain Newark; the George Washington Bridge and Bus Station; the Lincoln and Holland tunnels; the three bridges between Staten Island and New Jersey; the PATH (Port Authority Trans-Hudson) rapid-transit system; the Port Authority-Downtown Manhattan Heliport; Port Newark; the Elizabeth-Port Authority Marine Terminal; the Howland Hook Marine Terminal on Staten Island; the Brooklyn Piers/Red Hook Container Terminal; and the Port Authority Bus Terminal in midtown Manhattan. The agency also owns the 16-acre World Trade Center site in Lower Manhattan.

The Port Authority is financially self-supporting and receives no tax revenue from either state.

The agency operates four airports that are critical to the nation's trade, travel, commerce and tourism – a rapidly growing global gateway, John F. Kennedy International (JFK); a major domestic and international hub, Newark Liberty International (EWR); the premier business airport, LaGuardia (LGA); and a vital corporate and general aviation reliever, Teterboro (TEB); as well as an urban helipad, the Downtown Manhattan Heliport (DMH). These facilities can handle aircraft as diverse as a Piper Cub, a Sikorsky S-76, and the Boeing 747-400 and just this week we greeted the Airbus A380's first voyage to the United States. In 2006, we warmly welcomed our 100 millionth passenger. These airports were used by 104 million passengers, with over 2.6 million tons of cargo and 1.2 million aircraft movements in 2006. We served an unprecedented number of customers in 2006, with JFK growing by more than 4% and Newark Liberty growing by almost 8%; while LaGuardia's traffic was flat. This activity produces annually an astounding $62 billion in economic activity and directly and indirectly supports more than 375,000 jobs in the New York/New Jersey metropolitan region.

HISTORICAL BACKGROUND

The FAA's proposed NextGen legislation seeks to address a fundamental and undeniable problem, the scarcity of airfield resources at LaGuardia. It has been clear since the "High Density Rule" (HDR) was established in the late 1960s that certain airports have insufficient runways and taxiways to handle unconstrained demand without experiencing significant congestion, and attendant delay and passenger inconvenience. At LaGuardia, the problem is exacerbated by the fact that no amount of labor, capital or entrepreneurship can expand the constraint on capacity, namely airport land. The highly constrained facilities at LaGuardia are not capable of absorbing the demand for access to the airport without the use of tools to manage the inevitable delay and strain on the airport infrastructure that would ensue if access were left unchecked after the HDR expired at LaGuardia on January 1, 2007.

The issue of congestion management at LaGuardia is governed by its location; a mere eight miles from the Central Business District, and its physical size and layout. LaGuardia is by far the smallest of NY's area three commercial airports, consisting of only 680 acres in area. It has two intersecting 7,000-foot runways, and four passenger terminals with 73 gates. Yet within this space, it accommodated 25.8 million air passengers a year in 2006 more annual passengers per acre than any other airport in the world.

On April 5, 2000, Congress enacted the Wendell H. Ford Aviation Investment and Reform Act for the 21st Century ("AIR-21"). Under AIR-21, Congress legislated the sunset of the HDR at Chicago O'Hare, LaGuardia and JFK. Congress hoped to lower the barriers to entry for carriers interested in providing new competitive services and those interested in providing service to small communities. By permitting new entrant carriers to serve LaGuardia, Congress hoped to see lowered fares thus affording new opportunities for travel and by permitting additional service to small communities. In addition, Congress hoped to advance the economic development objectives of these communities. These goals were noble and the objectives were largely met. Unfortunately, unintended consequences resulted from carriers rushing to add new service beyond what was physically possible.

That legislation enabled carriers meeting the statutory criteria automatically receive approval for HDR slot exemptions for LaGuardia. As a result, the airlines sought to schedule an additional 600 new flights a day at LaGuardia, immediately causing increased levels of flight delay, which accounted for a quarter of all flight delays nationally in September 2000. "Market forces alone [did] not limit the scheduling of additional operations or the scheduling of these operations in peak hours at the airport." High Density Airports; Notice of Lottery of Slot Exemptions at LaGuardia Airport, Docket No. FAA-2000-8278, 65 Fed. Reg. 69216, 69218 (Nov. 15, 2000). The result was a level of congestion and delay which made "carrier schedules impossible to meet, frustrate[d] passenger travel plans, and place[d] an unnecessary strain on carrier ground operations and on air traffic control services."

In response, the Port Authority announced that it was implementing a temporary moratorium on additional flights at LaGuardia that could be initiated pursuant to AIR-21. The FAA, in cooperation with the Port Authority, subsequently conducted a lottery for AIR-21 flights to be operated during congested periods in order to help alleviate excessive congestion at LaGuardia. The lottery limited total air carrier flights at the airport to approximately 75 scheduled flights (plus six unscheduled flights) per hour and also limited the total number of permitted AIR-21 flights to 159 flights. Additional lotteries have been held periodically to reallocate the small number of slots that had been previously allocated but were not being used.

I apologize for this lengthy history, but for members of the Subcommittee who have joined since AIR-21, there is a lesson to be learned. We believe that the extreme congestion, bordering on gridlock that took place after the enactment of AIR-21 is that LaGuardia would once again face crippling delays and congestion if no form of operational limitation replaces the HDR. The FAA has agreed. (65 Fed. Reg. 69216, 69218 (Nov. 15, 2000).

However, managing congestion is just one of the goals for LaGuardia in the post-HDR era. Congress had established the goal of creating opportunities for new entrants and ensuring service to small communities, and in addition, the FAA and the Port Authority were concerned about the efficient use of the airspace, or throughput.

As this Subcommittee begins consideration of H.R. 1356 (NextGen), I acknowledge that there are many significant policy questions before you. I hope my testimony will give the committee a chance to reflect on Section 503 *Allocation of Operating Authorizations at LaGuardia Airport.* This section must be considered in light of the FAA's August 29 Notice of Proposed Rulemaking (NPRM) concerning LaGuardia. Only by closely examining the NRPM do we gain insight into the Administration's intent. And only through an examination of history can you appreciate the potential impact.

SHARED GOALS: DIFFERING SOLUTIONS

Managing Congestion

To address congestion management, the FAA correctly focuses on the need to continue to place limits on flight activity consistent with the supply of capacity. The Port Authority agrees that this is an FAA responsibility. However, the Port Authority believes that the current limit on operations at LaGuardia may not be low enough, and that now is the time for further examination of this limit to determine whether reduced hourly operations rate or other measures will prevent delays from accumulating to excessive levels. A cap of 75 commercial aircraft movements per hour was a demand limit that generated a tolerable level of delay from 2001 through 2004. Since that time, delays to arriving and departing aircraft at LaGuardia have grown 33 percent between 2004 and 2006, comparing comparable January through November weekday operations between the two years.

The FAA should also consider, together with, or as an alternative to, adjustment of the base operational cap of hourly Operating Authorizations (OAs), variation of the cap during selected hours through the day to provide a time when the backlog of delayed operations could be reduced or cleared. The elimination of even a single authorization allows each backlogged operation to move up approximately one minute. Given a typical backlog of up to 20 fights, each eliminated authorization could reduce delays by approximately 20 minutes. Elimination of six authorizations would eliminate two hours of delay per day. Please see Attachment 1 for further details.

We believe the number of permissible hourly operations needs to be lowered until such time as FAA can restore its previously demonstrated level of productivity.

Providing Access opportunities For New Entrants

While we agree with the goal of providing new entrants and limited incumbents access to LaGuardia, we have great concern about the FAA's approach. While the NextGen legislation states that a provision of the rule that would be required would provide "air carriers and the traveling public with a stable and predictable schedule for planning future travel." [Section 41724 (b) (E)], the NPRM proposed that starting in 2010, and every year thereafter, ten percent of all existing Operating Authorities would be reallocated. The NPRM, much like the language in the NextGen Bill, are silent on the mechanics of how this would work.

A turnover of this nature would create excessive roiling for the entire airport community. Airlines that have spent years building their schedules so that they could provide hourly service in high-demand business markets would be faced with potentially losing key pieces of their operation. Even if airlines were successful in restoring some elements of their lost ten percent by re-purchasing through whatever mechanism is instituted, there is no certainty they will be able to restore their schedules. As for carriers who may successfully acquire new operating rights through the forced annual reallocation of ten percent of LaGuardia's capacity, there is no certainty that they will find contiguous gate space, which would permit them to take advantage of the new opportunity in a commercially viable manner. Both the NPRM and the NexGen Bill are filled with uncertainty that is quite troubling to airlines, the airport and the customers that we serve.

Preserving Service to Small Communities

The competing goal of promoting service to small communities that are served by smaller aircraft is not only important to air service at LaGuardia and to the trade, travel and commerce needs of New York City, but it is also essential to the communities from which those flights originate or are destined for, especially those located within 300 miles of New York City. These communities rely on access to New York City through LaGuardia, as well as the transfer opportunities available to other flights destined for

other cities. There must also be ways of allocating certain operating privileges to encourage competition and entry by other airlines. We believe that FAA should have the authority to address this goal.

The Port Authority strongly agrees that in the case of LaGuardia where it has been established that aeronautical capacity is finite and cannot be expanded, the overabundance of service to large markets with small aircraft effectively precludes other services. highly demanded resource such as LaGuardia should be used efficiently for both the benefit of the residents of the New York/New Jersey area and air travelers in general. Both the FAA and Port Authority differentiate between small planes to large places, which often poorly serve the traveling public and small planes to small places, which is often the only way small communities can be afforded access.

The Port Authority supports the concept that some portion of airside capacity should remain available to serve small community destinations within 300 miles of the airport and believes ensuring service to small communities must rest with the federal government.

Efficiently Using a Scare Resource

In the NPRM, the Port Authority embraced the FAA's goal of using LaGuardia's scarce capacity to its highest and best use by encouraging upguaging to increase throughput even if we did not embrace the means. As such we are troubled that Section 503 explicitly lists five public policy goals for LaGuardia, without mentioning the goal of increased throughput that is so central to the NPRM, and to the future of the airport. It should be noted that although we strongly support the goal of upguaging, the FAA's method, as defined in the NPRM as an Average Seat Size target, would create substantial disruption. The Port Authority would be required to move airlines to new premises, change airport signage, modify baggage handling systems, and change configurations for TSA operations. The foregoing is impractical, inefficient and will result in increased expense and operational difficulty for the Port Authority, the airlines, and the customers we serve. Additionally, it may force the Port Authority to accommodate individual airlines on multiple concourses, thereby splitting their operations, decreasing their operational efficiency and increasing their operating costs. The Port Authority, as airport operator, is in the best position to determine how to efficiently allocate scarce resources of the gates at LaGuardia. Determination of the optimum balance of positive and negative effects of upgauging is best performed by the airport operator in consultation with the airlines using LaGuardia. The Port Authority has concluded that the approach embodied in the NPRM is overly prescriptive and administratively burdensome, and would result in unnecessary disruption and less efficient use of the scarce airport resource.

THE PORT AUTHORITY'S SOLUTION

Although the Port Authority supports the many principles, doctrines and tenets that the FAA has articulated, in the Port Authority's view, the proposed rule and

legislation needlessly interfere with the airport operator's proprietary rights to manage LaGuardia.

More importantly, it appears that the proposal would have undesirable impacts on the airport, the airlines, and, ultimately, the traveling public due to the fundamental mismatch between the proposed airfield policy and the management of landside infrastructure. The FAA's proposal is too prescriptive and improperly assigns to the federal government the responsibility of managing access to the all-important airport gate facilities, rather than acknowledging that the responsibility for doing so properly rests with the airport operator as the manager of the facility.

The Port Authority has determined that an alternative approach is preferable, realizable, and is responsive to the aforementioned goals. The FAA needs only to set the operational hourly limit and to establish the criteria for service to small communities. The Port Authority then will exercise of its right to manage utilization of access to LaGuardia terminal gate facilities, which avoids many of the potential pitfalls in the NPRM proposal and the NextGen legislation.

The Port Authority proposes using its proprietary powers to effectuate gate utilization measures, in consultation with air carriers, to achieve the objectives that Congress and the FAA have articulated. The Port Authority has a legitimate interest as the proprietor of the airport to seek to optimize the efficient use of limited airport capacity and facilities and to promote competition at LaGuardia.

Essentially, the Port Authority would establish utilization standards that would limit airline use of passenger gates on an hourly basis consistent with the aeronautical capacity of the airport as determined from time to time by the FAA based on input from all relevant sources. Airline rights to conduct passenger aircraft operations would be subject to take-back procedures based on frequency of use requirements, and capacity use requirements based upon the size of an aircraft and the numbers of passengers that may be accommodated at the corresponding gate.

Airline rights to conduct passenger operations would also be subject to limited reallocation to encourage competition and provide meaningful opportunities for new entrants to respond to actual circumstances. The Port Authority, agrees with Congress and the FAA that service to certain small communities should be maintained, thus a certain number of operating privileges, to be determined by the FAA, should be exempt from take back procedures related to seat usage and competition. Also, airlines would have the right to enter into direct arrangements with other carriers to buy, sell, borrow, or trade-operating privileges consistent with the objectives of the leasing policy, subject to airport operator consent which would be based on the policy objectives articulated by the FAA in the NPRM. The exact provisions of the LaGuardia terminal leasing policy, practices and agreements, would, of course, be developed in consultation with the airlines that use the airport. The Port Authority has initiated discussions with the air carriers serving LaGuardia and will expand this consultation in the months ahead.

NECESSARY CONGRESSIONAL ACTION

The FAA acknowledges that there is tremendous uncertainty embedded in the LaGuardia NPRM, uncertainty as to what Congress will authorize and uncertainty as to how market-clearing charges will work in its first application in the United States aviation context. Rather than face this tremendous uncertainty with the resultant highly disruptive effects on airlines, airports, and the customers, the Port Authority believes that it would be preferable to use gate leasing policy, which is a time-tested and common industry practice.

In the NPRM, the FAA did not specify the methodology it would use to reallocate OAs returned after their expiration. Nor does it elaborate in the NextGen Bill, other than to make clear it will be an auction or congestion pricing. If the FAA implements a market-based approach, any OA fee would add to airlines' expenses. The addition of such an expense will cause an air carrier to be much more resistant to reasonable increases in terminal rents and other charges that would normally fund improvements to the airport, and the incurred costs would likely be passed along to the passenger in the form of increased ticket prices. Any revenues derived under such a protocol should be used for investment in capital improvements at LaGuardia.

We urge Congress to modify Sections 503 and 504 to enable the Port Authority to proceed with a simpler, more certain solution to LaGuardia's congestion issue: incentive-based gate-leasing policy. As such it is important to include gate-leasing policy as a potential 'market-based mechanism' as defined in Section 503(a) and Section 504(e). The FAA should set the hourly capacity of LaGuardia, provide for small community access and empower the Port Authority to proceed with its gate-leasing policy.

OTHER CHALLENGES

DELAYS

Newark Liberty International, LaGuardia and JFK finished 2006 as the first, second and fourth most delayed airports in the nation. What is more troubling is that the number of aircraft delayed is increasing, as is the average length of delay. The 5.5 million hours of delays at our airports resulted in the loss of $180 million in productivity.

The Port Authority has assessed operations at the three airports using its own and FAA records of operations and has determined that little has changed to trigger such a large increase in delay. Weather conditions, aircraft fleet mix, the distribution of operations through the day and runway use patterns do not vary sufficiently to explain such a large change. However, ay LaGuardia, as an example, the utilization of the airport's runways has dropped two operations per hour in good weather (Visual Flight

Rule, or VFR, conditions), and has dropped by as many as eight operations per hour during good weather with east wind conditions when Runways 4 and 13 are used.

Since no significant change has occurred in demand or physical characteristics of the fleet of aircraft, the airport runways, or the weather conditions, the cause of the increased delay despite the maintenance of the same hourly regulatory limits should be determined and, if possible, rectified.

The Port Authority has formed a coalition of air carriers from all three commercial airports to address what is becoming an untenable situation. Last month the coalition met with the FAA and we are developing a work plan to identify short-term and long-term initiatives that will improve the throughput at our airports without compromising safety. We urge Congress to monitor the delay situation in the New York/New Jersey metropolitan area so that the situation does not worsen, and to support air traffic management initiatives put forth by the FAA to address it. NY Governor Elliot Spitzer and NJ Governor Jon Corzine strongly support our agency's efforts to ensure that service to the traveling public be improved to provide a favorable business environment and to serve the millions of annual visitors to our region.

PORT AUTHORITY ACTION TO ADDRESS CONGESTION AND DELAY

The Port Authority has taken some very significant steps to address the congestion and delay situation at our airports. As I have described, LaGuardia is a land-constrained older airport, which needs considerable investment and modernization to enable its landside infrastructure and associated gates to accommodate larger aircraft thereby serving the growing demands of the vibrant New York / New Jersey region.

The Central Terminal Building (CTB) has 37 gates or about half the gates at LaGuardia. This terminal (constructed in 1964) has four gates that cannot accommodate aircraft with more than 110 seats, and five gates that cannot accommodate aircraft with more than 50 seats. Many hold rooms are undersized for the gates they serve. Not all security checkpoints have capacity to support the flow of passengers generated by gates operating at their full capacity. The Central Terminal Building is in need of significant capital investment, which would increase capacity by permitting larger aircraft to serve to LaGuardia without increasing operations. The agency is in the midst of a $15 million study to examine the feasibility of modernizing the terminal to accommodate the forecasted passenger growth.

Another significant attempt to manage the growth in passenger demand is the Port Authority's pursuit to purchase the 93 years remaining on the Stewart International Airport's lease. Stewart, which is located 50 miles north of New York City, has two runways that generally do not compete with the airspace around the four Port Authority airports. We are currently in negotiation with the current lease-owner but expect to take over operation of that airport by October 1, 2007.

FLEXIBILITY IN THE PASSENGER FACILITY CHARGE (PFC) PROGRAM

The Port Authority has collected more than $1.6 billion in PFCs and used them for vital capacity enhancing and security-related projects, including taxiway widening at JFK, and runway rehabilitation work at Newark Liberty and LaGuardia, the AirTrains at NEWARK LIBERTY and JFK, and an ARFF facility at LaGuardia. NEWARK LIBERTY The program has afforded the agency the opportunity to expand our financial capacity. However, the $4.50 cap and the strict eligibility requirements severely limit the Port Authority's ability to fully use the PFC as a financing tool. Therefore, the agency supports an increase of the PFC level, but recommends that this be done in conjunction with a relaxation of the eligibility requirements of the program. By broadening eligibility to all aviation-related capital projects the FAA would remedy the difficulty inherent in the uniform implementation of detailed eligibility requirements to different airport environments.

In addition, the Port Authority strongly supports a streamlining of the review process. The application process has been lengthy, costly and unpredictable. We support a system whereby the airport operators impose, report and audit the PFC-funded projects.

CONCLUSION

The Port Authority is confident that its gate leasing proposal is sound and workable and a desirable alternative to that which is set forth in the NPRM and discussed in Section 503.

The Port Authority's proposal provides for a continuing strong federal role in establishing and overseeing policies governing the use of the airport, relies upon the FAA's authority to establish flight limits to control demand relative to capacity, and recognizes that the FAA has a role in defining small community air service markets eligible for distinctive consideration.

The Port Authority's proposal also protects the airport operator's proprietary rights to manage its business relationships with its airlines, and control its facilities using airport leases, use agreements, and policies which have been fundamental to defining airport and airline responsibilities. As is the case at other commercial airports, the Port Authority's alternative would unite the administration of operating authorizations with the leasing of terminal space and facilities.

The terms are also consistent with airport responsibilities to promote competition and achieve efficient utilization of assets.

If Section 503 is incorporated into law we respectfully ask Congress to modify Section 503 and 504 to expand the definition of eligible market based mechanisms to include gate-leasing policy. In addition, we urge the Subcommittee to increase the PFC

level and to enhance the flexibility of the PFC program. Finally, the Port Authority states once more its appreciation for all of the efforts expended by the FAA and US DOT to date with regard to these proposals, and looks forward to an opportunity to have a conversation with the FAA and US DOT, and all airport stakeholders, regarding the development of the Port Authority's alternative proposal.

The Port Authority is deeply grateful to the Subcommittee for giving us this opportunity to discuss these important issues as the Congress deliberates on several significant aviation policy issues as part of the FAA Reauthorization process.

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ATTACHMENT 1

ASSESSMENT OF LAGUARDIA AIRPORT DELAYS

COMPARISON OF 2004 AND 2006

SUMMARY

Seventy-five commercial aircraft movements per hour was a demand limit that generated a tolerable level of delay from 2001 through 2004. Since that time, delays to arriving and departing aircraft at LaGuardia have grown 33 percent between 2004 and 2006 (when comparing comparable January through November weekday operations between the two years). The Port Authority has assessed operations at LaGuardia using FAA and its own records of operations and has determined that little has changed at LaGuardia to trigger such a large increase in delay. Weather conditions, aircraft fleet mix, the distribution of operations through the day and runway use patterns do not vary sufficiently to create an environment that would generate such a large change. However, the capacity of the utilization of the airport's runways has dropped two operations per hour in most good weather conditions, and has dropped by as many as eight operations per hour during good weather, east wind conditions when Runways 4 and 13 are used.

There was no significant change in demand or physical characteristics of the fleet of aircraft, the airport runways, or the weather conditions that explains the reduced airport runway capacity

ANALYSIS OF FAA DELAY DATA

FAA delay data for LaGuardia for 2004 and 2006 was obtained from the on-line edition of the Aviation System Performance Metrics (ASPM) database from http://www.apo.data.faa.gov/. Since monthly data is only available for the first eleven months of 2006, comparisons between 2004 and 2006 only cover the first eleven months of each year. Delay was examined for weekdays since the operational limits proposed by the FAA would be in effect for weekdays and Sunday afternoons when airlines usually run a full schedule of operations. Saturday afternoons and Sunday mornings have considerably less activity.

Table 1 compares weekday delay minutes per aircraft for the first eleven months of 2004 to a similar period for 2006 for portions of flight operations into and from LaGuardia. All delay categories have increased between 30 and 35 percent.

Table 1

COMPARISON OF 2004 AND 2006 DELAYS

Delay Category	Delay Minutes per Aircraft 2004	Delay Minutes per Aircraft 2006	Percent Change
Airport Departure Delay	18.9	24.9	**32%**
Gate Arrival Delay	13.2	17.9	**35%**
Gate Departure Delay	9.4	12.3	**31%**
Taxi Out Delay	11.5	14.9	**30%**
Taxi In Delay	5.0	6.5	**30%**

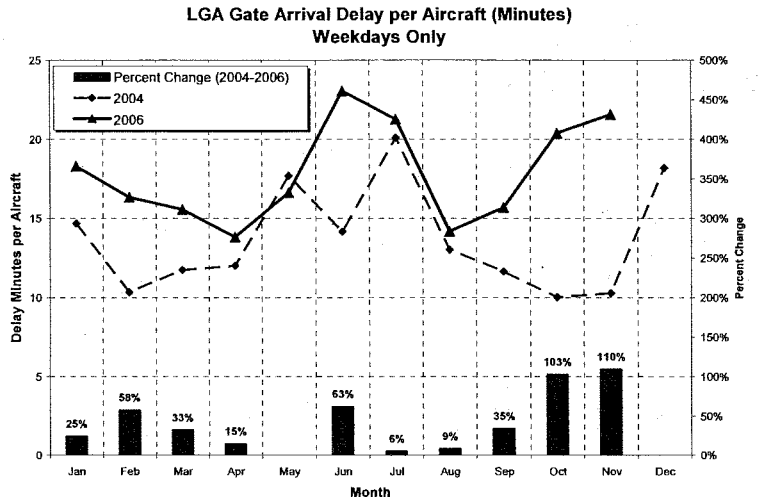
Source: FAA ASPM database and Landrum & Brown Analysis

Note: Comparison is for weekdays of the first eleven months of each year.

Exhibits 1 and 2 show comparisons of airport departure delays and gate arrival delays by month for 2004 and 2006. Delays have increased in all months. However, the largest increases occurred in June, September, October and November of 2006.

Exhibit 1

COMPARISON OF 2004 AND 2006 GATE ARRIVAL DELAYS



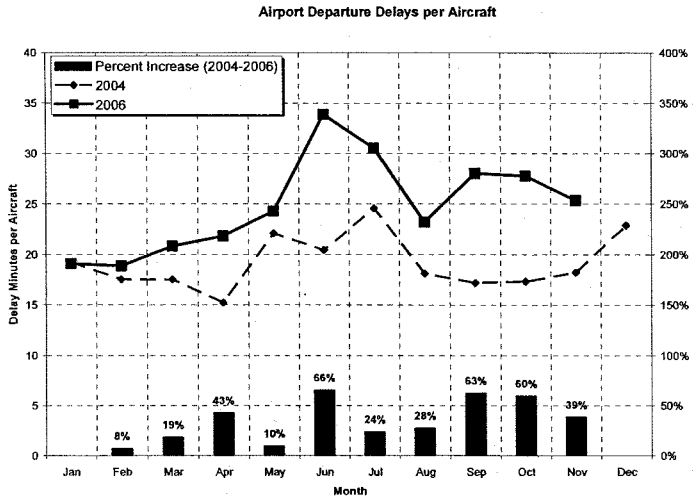
Source: FAA ASPM database and Landrum & Brown Analysis

Since October tends to be one of the busiest months, and the first week of October 2006 is the basis of future activity under the FAA proposed rule, The Port Authority prepared a more detailed analysis comparing airport operations and delays between October 2004 and October 2006. This analysis was prepared from the joint FAA and Port Authority CATER database of aircraft operations at LaGuardia. This analysis covered four factors that effect airport runway capacity utilization:

- Airport Runway Use Configurations
- Airport Weather Conditions (Ceiling, Visibility, Wind Speed and Direction)
- Aircraft Fleet Mix
- Volume of Aircraft Operations by Runway by Five Minute Increments

Exhibit 2

COMPARISON OF 2004 AND 2006 AIRPORT DEPARTURE DELAYS



Source: FAA ASPM database and Landrum & Brown Analysis

Airport Runway Use Configurations

The CATER database records the primary arrival and departure runways in use or the "configuration", as well as the times the runway configuration changes. CATER records for October 2004 and October 2006 were evaluated for configuration use between the hours of 6AM and 10PM. The results of this analysis are summarized in **Table 2**. Configurations that include operation of both runways occurred more often in 2004 than in 2006. Most of the use of the single runway configurations in 2006 occurred on Saturdays when demand is lower. Most of the remaining time occurred on October 20 and 29, 2006 when winds were too strong from the northwest to use Runway 4/22. These two days do not account for a major portion of the large delay differences between October 2004 and 2006.

Table 2

COMPARISON OF RUNWAY USE CONFIGURATIONS

OCTOBER 2004 TO OCTOBER 2006

Runway Use Configuration	Number of Runways in Use	October 2004 Percent Use	October 2006 Percent Use
Arrive 13/Depart 13	1	0.3%	0.7%
Arrive 22/Depart 13	2	35.5%	34.3%
Arrive 22/Depart 22	1	0.0%	0.7%
Arrive 22/Depart 31	2	15.0%	23.2%
Arrive 31/Depart 31	1	3.5%	8.6%
Arrive 31/Depart 04	2	19.3%	15.9%
Arrive 04/Depart 13	2	26.4%	13.9%
Arrive 04/Depart 04	1	0.0%	2.7%
All Configurations		100.0%	100.0%
Dual Runway Configurations	2	96.2%	87.3%
Single Runway Configurations	1	3.8%	12.7%
Saturday Usage	1	3.7%	9.6%
Weekday Usage	1	0.1%	3.1%

Source: FAA and PANYNJ CATER database and Landrum & Brown Analysis

Note: Runway Configuration Use Shown Only for 6AM to 10PM

Weather Conditions

The CATER database reports the hourly and special weather observations made by the National Weather Service at LaGuardia. Missing data in the CATER database was obtained from <www.wunderground.com>. Between the hours of 6AM to 10PM, 92% of ceiling and visibility observations in October 2004 permitted visual flight rules operations (higher capacity), as compared to 94% in October 2006. Thus, in general, ceiling and visibility conditions in 2006 provided more opportunities to operate LaGuardia in its highest capacity modes.

Aircraft Fleet Mix

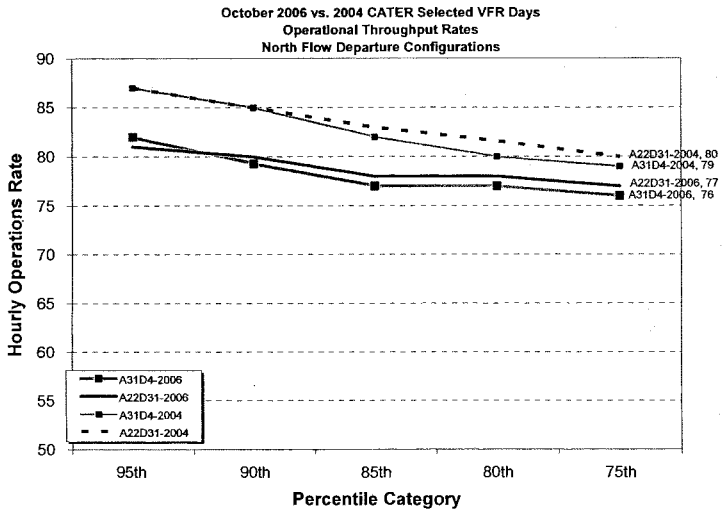
The more uniform the aircraft fleet mix, the more uniform the separations are between successive aircraft, and the greater likelihood that a higher level of capacity can be achieved. Small class aircraft that weigh less than 20,000 pounds or heavy class (and B-757) aircraft that weigh more than 300,000 pounds, need greater separations when they are in an aircraft traffic flow that contains predominantly large class aircraft. Small and heavy aircraft comprised approximately 10 percent of the aircraft fleet in October 2006 compared to 13 percent in October 2004. These values are sufficiently similar allow similar average aircraft separations in 2006 compared to 2004. Thus, the changes in aircraft fleet mix between 2004 and 2006 have not changed the capacity of LaGuardia.

Volume of Aircraft Operations by Five Minute Increments

Selected days for each of the five most commonly used runway operating configuration were analyzed to determine the hourly rate of aircraft operations achieved under each one. The hourly rate of aircraft operations was assessed by five minute increments between 6AM and 10PM. Exhibit 3 shows a comparison of four days with similar north flow departure conditions (departures on Runway 4 or 31) between 2004 and 2006. The analysis shows that both configurations lost three to four operations per hour of aircraft operations (throughput) between 2004 and 2006.

Exhibit 3

COMPARISON OF HOURLY RATE OF OPERATIONS FOR CONFIGURATIONS WITH NORTH FLOW DEPARTURES



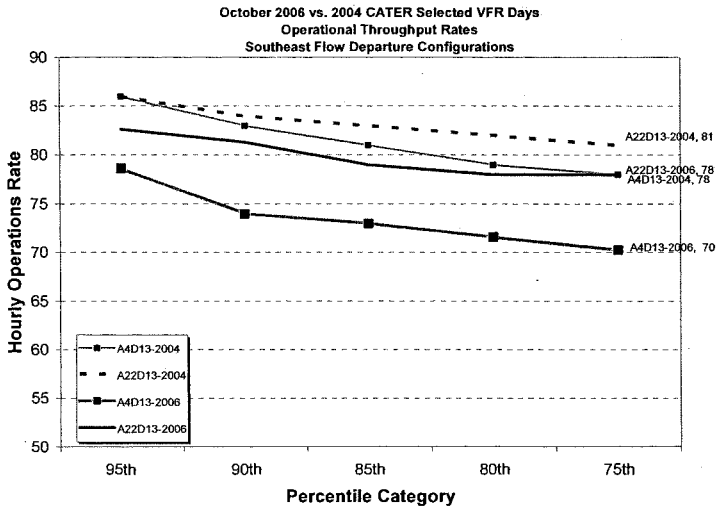
Source: CATER databases and Landrum & Brown Analyses

Both configurations had throughput values in 2004 that generally exceeded 80 operations per hour at least 20 to 25 percent of the time. In 2006, 80 operations per hour was exceeded only 5 percent of the time.

Exhibit 4 shows a similar analysis for the two dual runway configurations that have departures on Runway 13. These two configurations were generally accepted as being among those with the highest capacity at LaGuardia. In 2004, the arrive on Runway 22 and depart on Runway 13 configuration achieved a throughput rate of 80 operations per hour or more at least 25 percent of the time. In 2006, 80 operations per hour was achieved only 10 percent of the time. In 2004, the arrive on Runway 4 and depart on Runway 13 configuration achieved a throughput rate of 80 operations per hour at least 15 percent of the time. In 2006, 80 operations per hour is rarely

Exhibit 4

COMPARISON OF HOURLY RATE OF OPERATIONS FOR CONFIGURATIONS



WITH SOUTHEAST FLOW DEPARTURES

Source: CATER databases and Landrum & Brown Analyses

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achieved and most throughput rates are below 75 operations per hour. From this analysis it appears that the four most commonly used runway operating configurations that account for more than 85 percent of daytime configuration usage have lost five to ten percent of their aircraft operations throughput. These same four configurations generally had rates of aircraft operations that exceeded 80 operations per hour at least 20 to 25 percent of the time in 2004, in 2006 now only exceed 80 operations per hour approximately 5 percent of the time.

Tables 3 and 4 show the throughput rating for all configurations during VMC conditions (92 to 94 percent of all weather) for October 2006 and 2004, as recorded by the FAA ASPM databases. These tables confirm the 5 percent loss of throughput between 2004 and 2006 at the 95th percentile and at the 75th percentile

levels and provide data that agrees with the CATER analysis. These tables also show that between 2004 and 2006, the median throughput value has fallen below the 75 operations per hour FAR Part 93 limit on commercial aircraft operations.

Table 3

FAA ASPM EFFICIENCY RATING FOR OCTOBER 2006

Actual Efficiency Counts								
	Time Periods	Max	99th	95th	75th	Min	Median	Average
Departure	400	47	45	42	38	2	35	33
Arrival	400	44	43	41	38	8	35	33
Total Operations	400	88	82	80	75	17	71	67

Source: http://www.apo.data.faa.gov/

Table 4

FAA ASPM EFFICIENCY RATING FOR OCTOBER 2004

Actual Efficiency Counts								
	Time Periods	Max	99th	95th	75th	Min	Median	Average
Departure	359	50	48	44	40	6	37	35
Arrival	359	48	45	43	40	13	37	35
Total Operations	359	90	87	84	79	24	75	70

Source: http://www.apo.data.faa.gov/

CONCLUSIONS

The analysis of runway throughput shows that between October 2004 and October 2006 runway throughput at LaGuardia declined by five percent. FAA ASPM data shows that peak period throughput levels (those achieved 25 percent of the time or more) have declined from 79 to 75 aircraft operations per hour and median throughput levels have declined from 75 to 71 operations per hour. The 71 operations per hour median throughput rate has fallen below the 75 operations per hour FAR Part 93 limit on commercial aircraft movements. One consequence of the reduced operational throughput is that aircraft delays have increased by over 30 percent.

The data analysis shows no physical or aircraft schedule reason for the change in aircraft throughput between October 2004 and 2006. Airline schedules and fleet mix are approximately the same. Weather conditions, as defined by ceiling and visibility, were slightly better in 2006 than in 2004. No changes to airport runway or taxiway geometry occurred. The use of single runway configurations increased from 2004 to 2006. However, most of this use occurred on Saturdays when aircraft activity is less.

STATEMENT OF

CAPTAIN TERRY MCVENES
EXECUTIVE AIR SAFETY CHAIRMAN

AIR LINE PILOTS ASSOCIATION, INTERNATIONAL

BEFORE

SUBCOMMITTEE ON AVIATION

COMMITTEE ON TRANSPORTATON AND INFRASTRUCTURE

UNITED HOUSE OF REPRESENTATIVES

WASHINGTON, DC

MARCH 22, 2007

A REVIEW OF FEDERAL AVIATION ADMINISTRATION OPERATIONAL AND SAFETY PROGRAMS

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MARCH 22, 2007

Good morning. I am Terry McVenes, Executive Air Safety Chairman of the Air Line Pilots Association, International. ALPA is the world's largest pilot union, representing more than 60,000 pilots who fly for 40 airlines in the U.S. and Canada. ALPA was founded in 1931 and our motto since its beginning is "Schedule with Safety." For more than 75 years, ALPA has had a tremendous impact on improving aviation safety. Today, ALPA continues to be the world's leading aviation safety advocate, protecting the safety interests of our passengers, fellow crewmembers, and cargo around the world. ALPA has lived up to its mandate to the extent that many in the industry, including a former FAA Administrator, have referred to us as the "conscience of the airline industry."

Everyone is all too familiar with the difficult times that the airline industry has faced since the devastation that occurred on September 11, 2001. The industry has lost tens of billions of dollars, many airlines are in, or have recently come out of, bankruptcy, workers have been furloughed, and profits to the industry have been virtually non-existent. However, the contributions of the professional airline pilot to their carriers have literally made the difference between continued operations and cessation of scheduled service. Pilots and other airline workers, employed under the threat of corporate bankruptcy, have given up billions of dollars of salary and retirement benefits. With work rules decimated, many pilots are working longer duty days and flying more hours, taking second jobs or leaving the profession completely. While corporate profits have returned as the price of oil has moderated and revenues have increased, we remain extremely concerned that the bankruptcy era following 9/11 has cut deeply into the safety fabric once afforded by the past 50 years of collective bargaining over work rules and adequate staffing. Weather events occur virtually every day, yet marginal staffing leads to pressure on pilots to fly, since many airlines have an inadequate number of pilots to recover from such events.

We believe that Congress must help us ensure that the airline industry's safety net is not further eroded. Our comments today are intended to focus attention on a number of issues in which greater oversight and attention is needed.

In spite of the challenges and obstacles facing us today, the professional airline pilot has remained focused on operating airliners safely and, as a result, we have played a major role in lowering the U.S. accident rate that is now the envy of the rest of the world. However, we must recognize that the absence of accidents is not necessarily proof of safety. Accidents are simply outcome measures of ongoing risks. Their numbers, or lack thereof, are inadequate and misleading, because their causes are both systemic and probabilistic in nature. History has shown us that well-managed airlines can still have accidents.

My comments center upon the effects of the economic pressures the industry now faces. We are all too familiar with the recent media reports of 10-hour ground delays some of our airlines have experienced. Those delays are unfortunate, but loss of life is unacceptable. We must take those delays as a warning signal that the system needs help and we must proactively manage the safety risk that exists in our industry though Safety Management Systems before an accident occurs. In addition, pilot fatigue, the lack of One Level of Safety in cargo and security, the need for continued modernization of airspace and airport infrastructure so as to safely improve capacity, and the outsourcing of services, are serious issues that government and industry must solve together.

If you count the number of close calls that we have had in the last 12 months, we can see there is much work to be done. Government agencies and industry groups, including the National Transportation Safety Board, the Commercial Aviation Safety Team and ALPA, have made many recommendations over the years to improve safety. Some have been implemented and many others have not. We must not wait for the next accident to occur before those recommendations are enacted.

Keeping our safety record intact, and improving upon it, is going to be difficult in the face of the economic turmoil and lack of resources that we are facing. The airline industry is a national resource and needs the full support of Congress, or it will fail. The next generation air transportation system needs to be funded and Congress can make it happen. In our role as professional aviators who help keep this industry safe, together with the strong support of Congress, we are confident of success – success that is vital to the well-being of our industry and the traveling public.

We are appreciative, therefore, for the opportunity to provide you with our perspective on the current state of aviation safety and operational programs. Given that there is considerable overlap between safety and security issues, we will also identify security concerns as they relate to some of our safety topics.

Executive Summary

In order to effectively address emerging and continuing safety and security issues, ALPA has identified several broad areas of concern that we feel merit Congressional attention. I will summarize each area now and elaborate on them in my further remarks.

- Use of a Safety Management System (SMS) by airports, airlines, and ATS providers.
  - ALPA recommends that Congress monitor FAA's progress in the implementation of SMS to ensure compliance with the ICAO standards.
  - Front-line employee participation in safety risk assessment processes, safety reporting systems, and safety assurance program is critical to a successful SMS
  - ALPA endorses a shift from a blame-based, punitive approach to safety to a proactive, risk-management approach.

- Pilot Fatigue
  - The present FAA flight duty and rest rules are in need of revision.
  - The FAA must close the loophole in the existing flight and duty rules which permit turboprop airline operations to be conducted under FAR Part 135 rather than Part 121.
  - There is a need to provide scientifically-based working hour limits for airline pilots.

- One Level of Safety and Security in the Cargo Industry
  - Current regulations allow cargo-only airliners to operate without a secure cockpit door.
  - ALPA opposes proposals to change Federal Aviation Regulations to allow an increase in the payload requirement for coverage under FAR Part 121.
  - Current rules allow cargo aircraft to operate with no requirement for Fire Fighting.

- National Airspace System Modernization
  - A sustained funding stream is critical to the implementation of the Next Generation Air Transportation System (NextGen).
  - The community must take full advantage of performance-based capabilities emerging for navigation, communications, and surveillance.
  - Wake turbulence research is critical to the ability to employ new equipment and procedures that allow us to position aircraft closer together safely.
  - Industry and government must collaborate on a series of efforts to address the challenge of airport surface management.
  - Before Unmanned Aerial Systems (UAS) are allowed unrestricted access to the NAS, appropriate steps must be taken to perform detailed risk analyses.

- Runway Safety
  - Many airports in the U.S. that serve both domestic and international air carrier operations do not meet standards for runway safety areas.
  - The runway incursion problem should be addressed with the implementation of recommendations of the Commercial Aviation Safety Team (CAST).
  - Runways contaminated with snow, ice, or other foreign materials continue to be a safety problem. There is no requirement to flight test on any runway conditions other than dry or to account for contaminated runway effects on aircraft braking.

- Congress should require and fund industry research to develop means to measure runway friction and require manufacturers to relate these values to aircraft performance

- Outsourced Maintenance Oversight
  - The FAA must have both the mandate and the resources to ensure that they can fulfill their oversight role in the new economic environment of outsourced maintenance.

Safety Management Systems

ALPA is acutely aware of the economic pressures on our industry and recognizes the need for better and smarter operating practices. Emphasis on the balance sheet cannot be allowed to place the traveling public at increased risk of accidents or incidents. As such, ALPA is an active participant in the development and implementation of Safety Management Systems (SMS) for our airlines, airports, and the FAA's Air Traffic Organization. We are working through the Joint Planning and Development Office (JPDO) with government and industry professionals to help establish a national safety policy. We are also working with the FAA as they guide SMS implementation at U.S. air carriers.

SMS is a proactive business approach to managing aviation operations with the goal of increasing safety and reducing risk in the NAS. The International Civil Aviation Organization (ICAO) will require the adoption of SMS Standards in Member States by January 1, 2009. The FAA has developed an Advisory Circular (AC) on SMS for air operators and published a draft AC for airport operators. We applaud the FAA for their efforts to move toward regulatory requirements for SMS implementation at our airlines. Properly constructed and implemented, SMS offers the promise of increased safety for our industry through the partnership of regulatory, industry, and labor organizations by integrating safety through every level of the organization. In a classic win-win scenario, we have the opportunity for real economic savings while reducing the level of risk to the industry.

SMS consists of clear policy, a robust and proactive safety risk management system, a safety assurance system encompassing effective reporting and auditing programs, and a responsive and positive safety culture. Policy must include a documented and clearly defined commitment to the SMS from the Chief Executive Officer (CEO) of an organization. The CEO must lead the drive to continued improvement in the level of safety, management of risk, and to a strong safety culture. An SMS provides business benefits to an organization through preservation of assets and prevention of mishaps and needs the support of the CEO to succeed. The policy must have clearly documented lines of safety accountability for all levels of the organization.

A robust risk management system is essential to an effective SMS. Complete hazard identification can be accomplished only with the inclusion of front line operators. ALPA must be included as a matter of policy in hazard identification, risk analysis, and risk mitigation of new procedures and technology development.

Safety assurance includes an airline's auditing programs and reporting systems. Flight Operations Quality Assurance (FOQA) is one such program. FOQA programs use flight data recorder information to measure actual line operations.

FOQA data has proven valuable in adjusting internal airline procedures, in identifying and correcting ATC procedures, and in identifying problems at particular airports. The confidentiality of this information must be maintained through regulatory protection to prevent misuse of the data. Deficiencies and problems identified through FOQA data should be used solely for safety purposes.

The FAA's Aviation Safety Action Program (ASAP), which provides a means for airline employees to report on safety problems without fear of retribution, is an example of a non-punitive reporting system. An effective means to determine what is really happening in the operation is through the reports of the people actually doing the work. A safety report is less likely to be filed if an individual's position or livelihood is in jeopardy. The idea of a "just culture" recognizes that well trained, motivated employees still make mistakes, and focuses on identifying and correcting problems, rather than on assigning punishment and blame. This is a fundamental paradigm shift from an enforcement culture, and is imperative if we are to collect real and complete data on actual system operations. It is this data which helps to identify systemic hazards and mitigate risk before there is an incident or accident. We must move toward confidential data sharing systems across airlines and government organizations so we can proactively manage the aviation system. There must be a documented process for collecting and analyzing safety information and implementing corrective action.

While FOQA and ASAP programs are examples of non-punitive reporting systems that work, there has been a recent assault on the basic tenets of ASAP by both the FAA and air carriers. This has resulted in termination of the FOQA and ASAP programs at a major air carrier. FOQA programs continue to have problems in the area of data de-identification when third party analysis is utilized, and both programs suffer from inadequate data analysis, resulting in limited and ineffective corrective action being recommended. If these problems are allowed to continue, the mutual trust built up by participating parties will be destroyed. There will then be a strong disincentive for employee reporting and program participation.

ALPA supports the development and implementation of SMS in our industry, but recognizes the possibility for abuse. Effective implementation strategies, common objectives for safe system operations and strong Congressional oversight will guard against that abuse. We recommend that Congress monitor the FAA's progress in the implementation of SMS to ensure compliance with the ICAO January 2009 deadline. One area of concern regarding SMS implementation is that there could be a call for reducing or even eliminating regulatory standards and oversight once SMS is in place. In the past, airlines regularly exceeded minimum statutory requirements for operations. Economic pressures and the realities of competition have caused numerous carriers to reduce crew training, maintenance standards, staffing, and operational margins to the regulatory minimum. ALPA recognizes the need for regulatory oversight in SMS and strongly opposes any attempts to use SMS as a replacement for a comprehensive regulatory framework.

For additional information, we have provided to the Committee a copy of ALPA's SMS Manual, "Background and Fundamentals of the Safety Management System (SMS) for Aviation Operations, Second Edition," February 2006. We have also provided an article from the ICAO Journal, Volume 61, Nov/Dec 2006, "Concept of Safety Management System Embraced by Many Countries."

ASAP Program for ATC Controllers

As an industry, we have seen the value of ASAP go far beyond the cockpit to other employee groups in the airlines. Non-punitive reporting programs for dispatchers, mechanics, flight attendants, and ramp personnel are also being created. Although there has been a shift away from assessing blame and meting out punishment toward an actual resolution of problems, the stance taken by the FAA toward its own air traffic controllers has yet to change. Operational errors are viewed by the FAA as reasons for discipline. If we hope to get true operational information from our air traffic controllers, they must also operate in a "just culture."

One of the things that has made the U.S. air transportation system so effective is the synergy that comes from pilots and controllers working together to make sure passengers and cargo get from origin to destination safely, time after time after time. Pilots and the airlines they fly for reap the safety and economic benefits of ASAP. In the air traffic arena, that same culture does not exist and the front line controllers' advice and input is not welcomed. They do not have a means to report safety or operational issues in the same cultural environment that many of the pilots at the other end of the radio do. Even though the FAA has encouraged and promoted ASAP for our nation's airlines, they have not done so internally for the benefit of their own organization. In order to take the next step in aviation safety, all components of the system must be involved, including ATC. We strongly recommend that the FAA expeditiously make ASAP a reality for air traffic controllers. Just like airlines, this will require a commitment from the top of the FAA's organization, in this case the FAA Administrator. The Administrator can make this happen and it will have a tremendous impact on the safety and efficiency of our entire air transportation system.

Pilot Fatigue

Fatigue is a present and growing problem within the airline industry. ALPA's own internal research indicates that fatigue has reached an alarming level among airline pilots. ALPA has – thus far without success – encouraged the FAA to modernize the flight and duty time regulations for all U.S. licensed commercial airlines to comply with the results of current scientific research and principles.

Because the FAA's present fatigue regulations are antiquated and dated, they have frequently been augmented by negotiated work rules. Through the restructuring of pilot contracts and the absence of negotiated improvements at many carriers, there has been non-uniform treatment of flight duty and rest limitations at the various airlines. In recent times, there has been severe pressure on individual airlines to slash pilot staffing and reduce rest periods to minimum levels due to a belief that such behavior would result in "productivity" increases necessary for economic survival. The fatigue cushion once provided by negotiated work rules has been completely eliminated. This elimination of negotiated work rules means that for more and more pilots the bare minimum protections afforded by the FAA flight and rest regulations have become a daily way of life. The current cumulative effects of reduced rest resulting from working to minimum FAA limits, combined with the effect of personal financial stress and uncertainty brought about by more than five years of severe economic downtimes in the industry,

have taken a severe toll upon pilots. Many pilots feel that they are just hanging on to a barely tolerable job instead of pursuing a once-promising career. At one major U.S. carrier, the company has reportedly had to recall seven or eight pilots from furlough for each one that is willing to return to flight status. The return to airline profitability for Wall Street is being paid for by the daily blood and toil of the airline pilots and other workers.

The present FAA flight duty and rest rules applicable to airline pilots are a dated patchwork of regulations that have been developed over the past fifty or sixty years. For example, the rules usually applied to air carrier cargo operations – the supplemental rules – were developed over 50 years ago for unscheduled freight operations using piston-powered aircraft. Many of these post-WWII vintage aircraft had unpressurized cabins, cruise speeds in the 200-knot range, and flight crews consisted of at least two pilots and often a flight engineer. In the 21st Century, carriers have used modern technology to decrease cockpit crew size and travel times and to increase pilot and aircraft utilization. This increase in technology and reduction in staffing has put additional pressures on flight crews. As the overall system complexity continues to increase, the hazards associated with pilot fatigue in the industry also increase and are as great as they have ever been.

During the mid-1990's, a number of high-profile aircraft accidents attracted public and media attention to questions of aviation safety. In response to this public interest, the FAA Administrator helped direct the agency toward a regulatory system for commercial aviation based upon the principle of "One Level of Safety." In January 1995, former DOT Secretary Federico Pena convened an unprecedented aviation safety summit that brought together over 1,000 officials from government, airlines, airline labor, and other segments of the industry to establish joint priorities and strategies for enhancing aviation safety. These events led to the landmark FAA ruling on the "One Level of Safety" ("i.e., the Commuter Rule"). The Commuter Rule required all 14 CFR Part 135 operators to transition to 14 CFR Part 121 by March 20, 1997.

This standard, which has been applied to large airlines and regional airlines (formerly known as "commuters") alike, has become one of the FAA's guiding regulatory principles during the last decade and has been a widely heralded success.

The FAA proposed to modernize the flight duty and rest regulations during the adoption process of the "Commuter Rule." That attempt stalled for a number of reasons. Industry, pilots, and the regulators were unable to reach a consensus and the industry-wide reform proposed in 1995 was not implemented. The commuter airlines were permitted to continue to operate their turboprops under the existing FAA fatigue rules pending the anticipated industry-wide reform. Because the anticipated reform of the rules never took place, small airliners continue to fly today under those less restrictive rules. This is not what was intended. Indeed, some airlines are currently forcing travelers back into these smaller aircraft to take advantage of the less restrictive pilot fatigue rules and lower cost. Over a decade later, the need for industry-wide reform in the FAA's flight duty and rest rules is still apparent. The NTSB's 2007 Most Wanted Transportation Safety Improvements includes "[s]et working hour limits for [pilots] based on fatigue research, circadian rhythms, and sleep and rest requirements." The current FAA rules do not adequately address fatigue research, circadian rhythms and realistic sleep and rest requirements as recommended by the NTSB.

For example, domestic airline pilots currently have a weekly flight time maximum of 30 hours. Domestic pilots are those that operate entirely within the continental United States. What is not widely understood is that the weekly flight time limitation for pilots does not include *any* of the required time spent performing ground-based duties. In reality, it is not unusual for airline pilots to find themselves working shifts approaching 15 hours per day to accomplish 7 to 8 hours, or less, of daily flight time. Moreover, the pilot's 7 or 8 hours of daily flight time may be spread out over 4 or 5 individual flight legs. Each of those flights has both pre- and post-flight duties, none of which count against the flight time limitations. The domestic pilot's total maximum total duty day limit, including flight time and ground based duty, is 16 hours per day under current FAA limits. That is simply too long. Additionally, there is no limit to the number of times per month lengthy duty days may be assigned – so long as flight hour limits are not exceeded – increasing the potential for cumulative fatigue. Today's airline pilot is typically working substantially more hours for less money and spending more hours away from home than his or her predecessors.

Currently, airline pilots are routinely assigned a duty day up to 15 hours, followed by only an eight hour break, followed by another lengthy duty day. Unfortunately, this eight hour minimum break does not provide an adequate opportunity for recuperative sleep. Let us be clear; this is not an opportunity for eight hours of sleep, but rather a period away from the aircraft. During the 8-hour break, it is not unusual for a pilot to be left with a maximum 4 or 5 hours per night sleep opportunity actually spent in a hotel room. This occurs because the FAA has determined that all time away from the airplane on a trip counts as "rest." Incredible as it may seem, the time a pilot spends waiting for a hotel shuttle and even the time spent going through airport security screening is defined as "rest" under the current FAA regulatory scheme. Pilots need a longer, and genuine, daily rest period.

Moreover, new aircraft types capable of long-haul operations in excess of 16 hours of continuous flight are being built, developed and placed in service. This type of flying is done under the FAA international, or flag, rules across multiple time zones, with crossings of 12 to 14 time zones not uncommon. These flights result in pilots being on duty at a time when they would normally be asleep at home. Traffic on existing international routes is increasing. Because of the length of these flights, additional pilots are required to be aboard the aircraft. It is critical that that the onboard rest facilities provided to pilots on these long haul international routes are adequate. Scientifically based rules to address these types of long haul flying are urgently needed.

ALPA believes that there is a pressing need to provide rational, scientifically-based, working hour limits for pilots engaged in all commercial airline operations. The weight of the scientific evidence over the last 20 or so years has firmly established that the vast majority of humans, including pilots, simply cannot be expected to reliably and safely perform operational tasks with the same degree of effectiveness as at the beginning of the shift, past a time on duty beyond 12-14 hours. Recent aviation accident studies point to a statistically significant increase in the rate of accidents beyond 12 hours time on duty. Other studies show that 8 hours of time at the controls between required rest periods is the maximum period that one should normally be able to expect a rested pilot to perform reliably and safely. The NTSB and other accident investigation bodies are increasing the focus on fatigue as a factor in aviation accidents as well as

in accidents in other modes of transportation. Additionally, scientific evidence continues to mount that the negative effects of disrupting a person, or pilot's, circadian rhythm, i.e., the sleep-rest-wake cycle have been grossly underestimated.

When addressing possible revisions to the current flight duty and rest regulations, airlines and their pilots are immediately at cross-purposes. Managements are looking for more availability and "productivity" from flight crews. For flight crews, safety advocates and scientists, the question is often not whether to change the current rules, but rather *how much* to reduce the current flight and duty limitations to enhance safety, raise human performance to acceptable levels, and reduce risk. Hence, the past approach of creating proposed regulations without the assistance of scientists and technical advisors, or reference to the technical literature, but rather based upon notions of operational necessity, has failed. What is needed are rules which are grounded in the results of scientifically based fatigue studies and safety reports.

In conclusion, pilots performing commercial flying duties must have regulations that provide them with an opportunity to get an adequate night of sleep before each duty day of flying. This, combined with a scientifically determined maximum length duty day, including provisions for the type of flying accomplished, whether it be traditional short haul, multiple sector flying or flights across multiple time zones, is mandatory to ensure that the U.S. air transportation system continues its envied record of aviation safety. ALPA stands ready to work with regulators and the industry to develop rules that will adequately address the problem of pilot fatigue.

One Level of Safety and Security in the Cargo Industry

ALPA Recommendations to the NTSB

On March 30-31, 2004, the National Transportation Safety Board (NTSB) held a Cargo Safety Forum to discuss the safety issues and concerns confronting the air cargo industry. The NTSB brought government and industry groups, including ALPA, together to make presentations outlining their positions on significant safety issues. The Forum held technical panel sessions on various subjects which included the current state of the cargo industry, operational and human factors considerations and regulatory issues. We made presentations on each panel and submitted formal substantive papers that outlined our positions.

There are many areas of differences between passenger and all-cargo operations. We have provided to the Committee additional materials which provide details of those differences and our recommendations for safety improvement, most of which have yet to be satisfactorily addressed. We urge FAA to support these recommendations and make the changes that are needed to bridge the safety gap between passenger and all-cargo operations.

Flight Deck Doors

After the attacks on the United States on Sept 11, 2001, the DOT's Rapid Response Team (RRT) recommended that reinforced flight deck doors, among other measures, should be part of "...*a*

retrofit of the entire U.S. fleet of aircraft." ALPA strongly believes that the intent of this recommendation was that all U.S. cockpits should be protected.

Four years ago, ALPA testified before this very body and expressed concern that the implementation of the RRT recommendation was incomplete. ALPA said then, and we reiterate now, that while we understand that unique design circumstances exist and should be considered, we do not concur with the exclusion of any aircraft operated under FAR Part 121 based on its size or mission. The current regulations related to flight deck security exclude an entire class of airliners operating the same aircraft at the same time in the same airspace as all other airliners – those operated by cargo-only airlines. These aircraft all serve equally well as terrorist-guided weapons of mass destruction. The regulation as eventually promulgated applied only to cargo aircraft that had a cockpit door installed on the date of the rule and left unaddressed the issue of new cargo aircraft. As I sit before you, an airline is ordering brand new Boeing 777 freighter aircraft that were neither designed nor produced when the flight deck door rule was written, and they are planned to be delivered without a cockpit door of any kind. These aircraft will carry not only freight, but potentially dozens of people. Those people will not buy tickets, and so they are not technically passengers. Neither do they necessarily go through the same rigorous screening that fare-paying passengers do. In the passenger world, airlines have a hardened cockpit door, and some airlines are even moving forward with secondary barriers to further improve the safety and security of the cockpit. Meanwhile, in the all-cargo world, even the most rudimentary door is still not required, regardless of how many people are on the airplane and how much of a screening process they have undergone. This situation is unacceptable to ALPA's pilots and should be unacceptable to the Congress, TSA, and the FAA.

Detailed information has been provided to the Committee on ALPA's recommendations for improving cargo security.

Opposition to Changing 14 CFR Part 119

One particular item that has given us great apprehension and concern is the regional cargo carrier segment of the air cargo industry advocating a change in the Federal Aviation Regulations (14 CFR Part 119). Currently, all aircraft, but specifically all-cargo aircraft with a useful payload of 7,500 pounds and below, are required to operate under regulations contained within 14 CFR Part 135 *Operating Requirements: Commuter and On Demand Operations*. Aircraft above this weight are required to operate under the increased safety and operational requirements of 14 CFR Part 121, *Operating Requirements: Domestic, Flag, and Supplemental Operations*. ALPA maintains its opposition to any increase above the current weight requirement. An increase in the current useful payload would result in hundreds, possibly thousands, of turbo-propeller and jet aircraft leaving Part 121 requirements behind and being operated under a lesser safety standard as Part 135 carriers.

Enhance Safety of Airports Used by All-Cargo Operators

Another area of concern for all-cargo pilots is the fact that airport standards for their operations are much less stringent than are those for passenger aircraft operations. Federal law requires the FAA to regulate airports serving scheduled passenger operations, but is silent on regulation of airports serving all-cargo operators. Indeed, 14 CFR Part 139, Certification of Airports, specifies the "...rules governing the certification and operation of land airports which serve any scheduled or unscheduled passenger operation of an air carrier that is conducted with an aircraft having a seating capacity of more than 30 passengers." Since all-cargo aircraft, even those of the same type as passenger counterparts, do not necessarily meet the minimum seating capacity threshold, they are not covered by the same airport safety requirements.

The significance of this regulatory disparity becomes apparent when the scope and depth of Part 139 is examined more closely. Part 139 prescribes an extensive set of airport-related conditions, capabilities, facilities and equipment that must be provided in order for the designated aircraft to operate into that airport. These include such items as aircraft rescue and fire fighting (ARFF), hazmat handling and storage, an airport emergency plan, marking and lighting standards, snow and ice control programs, physical protection of navigational aids protection, and wildlife hazard management.

One of the most glaring and critical discrepancies between the two types of airport standards is the allowance of cargo aircraft – frequently loaded with hazmat – to operate at airports with no requirement for ARFF. During its investigation of a DC-10 freighter accident at Stewart International Airport in Newburgh, NY, in 1996, the NTSB observed that "...aircraft rescue and firefighting capabilities must also be improved so that firefighters are able to extinguish aircraft interior fires in a more timely and effective manner..." and made recommendation A-98-077 that airport emergency plans should specifically address hazardous materials emergencies.

The FAA response to this particular recommendation was to amend FAR 139.325 for emergency plans and publish guidance to airports about being prepared for hazardous materials incidents. NTSB classified this response as "closed – acceptable action," but we disagree with that categorization. We call on Congress to require that FAA broaden the applicability of pertinent regulations to include certification of airports which serve on-demand, all-cargo aircraft operators.

Carriage of Batteries on Passenger and All-Cargo Aircraft

ALPA believes that the current level of transportation regulations for batteries of all types is inadequate, and that the degree of risk and incident history justifies more stringent control of batteries in air transportation. We believe that it is inappropriate to grant a Special Provision in the Hazardous Materials Regulations (HMR) exempting the transport of batteries as cargo, especially in large quantities, considering that items such as paint, a flammable liquid, are fully regulated. ALPA strongly believes that cargo shipments of batteries should be fully incorporated in the HMR – including packaging requirements, acceptance checks, package testing, labeling, quantity limitations and pilot notification – because damage to a battery may be all that is

necessary to start a fire and may take place hours after the damage has occurred. In the case of many other highly regulated substances, a damaged shipment would only result in a liquid spill, absent an ignition source.

Accordingly, we continue to urge the Pipeline and Hazardous Materials Safety Administration of the Department of Transportation to introduce a rulemaking to end the use of a Special Provision for the transport of cargo shipments of batteries and we respectfully solicit Congress' support for same.

While batteries of all types deserve additional scrutiny, ALPA believes that the characteristics of lithium metal batteries make them particularly ill-suited for transport in bulk quantities aboard aircraft until sufficient packaging standards can be developed. Following a fire involving lithium metal batteries in Los Angeles in 1999, the FAA Technical Center undertook a study of lithium metal batteries and their response to an external fire source, (reference study DOT/FAA/AR-04/26, published June 2004). Among the study's findings, the FAA found that a fire involving one lithium metal battery would spread to all batteries in the shipment, that the fire would burn at a temperature above the melting point of aluminum, and that it would be accompanied by a pressure pulse that could cause the cargo compartment lining of an aircraft to fail. Especially sobering was the finding that the traditional aircraft fire suppression agent, Halon 1301, would have no effect on the fire.

Based on the Los Angeles fire and the FAA Technical Center report, the US DOT took the unusual step of banning bulk shipments of lithium metal batteries aboard passenger aircraft, except when contained in or shipped with equipment, in the United States. While ALPA supports this move, we do not believe that there is any safety justification for allowing lithium metal batteries to continue to travel under Special Provision on cargo-only aircraft. Accordingly, until adequate packaging standards can be developed to protect all occupants of an aircraft in case a shipment of lithium metal batteries is exposed to fire of any origin, we urge the Department of Transportation to ban bulk shipments of lithium metal batteries from both passenger and cargo aircraft.

National Airspace System Modernization

ALPA is vitally interested in the strength and long term viability of the U.S. National Airspace System (NAS). It is not only our workplace, but the NAS is a major economic engine in the U.S. and the world. As such, it is in our best interests as pilots and as citizens to ensure the safety and efficiency of this critical national resource. At a recent industry symposium, the FAA reported that aviation in this country represents a total economic impact of $690 Billion, so this is not a resource to be taken lightly.

Although air travel today is vastly improved from the early days of aviation, the NAS is in dire need of an overhaul if we expect it to keep up with the demands of the 21st century. FAA Administrator Blakey recently commented that improvements forecast for the NAS through 2025 are expected to come with about a $20 billion price tag for the government -- industry is expected to pay a similar amount. Clearly, planning these improvements is something we need to do right the first time.

Today's U.S. air traffic system is thought of as the safest in the world. Accidents are so rare that the statistics are almost meaningless – the statistical odds say that one must fly hundreds of lifetimes to have just a 50:50 chance of being in a commercial airline accident. But we never stop trying to improve the safety and efficiency of that system. As pressure continues to mount to meet increasing demand, though, we need to make sure that the aviation community, led by the FAA, does not become a culture of capacity rather than a culture of safety. At some airports today, we see things that concern us. We see controllers placing airliners outside of the protected airspace at major metropolitan hubs like Memphis, Detroit, and Philadelphia in efforts to keep the traffic moving and keep capacity up. This means that the risk at some airports is higher than at others for reasons that are completely within the control of "the system." We need to be vigilant for these kinds of operations and make sure that we keep safety as the primary driving force for NAS operations.

Over the years, the air traffic control system has transitioned from separating flights using radio position reports to one employing satellite technology, data link communications, and in some areas, accurate surveillance without using traditional ground-based radar.

All of these changes have two things in common. They have made air travel safer, and they were successfully accomplished when there was a collaborative relationship between the government and the private sector.

ALPA is proud to be a full partner with the FAA and the rest of the aviation industry in working together to design and implement the air traffic management procedures and systems that will carry us forward. Our President sits on the Institute Management Council of the Next Generation Air Transportation System or "NextGen" Institute. The Institute was established in 2005 for the purpose of establishing a collaborative relationship between the government and private sector that will serve as a catalyst for fostering a shared vision of the NextGen and combine the talents and resources of government, industry and academia. The result will be a roadmap for the private sector and government to use as we move together from today's NAS to the 2025 version, the NextGen. The Institute is the mechanism for the FAA's Joint Planning and Development Office (JPDO) to access world-class private sector expertise, tools, and facilities for application to the NextGen activities and tasks.

The private sector and government have often worked together to make major changes in the NAS. Changes like radar, all-weather landing aids, the traffic collision avoidance system (TCAS), GPS, and traffic flow management using collaborative decision making are all examples of fundamental changes that have had a major influence on the NAS. In each example, the private sector and government worked together to develop system and equipment specifications, new controller and pilot procedures, training requirements, and the development and implementation of ground and airborne equipment. ALPA and the rest of industry are actively working with the FAA and the JPDO to ensure that NextGen is yet another example of a successful collaboration leading to fundamental change to the NAS.

However, the continued road toward the implementation of NextGen will require an additional element – national resolve. Just like the development of the interstate highway system during the 50s and 60s, NextGen is a major technological step forward.

National resolve is required to continue the operation of the current system while we research, develop, and implement NextGen.

National resolve is demonstrated by a sustained funding stream. In 1997, while a member of Congress, former Secretary of Transportation Norman Mineta chaired the National Civil Aviation Review Committee (NCARC). NCARC recommended that the FAA's funding and financing system receive a federal budget treatment that ensured revenues from aviation users and spending on aviation services were directly linked and shielded from discretionary budget caps. This was made to ensure that FAA expenditures would be driven by aviation demand. While some movement has been made on this issue, this recommendation has not been fully implemented. Without national resolve, the funding of NextGen is uncertain, and will most certainly cost more and take longer to implement.

We cannot accurately predict what aviation's future will bring. But whether it is air carriers, unmanned aerial vehicles, micro-jets and "jet taxi" service, or some combination thereof, we do know that the system of the future will involve a great many more operations than we have today. In addition, as we transition to that system of the future, we will have to recognize that there will continue to be a large variety of aircraft capabilities in the NAS. NextGen must be a flexible and scalable system capable of accommodating any fleet mix that evolves. The American people deserve a system that will readily accommodate that new demand – seamlessly and safely.

Specific Modernization Efforts

We would now like to focus on some specific modernization efforts.

In April 2002, FAA Administrator Marion Blakey announced the migration away from a ground-based navigation system to a required navigation performance (RNP) system using GPS satellites. This was a major policy decision. Airlines have long complained of sending aircraft to the boneyard with equipment that has never been used – equipment capable of flying independent of the ground-based navigation system. This avionics equipment had been developed and installed with the hope that the capabilities could be used. This was an example of how the private sector and government failed to work in a collaborative manner.

With Administrator Blakey's announcement, we are now taking advantage of satellite-based equipment on the aircraft to fly RNAV departures, arrivals, and RNP precision approaches at some of our busiest airports. This technology will improve the efficiency and capacity of the national airspace system by allowing instrument procedures that minimize noise, offer greater access to all runways in all weather conditions, and provide more safety than ever before.

One of the advantages of a satellite-based navigation system is the ability to provide precision instrument approaches to all runways. To meet this goal will require a rethinking of our instrument procedure production and maintenance capability. Currently the FAA develops and maintains over 13,000 instrument procedures. Approximately 20% of these approaches are satellite-based procedures. This percentage is increasing as technology advances. However, many of the current RNAV and RNP procedures are "overlays" meaning that they utilize the

same paths through space as the original procedure, but they employ new technology to establish the aircraft position. Originally, this was an effective way to develop operating experience with new systems, and that benefit still exists. But to truly realize the economic and operational benefits available through space-based procedures, we must break out of that mold and design more procedures that optimize use of the greater accuracy afforded by these new capabilities. Along with potential increases in capacity, this will have the additional benefits of reduction in noise and emissions in many areas.

A year ago, Administrator Blakey announced the surveillance system of the future – Automatic Dependent Surveillance – Broadcast (ADS-B). ADS-B, unlike radar, does not rely on a ground-based surveillance system. With ADS-B, each aircraft broadcasts a position report. Any other receiving station, either on the ground or other aircraft can use the position report. Now, just like the air traffic controller, other aircraft will have the capability to know where other aircraft are on the ground or in the air. Just like radar increased the air traffic controller's situational awareness, ADS-B will also increase the pilot's situational awareness.

Once again, to be successfully implemented, ADS-B will require collaboration between industry and government. The FAA will recognize a substantial savings by reducing the number of radars. The savings should be used to provide incentives for the early installation of ADS-B avionics on aircraft. This approach, which was successfully used in the Capstone Program in Alaska allows for the rapid equipage of aircraft, resulting in a faster implementation. Faster implementation reduces the costs and increases the benefits.

Additionally, the government and industry should push for the development of air-to-air ADS-B applications that benefit the users. These air-to-air applications should result in faster equipage and a safer, more efficient NAS that benefits all.

During the summer of 2000, the NAS saw a large number of delays. Government and industry worked together to implement a series of programs to reduce these delays. These programs have had some effect in reducing delays, but more work is needed.

Departing aircraft are waiting in long lines to taxi to runways while arriving aircraft often must wait for gates to become available. Each new runway takes an average of over 10 years to design and build and costs billions of dollars, so accurate, effective planning is essential. According to Administrator Blakey, the new runways envisioned by the current FAA OEP, or Operational Evolution Partnership, represent a huge potential increase in the number of operations each year in the NAS. If we are going to safely accommodate all of those operations, capacity enhancements must be done intelligently. Many of those new runways are necessarily going to be very close to existing runways at major airports. We must continue to develop the science to support procedures and systems that will allow us to continue operating safely as the need to put airplanes closer together continues to grow. Chief among these research efforts that are needed is the study of wake turbulence. As our ability to safely position aircraft closer together continues to improve, the likelihood of encounters with another aircraft's wake will increase. However, as advanced as aviation is in many areas, we actually have very little hard operational data about how wakes behave. We know that they can be dangerous, even deadly under the right circumstances, but we really do not know what those circumstances are – at least

not with enough certainty to bet the lives of 200-300 people. Some research is being done but these efforts must continue if we are to know we can safely operate in the NextGen environment.

Airlines have been forced to increase the scheduled time between departing the gate and arriving at the destination gate. A flight of a propeller-driven Douglas DC-7 in the 1950's between Dallas and Atlanta had a shorter scheduled time than does a flight today in a jet Boeing 757. The extra time is necessary to navigate on the ground to and from the runway. At some airports, some airlines allocate over 40 minutes just to get from the departure gate to the runway. Increased airport surface congestion increases the chances of runway incursions and possible collisions.

Industry and government must collaborate on a series of efforts to reduce the challenge of airport surface management. The use of ADS-B is needed for increased surface situational awareness for both pilots and controllers. The collaborative use of flight data, such as departure time of a flight from the gate and the estimated time before a flight will touchdown, can be used by the airport, air traffic control, and airline managers to more effectively manage surface traffic.

The potential benefits of more effective surface management are tremendous. Less fuel will be consumed while taxiing which will result in immediate savings. Reduced taxi time also translates into less noise and emissions. Better knowledge of exactly where the aircraft is on the surface translates into more efficient gate management and will allow the air traffic controller to arrange departures into a more efficient departure stream.

We need to also be mindful that all the improvements envisioned for NextGen rely on good information about what the system is doing. Not only on the tactical level, meaning where each aircraft is and what it needs to do to operate efficiently, but more importantly on the strategic level – what will be happening at each point in space over the next several hours. This information has to be integrated across the NAS, and to do that requires a tremendous amount of computing power. That capability is provided by ERAM, or Enroute Automation Modernization in NextGen. This critical program is easy to overlook – it is not very visible and it is not glamorous at all. It is, however, the heart of the system. The current "host" or computer network that allows similar communication today is old and cannot meet the demands of NextGen. ERAM, like the rest of NextGen, must have long-term funding guaranteed if we are to realize the promise of NextGen.

NextGen has the potential to revolutionize the NAS and our air transportation system, but only if private industry and government work together. By collaborating, we have made major strides in the more than 103 years since the Wright Brothers first flew. However, the next 20 years could see major changes in aviation. Forecasted increases in air traffic of two to three times today's traffic cannot be met in today's NAS. The changes will be not be easy and will require much work and effort. ALPA looks forward to collaborating with industry, academia, and government to meet these challenges.

Finally, let me comment on the introduction of Unmanned Aerial Systems, or UAS into the NAS. We have a vital safety interest in these aircraft and the systems that support them, including, we might add, the operator on the ground who we believe should have the same qualifications as any other pilot of an aircraft.

Pressure to allow widespread UAS access to the NAS is fast approaching for commercial applications and that access has been a reality for Department of Defense operations for some time. ALPA is concerned with the level of risk assessment utilized to prove that current UAS operations have met the Equivalent Level Of Safety (ELOS) for operations in civil use airspace. So far, the track record for UAS accidents and data link dependability has not supported the claim that they are "just like any other airplane, but without a pilot on board." Before these aircraft are allowed unrestricted access to the NAS, including operating above or below the altitudes usually used for airline operations, appropriate steps must be taken to perform detailed risk analyses. This is the only way we can assure the safety of our passengers and cargo.

Runway Safety

We would like to address three major areas of concern with respect to runway safety. The first concerns the hazard posed by aircraft overruns and undershoots, which are addressed by enhancing runway safety areas, artificially shortening runway length available, and installing engineered arrestor beds at the ends of runways. Another area is that of runway incursions, which is addressed through airport visual aids, aircraft, airport and ATC technology, training, and procedures. Lastly, aircraft stopping performance can be improved through better runway friction measurement practices and timely, thorough contaminant removal.

Runway Safety Areas

In the event that an aircraft is unable to stop normally before the end of the runway due to mechanical, weather, or other operational problems, a runway safety area is intended to help ensure that an incident does not become an accident.

International Civil Aviation Organization (ICAO) recommends that runways have a defined "runway safety area" free of obstacles and extending well past the end of the actual runway. In the U.S., Advisory Circular 150/5300-13, Airport Design, provides the criteria for an acceptable runway safety area.

Many airports in the U.S. that serve both domestic and international air carrier operations do not meet U.S. or international standards. According to recent FAA statistics, 45% or 460 of the 1,024 certificated airport runways in the U.S. must be improved with regard to runway safety areas.

Three solutions exist for the airports that do not meet current standards.

1. Airport authorities should remove obstacles, fill ravines or level ground to create adequate runway safety areas. This option may not be possible for urban airports or others in a confined geographic area.
2. Airports can decrease the effective runway length of certain runways to create adequate runway safety areas. This option may not be attractive because it could potentially mean reducing the size and weight of aircraft that use the airport.
3. If the physical space simply does not exist to create the recommended runway safety area, an Engineered Materials Arresting System (EMAS) could be installed.

4. This system uses aerated, frangible concrete to bring an aircraft to a quick but controlled stop, much like runaway truck ramps on steep mountain highways. EMAS is a solution that has already proven successful in actual operation. It is worth noting that EMAS has the advantage of being generally unaffected by snow and/or ice contamination and functions to the same level of arresting capability as if it is bare and dry.

Runway Incursions

Next Tuesday marks the 30th anniversary of the worst aviation accident in history – a runway incursion. On March 27, 1977, two B747's collided on a runway at the airport in Tenerife, Canary Islands, while operating in very poor visibility and 583 lives were lost in that single event.

The risk of another runway incursion event which could kill hundreds of people in a single accident is real and growing larger as the result of current, and forecast, increases of traffic within the National Airspace System. Fortunately, the incursion problem has been exhaustively studied by dozens of experts and mitigations have been devised that can greatly lessen the risk inherent with ground operations today. The question that must be answered is whether the government and industry are willing to spend the resources that are required to achieve that level of safety.

We have traveled this road before. Ingenious technology, combined with political will and monetary resources, have virtually thwarted two of the deadliest types of accidents: mid-air collisions and controlled flight into terrain (CFIT). Numerous mid-air collisions, resulting in thousands of deaths over several decades, occurred when air traffic controllers and pilots used to rely on basic ground radar and see-and-avoid techniques to maintain separation. The development of the Traffic Alerting and Collision Avoidance system (TCAS) equipped pilots with an invaluable tool that warns them of an impending collision and gives instructions on how to avoid it. Since the introduction of TCAS, many mid-air collisions have been averted and many lives have been saved.

CFIT accidents have been similarly catastrophic and caused hundreds of casualties during the era when controllers and pilots relied on ground radar, charts, and ground visual references to maintain adequate clearance from the ground in low visibility conditions and periods of darkness. The invention, development, and implementation of the Ground Proximity Warning System (GPWS), and its newer replacement, the Enhanced GPWS, or EGPWS, has had the same powerful impact on reducing the number of CFIT accidents that TCAS has had on reducing the number of mid-air collisions. In both instances, it was demonstrated that existing technologies, training and procedures were insufficient to satisfactorily meet the challenge of preventing incidents and accidents. In both instances, enhanced situational awareness and conflict alerting capability were combined for a powerful one-two punch to the heart of the problem.

So it is with runway incursions. *The risk posed by runway incursions can be significantly reduced – by up to 95% according to the U.S. Commercial Aviation Safety Team – with a combination of technologies which greatly improve the pilot's situational awareness and provide*

conflict alerting capability during ground operations. For decades, ALPA has led the industry in the development and promotion of airport-related measures to reduce the potential for incursions. In the early 1990's, ICAO adopted new airport sign standards bearing ALPA's influence, and new signs have been installed at nearly all commercial airports in North America, and many other airports around the world. New paint markings, vehicle driver training programs, pilot training programs, localized runway incursion action teams and numerous other initiatives have been undertaken with the goal of reducing incursions. While all of these programs have had a positive effect and are valuable, the simple truth is that, according to government statistics, the number of runway incursions remained nearly constant from 2002 to 2004 while total traffic volume decreased by three (3) percent.

We conclude that the runway incursion problem – and its commensurate potential for causing death and injury to hundreds of travelers and crewmembers in a single accident – can be addressed to high degree of satisfaction with the implementation of recommendations made five years ago by the U.S. Commercial Aviation Safety Team (CAST). The Executive Summary of the CAST's runway incursion team's 2002 study, which gives an overview of the commitments made by the government and industry to address the incursion problem, has been provided to the Committee. We call upon FAA and industry to make good on their commitments to institute the CAST-recommended mitigations and prevent further catastrophic events like the one that occurred 30 years ago.

Contaminated Runway and Aircraft Performance

Runways contaminated with snow, ice, slush, standing water, glycol, reverted rubber, or other foreign materials during all seasons of the year, continue to be a safety problem for both takeoff and landing. Our crews tell us that they continue to encounter inadequate removal of contamination and the lack of timely and accurate runway condition reports. Even when they are planning their flights and they know what contaminants lay ahead at their destination, our crews still do not have validated flight test performance data for operations on contaminated runways to ensure that they will be able to stop on the paved surface. Airplanes in commercial operations continue to slide off of slippery runways. But that is just one of the problems associated with operating on contaminated surfaces. Visual cues (i.e., runway markings) such as those that aid in landing in the prescribed touchdown zone may be obscured and make identifying the normal touchdown point difficult or impossible. In addition, signs and taxiway markings obscured by contamination increase the possibility of confusion on the ground which may lead to a runway incursion.

Although much attention has been focused on the landing phase, the rejected take off situation is similar because of the reduction in friction, and it has a higher risk for a catastrophic loss because of the higher aircraft weight due to fuel onboard. The industry must address a total solution that will make all contaminated runway operations safer.

The solution must encompass not just the runways themselves, but include airport management.

FAA's Advisory Circular 150/5200-30A, Airport Winter Safety and Operations states that "*Snow, ice, and slush should be removed as expeditiously as possible to maintain runways, high speed turnoffs, and taxiways in a "no worse than wet" condition.*" But in our experience there's a significant amount of difference between airports' compliance with this guidance. The best airports have detailed plans that quickly activate a central snow desk, snow removal equipment and crews, and accurate condition reporting. FAA should ensure that all airport operators which experience winter contamination meet federal criteria for removal of those contaminants.

Earlier, I made mention of the need for improved aircraft contaminated runway performance data. As professional airline pilots, we rely on data for a huge proportion of the things that we do in an airplane. Speeds, headings, altitudes, engine settings, even the number of passengers are all known with high accuracy. If the runway is dry, we know the airplane manufacturer has done flight tests to back up the takeoff and landing distances that are in our manuals, so we can be certain that the runway we are operating on is of sufficient length to ensure the safety of the operation. If, on the other hand, we are operating on a contaminated runway, the best information that we have about whether the runway is long enough is based on estimates. They may be very intelligently derived estimates, but they are estimates nonetheless.

Federal Aviation Regulations require manufacturers to determine a "demonstrated landing distance" during certification. This distance is based upon a dry, level, smooth hard surfaced runway in which maximum manual braking is used with no thrust reverser use or reverse thrust credit. There is no requirement to flight test on any runway conditions other than dry. Landing wet runway stopping distances required by Federal Regulations are only factored (i.e. "padded") dry runway values based on runway conditions existing at the time of dispatch. The factored distances are intended to account for varying factors such as approach speed, wind, touchdown point, and wet/slippery surfaces. There is no requirement to conduct actual wet or slippery surface aircraft runway testing to either validate the factored values or provide actual stopping distance data to the operators.

There are two aspects that must be considered for takeoff: the rejected takeoff and continuation following an engine failure. For the rejected takeoff, Federal Aviation Regulations require accelerate-stop distances to be defined. These distances are based on a dry, level, smooth, hard-surfaced runway in which maximum manual braking is used. Wet-runway accountability for the rejected takeoff, determined by calculation rather than flight test, was implemented for aircraft designed after 1998. Therefore, it affects very few aircraft flying today. Prior to 1998, accelerate-stop distances considered only dry runways. There is no requirement to account for contaminated runway conditions and its affect on aircraft braking.

The only circumstance for which thrust reverse *credit* is specifically allowed is in the "stop" phase of the rejected takeoff maneuver and only for wet conditions. However, thrust reverse is not actually used to demonstrate the maneuver during certification on dry runways.

Current regulations do not address consideration of reverse thrust credit for landings on contaminated runways. Therefore, it is typical for the aircraft manufacturer to empirically derive contaminated runway guidance material which compensates for the use of reverse thrust.

For the case of an engine failure during the takeoff roll in which continuation is the safest course of action, there is no requirement to assess the drag effects of contaminant displacement or impingement drag on the takeoff distance to clear obstacles.

Europe is ahead of the FAA when it comes to contaminated runway operations. Their rules require manufacturers to provide guidance material (typically empirically derived) to operators regarding contaminated runway operations. They also require the operator to ensure that approved performance data is in the AFM to account for the effects of contaminated runways on takeoffs and landings. Aircraft certificated under European rules are required to have guidance material for wet and contaminated runway operations. The same aircraft certificated under FAA rules are not required to account for contaminated runways.

Many operators and pilots are not provided with accurate information/data regarding weight penalties, speed corrections or distance corrections that should be used while conducting contaminated runway operations. In some cases, manufacturers develop "calculated" advisory information for contaminated runway operations. However, there is no flight test determination/validation of these particular numbers. In May 2006, the FAA proposed a new Operations Specification (OpSpec) to require all operators to reassess landing distance requirements based on actual runway conditions existing at the time of arrival. Implementation was expected by October 2006, but industry pressure forced the FAA to withdraw OpSpec C082. The contents of this OpSpec were moved to a voluntary Safety Alert for Operators (SAFO 06012). The SAFO provides runway distance multipliers as a function of braking action or contaminant type. However, it is unclear how the FAA determined these multipliers (i.e. have they been validated by flight test?). In addition, the SAFO still requires the use of pilot subjective assessments of braking action. ALPA has asked that the industry develop and provide more definitive guidance to flight crews to better enable them to assess and provide useful braking action reports.

Even if we had good data, there would still be a piece of the runway performance puzzle missing. That is, just how slippery is that runway that we are about to land on? Even if several flights land in a short time and each pilot makes a detailed report, pilot-issued braking action advisories are subjective and vary from pilot to pilot and aircraft to aircraft. There is little criteria or guidance material available to pilots for them to accurately and consistently make appropriate braking action advisories. In addition, braking action advisories require an aircraft to land and provide such a report to Air Traffic Control. What this may mean is that at some point under degraded runway conditions, a pilot may land in conditions that then are classified as unsafe.

Some airports have sophisticated equipment to actually measure the runway friction, or "slipperiness" of the surface. There are many runway friction measuring devices in use today. These devices currently provide highly variable readings under the same conditions. Interestingly, the measurements are considered unreliable on surfaces with more than 1mm of water or with more than 3mm of wet snow or slush or with more than 25.4 mm of dry snow. In some parts of the country, most airports are outside those boundaries for extended periods of time.

ICAO Annex 14 converts friction index/measurement to braking action but due to the unreliability of the measurements and the difficulty in equating braking action to all aircraft types, a questionable friction index/measurement relationship exists.

The Canadian Runway Friction Index (CRFI) is a positive step towards giving flightcrews the ability to better determine their stopping capability under some winter runway conditions but it has limitations as well. According to the Canadian Aeronautical Information Manual, CRFI is not provided when the runway is simply wet with no other type of contamination present, when there is a layer of slush on the runway surface with no other type of contamination, or when there's loose snow on the runway surface exceeding 2.5 cm in depth. Slush is a phenomenon that may be more prevalent in the lower 48 states than in the colder climate of Canada. CRFI is also not applicable for takeoff. CRFI is not, therefore, an ideal solution to the problem of providing meaningful runway friction information to flight crews.

There are several sources of Runway Surface Condition (RSC) information available to flightcrews: Automated Terminal Information Service (ATIS), ATC, Dispatch or Flight Service Stations, and other pilot reports. In some cases, in the absence of a current RSC, ATC will request a runway condition report from an arriving aircraft. The current Notice to Airman (NOTAM) system in use is effective and a valuable tool to airports, ATC and pilots for many types of information. However, it is not well suited for rapidly changing runway/weather conditions. For this reason, runway surface condition reports are frequently outdated, non-existent, and not reflexive of current conditions.

So what should the FAA and industry do to correct these problems? The first thing is to establish a requirement for manufacturers to determine, through flight test validation, aircraft takeoff (accelerate-stop and one-engine inoperative) distances and landing distances for wet, slippery, and contaminated runway conditions. If deemed appropriate for operators/pilots to take thrust reverser credit in landing situations on slippery/contaminated runways, ensure that the data being used is validated through manufacturer flight testing. That needs to include what flight crew procedures would need to be followed without requiring above average skills. In addition, thrust reverse credit should only be allowed on contaminated/slippery runways and only when other "mitigators" are in place in the event of thrust reverse failure or aircraft control problems (i.e. rudder blanking, or crosswinds) that might require the crew to discontinue the use of thrust reverse. Mitigators to be considered would include, but not be limited to, the presence of a standard Runway Safety Area or equivalent, prohibiting asymmetric thrust reverser deferrals, a defined minimum acceptable level of reverser reliability, consideration of the time delay needed for pilot deployment, and a regulated minimum runway distance safety margin.

To address the issue of measuring runway friction, we need research. Congress should require and fund industry research to develop accurate and reliable means to measure runway friction potential and to require manufacturers to relate these values to aircraft performance. In addition, if the data is to make any sense, there needs to be a requirement to develop guidance to pilots, air traffic controllers and airport personnel to facilitate reliable means for accurate runway surface condition reporting, such as contaminant type and depth and pilot braking action advisories and to relate these to aircraft performance

It will take a while to develop meaningful and sufficient flight test data. Until then, the industry should develop a universally applicable tool that is usable by the flightcrew to quickly and accurately determine whether they can safely operate on the available runway under the given runway conditions (dry, wet, slippery and/or contaminated).

Outsourced Maintenance Oversight

As the economic pressure on airlines has continued to mount, one way that many carriers have endeavored to cut costs is by reducing or eliminating the amount of maintenance that they perform themselves. Work is now done by a contractor that, in years past, was done by company employees. That certainly does not mean that the work cannot be as good as that performed by company personnel, but it introduces some additional issues that ALPA is concerned about and that we feel the FAA needs to be involved in managing.

History has shown us what the results of improper maintenance can be. NTSB investigations into several airline accidents, resulting in the loss of hundreds of lives, have revealed maintenance deficiencies as part of the chain of events that led to the accident. As with almost everything in aviation, there are multiple redundant checks and inspections in maintenance to make sure that everything is done properly. The key to that process is oversight of young mechanics by their more experienced supervisors, oversight of the maintenance process by the airline, and oversight of the entire process by the FAA.

When maintenance is outsourced, oversight can become more complex and difficult. A recent fatal airline accident investigated by the NTSB proved that statement – company maintenance was contracted to a vendor who then subcontracted to a company who then used yet another company to actually perform the work. Ironically, the actual work was being performed about a day's drive from FAA Headquarters, but organizationally, the work was so far removed from both the airline and the FAA that it was not being properly supervised. Our concern is that the more organizational distance that is placed between the maintenance being done and the people ultimately responsible for its correct completion, the more complicated the process of providing oversight becomes. The FAA must have both the mandate and the resources to ensure that it can fulfill its oversight role in the new economic environment of outsourced maintenance.

Neither the outsourcing nor the critical need for oversight stops at the Nation's borders. As the aviation industry has truly become global, so have the safety issues, outsourced maintenance among them. Some companies are now using offshore contractors for significant maintenance procedures. Many such maintenance facilities perform excellent work, are operated to high standards, and are in countries with Civil Aviation Authorities which provide excellent oversight. However, this is not universally true, so FAA should still be involved to ensure that a U.S. registered aircraft, carrying U.S. citizens and operating into and out of U.S. airports meets the highest standards of maintenance. FAA oversight of the airlines operating these aircraft is critical to that process and needs to be ensured.

Thank you, again for the opportunity to testify today. I would be pleased to address any questions that you may have.

THE CURRENT STATE OF THE CARGO INDUSTRY – AN ALPA PERSPECTIVE

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March 30, 2004

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1. Introduction

In March of 2001, as a part of the investigation into the fatal crash of a McDonnell Douglas DC-8-71 cargo aircraft, the Air Line Pilots Association, International (ALPA) published a position paper calling for the National Transportation Safety Board (NTSB) to conduct a public hearing on the matter of cargo airline operations and safety. In that paper, ALPA provided preliminary factual substantiation that pointed towards the lengthy chronicle of cargo airline accidents in the United States that would provide significant background material for conducting such a hearing.

Historically, there has been little attention given to cargo airplane accidents. However, the air cargo industry has grown in scope and significance to individuals, businesses and the economy such that we can no longer ignore the "people dimension" of cargo. Cargo is not just boxes. Shipments of cargo contain not only peoples' ordinary goods, which are important to them in their own right, but also contain things like medical supplies, biopsies awaiting testing, parts to keep businesses and factories open, large sums of money, etc. In short, the loss of a cargo aircraft has the potential to impact the lives of people in much the same way that the loss of a passenger aircraft does.

As the air cargo industry has grown, new cargo airlines have started operation, and existing ones have grown. They have experience the same "growing pains" any business does, especially in the airline industry. Some airlines have incorporated robust, state-of-the-art safety programs and practices into their growth, recognizing that safety is good business. However, for a variety of reasons, these programs and practices are not universally used throughout the industry. The NTSB has recognized the advantages of a joint government-industry discussion of critical safety issues in the air cargo industry and ALPA applauds the efforts of all participants in the Air Cargo Safety Forum to begin a dialogue that will allow us to identify these issues and develop strategies to address them.

Since 1984, the NTSB has conducted at least 38 accident investigations involving cargo operators. These investigations have resulted in numerous recommendations to the FAA and to cargo operators. However, success in identifying and mitigating the safety

deficiencies of the cargo airline industry has been limited. In fact, a recent UK Civil Aviation Authority (CAA) study of worldwide fatal accidents for western-built jets between 1980 and 1996 concluded that "...cargo operations have a fatal accident risk at least four times that for passenger flights." A more current study of aircraft accidents in the United States conducted by the Commercial Aviation Safety Team (CAST) shows that from 1994-2003, while the overall commercial aviation accident rate is extremely low, the accident rate for cargo operations rate is twice the equivalent accident rate of passenger flights. CAST also pointed out that when relatively low risk events such as ramp, turbulence, runway incursions, etc. are excluded from the study, the accident rate rises to 5 times the accident rate for passenger operations. Yet, cargo airline operations account for only 7% of the total number of commercial operations.

While cargo and passenger airlines have many similarities, they also have some significant differences that may contribute to the higher cargo airline accident rate. Today we have both ends of the spectrum in terms of equipment being used by cargo airlines; everything from the brand new MD-11F to the very old DC-8 and 727F. Soon the new Airbus A380 will join the fleets of U.S. cargo carriers. While there are passenger airlines operating in the United States today that also employ older aircraft, there is a significant average age difference between the passenger and cargo airline fleets. As of January 2004, the average age of the U.S. cargo airline fleet is approximately 28 years, whereas the average age of the U.S. passenger fleet is approximately 7 years.

It is important to note that the FAA and industry have not ignored the incidents and accidents or the issue surrounding the cargo airline industry. In April 2000, the FAA formed a Cargo Strategic Planning Group to address the cargo-handling issues that relate to14 CFR Part 121 and Part 135 passenger and all cargo operations. By collecting data, analyzing that data, and evaluating current cargo operations and regulatory requirements, the group developed an action plan. They issued recommendations, identified responsible organizations, and identified issues in certification, operations and maintenance. One of the outgrowths of this group will be the issuance of an FAA Advisory Circular (AC) for Air Cargo Operations. At this writing, industry has been advised that the AC will not be made available for public comment and is expected to be published in late 2004. This activity has provided some important first steps and ALPA applauds such efforts. However, by its very nature, an Advisory Circular is "advisory" only and in this case will offer recommendations and guidance on procedures for managing an air carrier's cargo operation. The regulatory foundation on which the AC is based has not changed, and in many cases, no regulatory requirement exists for any of the recommended procedures in that Advisory Circular to be followed by an air carrier.

Several individuals and organizations representing cargo airlines have also been a part of CAST. These same individuals and organizations have endorsed the CAST process of data analysis of past accidents, identification of the safety enhancements that could have prevented those accidents, implementation of the most effective and feasible enhancements, measuring the results, and then repeating the process. Much of the data analysis and safety enhancement identification has now taken place. The data has identified the right things to do. It will be just as important for the cargo carriers to

implement the safety enhancements that CAST has recommended as it will be for the passenger carriers.

While the FAA and industry have begun addressing some of the issues surrounding air cargo operations, there remains more to be done. The NTSB Air Cargo Safety Forum, for which this paper is written, is intended to identify safety issues in the industry that still require work, and to identify ways for government and industry to work together to address those issues. This paper will identify, from the point of view of the Air Line Pilots Association, International, issues that should remain the subject of robust discussion by the industry and the regulators.

2. Regulatory Certification

Although cargo airlines operate large, complex aircraft that are often variants of the passenger-carrying models, the FAA regulations governing the operations often differ, sometimes significantly, from those for passenger airlines. Some differences can be attributed to the unique character of cargo operations while others cannot. Differences that are not specifically intended to provide an equivalent level of safety to a unique operation can lead to higher risk in cargo operations than in similar passenger operations.

Cargo airlines frequently operate as "Supplemental" carriers under Part 121 of the Federal Aviation Regulations (FAR), while passenger airlines are normally operated as "Domestic" or "Flag" carriers. The FAR 121 Supplemental regulations are less restrictive than those of Domestic or Flag regulations in such diverse areas as flight time/duty time and alternate airports. Supplemental carriers can have longer flight and duty times. Domestic and Flag carriers are required to use flight dispatchers, which provided an important redundancy in the operational control of the flight, and therefore contribute to improved flight safety. Flight dispatchers are not required for Supplemental operators. Requirements for other safety-related elements such as weather reporting and alternate airport requirements are also less stringent under Supplemental regulations.

In addition to these Part 121 Supplemental differences, cargo aircraft are explicitly excluded from certain other requirements that apply to passenger aircraft. For example, cargo aircraft are exempt from requirements for certain critical safety equipment that is required on passenger aircraft, such as escape slides. Unlike for passenger aircraft, FAR Part 139, which applies to airport certification, permits cargo aircraft, which are likely loaded with hazardous materials, to operate into and out of an airport with no requirement for Airport Rescue and Fire Fighting (ARFF).

There are certain aspects of cargo airline operations that have a direct bearing on flight safety and are only peripherally addressed by regulations. For example, the personnel and organizations that are directly involved in the cargo preparation and loading are not required to be licensed and are subject to less stringent monitoring by the FAA. Additionally, cargo airlines also operate at many reliever and other less-frequented airports, where the airport safety-related facilities & infrastructure, such as lights and navigation aids are less developed or prevalent than at the major airports.

It is imperative that the regulations governing the cargo airline industry and the common practices used in the industry be reviewed, and where necessary, modified so that they provide "One Level of Safety" across the U.S. commercial air transportation system. The regulatory differences between cargo and passenger operators contribute to increased risk in the cargo industry, and likely to the higher cargo airline accident rates.

3. Equipment and Certification

The Federal Aviation Regulations on the design and certification of aircraft and aircraft equipment often do not provide a consistent "One Level of Safety" for passenger and cargo operations. Aircraft of the same type that operate in the same airspace at the same time can fall under different safety standards. These current standards result in a higher level of risk for aircraft and aircraft equipment used by cargo airlines relative to those of the passenger industry. Factors affecting that risk include the certification basis of the aircraft, the sophistication, capability and reliability of original aircraft systems and equipment, and the supportability of modifications to aircraft and equipment.

Many cargo aircraft began service as early-generation passenger aircraft. Though older aircraft are not inherently more or less safe simply because of their age, these aircraft were typically certificated to standards developed before many of today's accepted safety standards were in place. Thus, they usually do not incorporate the safety improvements developed since their original certification. Significant safety improvements, especially those for design rules, are frequently not retroactive. A recent Emery Airlines DC-8 accident underscores this point. Had that aircraft been equipped with either of two design features required by FAR changes since the certification of the DC-8, it is likely that the accident would not have occurred.

By virtue of their age and passenger-aircraft heritage, many current cargo aircraft have had numerous post-delivery modifications such as the installation of large cargo doors and specialized cargo floors. Many of these changes were designed and accomplished by organizations other than the original aircraft manufacturer. Many of these companies are no longer in business, and technical, troubleshooting and parts support is difficult to obtain. This can adversely affect the continued airworthiness of aircraft and their components. Thin economic operating margins and strong competition for timely cargo delivery can lead to an operating environment in which aircraft are being flown in marginal and sometimes unairworthy condition.

Despite obvious operational differences such as the absence of a cabin crew and the more prevalent carriage of hazardous materials, there are some significant discrepancies between the fire suppression requirements for cargo and passenger aircraft. The FARs do not require the main decks of cargo aircraft to be equipped with active fire suppression systems, nor do they require sufficient access in a loaded aircraft for a crewmember to use or deploy a hand held fire extinguisher. As was previously mentioned, unlike their passenger carrying counterparts, cargo aircraft are not required to be equipped with escape slides to enable the crew and additional onboard personnel to evacuate the aircraft.

4. Qualification and Certification of loading personnel

Although cargo preparation and loading directly affect flight safety, the personnel and organizations responsible for this critical element are not required to be certificated or licensed by the FAA. Furthermore, the FAA requirements for training and qualification of these personnel and organizations are inadequate. Significantly, in its investigation of a 1997 DC-8 accident in Miami, the NTSB stated that the loaders were "not aware of the potentially catastrophic consequences of misloading the airplane and failing to properly secure cargo." Other cargo aircraft accident investigations and safety audits in the industry have identified similar problems.

These cargo preparation and loading personnel are frequently not extensively trained, and in many cases, these jobs are minimum-wage, high-turnover positions. Many cargo loaders perform their jobs in adverse and demanding physical conditions, under high schedule-driven pressure. These circumstances increase the likelihood of errors, can result in increased risk, and sometimes aircraft accidents occur. Therefore, the development and effective use of standard operating procedures (SOPs) are crucial to flight safety.

Many cargo airlines outsource the cargo preparation and aircraft loading activities to private organizations not affiliated with the airline. Frequently, these airlines utilize different contractors at the various outstations the airlines serve. This often results in a lack of standardized operations and increased difficulty in ensuring the effectiveness of the procedures used. Other results include the airlines' reduced ability to maintain adequate operational control from a safety standpoint, and the FAA's increased difficulty in ensuring compliance with the SOPs and FARs.

Ensuring accurate loading is a cornerstone to the safety of cargo operations. There are several factors that compound the difficulty of reliable and accurate loading. In recognition of the criticality of proper loading, the U.S. military utilizes specially trained, personnel known as "loadmasters" who are specifically responsible for the accurate loading of their cargo aircraft. Few commercial cargo carriers employ this approach. The role that loadmasters play in the operation is no less critical than that of a flight dispatcher. Yet the FAA certifies and regulates dispatchers but neither requires nor certifies loadmasters.

5. Cargo Handling

Safe and efficient cargo movement relies on the actions of many organizations which may not even know of the others' existence. The actions of every person and organization that comes in contact with the cargo, from the time it is originally packaged to the time it is delivered, must be carefully coordinated. Problems in any step of the process can present hazards, some of which may not be detected until an incident or accident occurs. Many factors can influence the safety of cargo handling. These include: oversight and regulation of originating organizations, oversight and operational control of

the loading/handling operations, outsourcing, turnover rate of qualified cargo personnel, improperly built-up pallets or loaded unit load devices (ULDs), operational constraints, schedule pressure, "cross-loading" operations, and weighing equipment.

The larger loads and increased exposure mean the potential severity of weight and balance errors is greater for cargo aircraft than passenger aircraft. However, there are no industry standards for scales used to measure the actual weight of cargo. There is an IATA standard for weighing scale accuracy, but there is no requirement to comply with it. Some carriers use the IATA standard, others use their own, which may or may not be similar. Some do not address the issue of weight accuracy at all. In addition, there is no standard to require periodic calibration of scales to ensure they remain within a given tolerance. Given that variation, the accuracy of the weight of cargo transferred from one airline to another will not be within any specific tolerance. Consequently, the accuracy of gross weight and center-of-gravity calculations, both critical for safe operations, cannot be determined.

NTSB investigations and other evidence suggest that personnel involved in cargo handling, particularly at the point of loading, may not know that if they improperly load the cargo and/or incorrectly list the weight of a pallet, a serious incident or accident could result. The NTSB has examined many of these areas and made recommendations to prevent these conditions from reoccurring. Despite these recommendations, there remains a lack of adequate industry standards pertaining to load planning systems and to the qualifications, certification and training of ground personnel who handle cargo. Factors unique to cargo operations, such as generally greater cargo weight, outsized cargo, and the variety of containers available can compound the complexity of required tasks, and increase or exacerbate the possibility of errors.

Further education and training is needed in the handing of cargo destined to be carried on aircraft. Issues involving the supervision and training at many levels need to be addressed, including legal and oversight issues, and the consequences of the mishandling and incorrect loading of cargo. These hazards can be greater for "all cargo" operations than cargo placed on passenger aircraft. Several of the cargo carriers have developed excellent procedures to adequately address cargo handling. However, as we've seen in past accidents and incidents, the industry has not universally adapted a consistent methodology for cargo handling. By incorporating the industry's "best practices" into universally used Standard Operating Procedures that address these issues, the overall level of industry risk will be reduced.

6. Ground And Flight Crew Qualifications And Training

Cargo air carrier accidents exceed those of passenger carrying accidents in both the takeoff and climb phases of flight. Many of these accidents have resulted from misloaded or shifting cargo that resulted in an airplane mistrimmed condition. The ability to prevent misloading or to successfully cope with a mistrimmed aircraft can frequently be traced to deficiencies in training of either ground or flight crew.

More needs to be done to reduce the risk of a serious mistrimmed condition due to improperly loaded cargo. The FAA did not satisfactorily address the NTSB's recommendation that air carriers instruct flight crews on mistrim cues that might be available during taxi and initial takeoff. On March 12, 2001, the Board classified its recommendation as "Open Unacceptable Response," and no further regulatory action has been taken. FAA and industry actions since do not adequately address the NTSB's recommendation.

Flight crews are ultimately responsible for the safe conduct of any flight. In passenger operations, the flight crew has a cabin crew, and for some situations, the assistance of the passengers themselves to aid in identifying and correcting problems. Flight crews on cargo aircraft can quite literally be *solely* responsible for the identification and correct resolution of any safety issues occurring during flight. However, there is no requirement for flight crews of cargo airliners to receive any detailed or specialized training in dealing with cargo-unique problems arising during flight from loading, packaging, or handling cargo, including hazardous materials. Simulators used to train cargo aircraft pilots are generally of limited value in training crews to cope with shifting cargo.

The prevention of cargo air carrier accidents caused by misloaded or shifting cargo will not improve unless we examine more thoroughly the reasons for these shortcomings. Further analysis into some of the systemic factors associated with training issues for ground and flight crews in the cargo airline industry is necessary. These include cargo handling, loading and flight training deficiencies. The industry also needs to address discontinuities between the Captain's responsibility and the Captain's authority over loading operations – the Captain bears the final responsibility to verify the aircraft is safe for flight, yet he or she has neither the training nor the direct authority over the loading personnel to ensure that loading is accomplished in accordance with safe operating practices, the adequacy of load planning documentation and the verification procedures. The current FAR training requirements for cargo pilots needs to be examined to determine their adequacy in addressing issues unique to cargo operations, including the best use of aircraft simulators to accomplish the intent of the NTSB's recommendation to address dangerously mistrimmed takeoff conditions.

7. Aircraft Aging

The aviation industry began aggressively working on solutions to the problem of aircraft structural aging several years ago and has made great strides to overcome that problem. However, some passenger operators have resolved their aging aircraft issues by selling older aircraft and buying new ones. Many of these aircraft are not removed from service, but are sold to other passenger operators, often carriers that are outside of FAA jurisdiction. These same aircraft may then be sold again for use as freighters by U.S. cargo operators. In addition to structural issues, there are other problems caused by aging such as outdated technology, higher part failure rates, lack of availability of replacement parts, and a decrease in support available from manufacturers. Although the problems of aging aircraft are not unique to the cargo carriers, they are more pronounced.

As noted above, many aircraft in cargo fleets have seen service in U.S. passenger airlines and foreign passenger airlines before moving to their present operators. Typically, such aircraft are less capable in terms of performance, reliability, and automation. In addition, older aircraft and their subsystems (e.g. avionics, engines, etc.) usually have higher failure rates and hence require higher levels of maintenance.

Many older aircraft and components are no longer produced and are no longer in widespread use. As a result, support by the airframe and component manufacturers is limited. Some of the original equipment manufacturers of these aircraft and components are no longer in business. Since many cargo operators purchase their aircraft and components from other airlines and not from the original manufacturers, even if the original manufacturer is still in business, there are weaker communication and business ties between these operators and the original manufacturers.

8. Aircraft Modifications, Support and Maintenance

As a result of the older aircraft fleets, cargo operators face many maintenance issues trying to adequately support their aircraft. The source of much of this complexity is the fact that many cargo aircraft were manufactured as passenger aircraft and have been modified from the original configuration to become freighters. Many cargo aircraft undergo numerous modifications and/or conversions prior to being put into cargo service. The aircraft condition and configuration can be significantly different than when the aircraft was produced and delivered.

Extensive modifications result in major variations in aircraft cockpits and systems on the same model aircraft. These modifications may be the result of specific requirements by the original purchaser, Supplemental Type Certificates (STCs) by subsequent owners, or conversions to make a passenger aircraft into a cargo aircraft. These changes can result in non-standard configurations and increase the complexity of both operations and regular maintenance. Similarly, record keeping and other accountability processes become more complex. As airlines grow and fleets expand, aircraft with the same original type certificate may be purchased, but these same-type aircraft may have been ordered by different carriers at different times and may have been through vastly different changes in ownership. This can result in significant differences in cockpit layout, installed equipment, and performance.

Because of the level of activity and schedule pressures, maintenance may often be deferred at the main hub. Thus, much maintenance is performed at outstations that may have limited resources. Outsourcing maintenance can result in the potential loss of two safety benefits: strong operational control and thorough familiarity with one's fleet. Language problems and long distances from parts supplies and company control can complicate maintenance done in other countries. As older mechanics retire, corporate knowledge is lost and it becomes more difficult to find people who can work on older systems. The decreased ability to repair or replace failed components results in many

aircraft being repeatedly operated with multiple Deferred Maintenance Items or inoperative equipment.

The industry needs to acknowledge and address the unique maintenance challenges faced by air cargo operators. Maintenance practices and the oversight of those practices need to account for these unique aspects.

9. Flight Time and Duty Time

The present flight time and duty time rules applicable to cargo flying are a patchwork of domestic, supplemental and flag regulations developed over the past fifty years. The FAR Supplemental rules that are usually applied to cargo operations were developed decades ago, many for unpressurized piston operations with crews consisting of two pilots and a flight engineer. Carriers have used modern technology to increase pilot and aircraft utilization, which has put additional pressures on flight crews.

The current regulatory structure does not provide the same standards for cargo operations as for passenger operations, even if the only difference is the nature of the payload. As a result, some safety deficiencies get addressed in collective bargaining agreements. However, dealing with deficiencies in this manner affects only a part of the industry and may not result in uniform treatment of the same issues across all carriers. They are subject to modification without the scrutiny and industry involvement afforded by the rulemaking process. The FAA last proposed to modernize the flight time/duty time regulations in 1995. That attempt stalled for a variety of reasons. The clear weight of scientific evidence supports the case that modernization of the flight time/duty time rules in the cargo industry is overdue, and needed to enhance safety.

There is a need for a unification of the passenger, cargo, and domestic and international flight time/duty time regulations to provide "One Level of Safety." Certain basic rules should be established to provide a baseline for all operations. To maintain this ideal of "one level of safety," certain unique aspects of cargo operations must be addressed by rules tailored to those operations. Some of the specific areas that are unique or predominant in cargo are fatigue and rest issues due to the non-scheduled nature of all-cargo operations and heavy assignment of back-side of the clock schedules; human factors introduced by non-standardized airport infrastructure, crew support and rest facilities, increased workload due to aging aircraft; and the use of FAR Part 91 ferry operations to position aircraft.

10. Hazardous Materials

Current regulations allow carriage of greater quantities of hazardous materials on cargo aircraft than on passenger aircraft. The hazards of carrying some substances are great enough that they may not be carried at all on passenger aircraft. However, such substances may be, and routinely are, shipped on cargo airliners. Thus, cargo aircraft consistently carry hazardous materials in greater quantities and containing materials judged more hazardous than are found on passenger carriers. Non-compliance with

regulations and procedures therefore represents a more serious safety problem in the air cargo industry, since exposure to the risks is greater. The current regulatory and operational systems do not provide adequate safeguards to ensure the proper identification, packaging, and handling of these materials. Moreover, there are no requirements for any special health monitoring for cargo aircraft crews, in spite of the higher potential exposure rates to hazardous substances.

Undeclared, improperly packaged, improperly loaded hazardous materials and even shipments of material never authorized for shipment via air continues to be a problem. The additional quantities and more hazardous nature of these hazardous materials on cargo airliners further increase the risk from a leak or release. Public awareness and employee training are essential to eliminating this hazard.

Flight deck crews are an integral part of the "checks and balances" in ensuring safe operations. Crews must be informed of hazardous materials shipments. This must include timely notification and accurate information to ensure proper handling and placement of hazardous materials. In practice, schedule pressure frequently results in flight crews receiving a large volume of documentation without sufficient time to properly review it. In addition, there is no established requirement for procedures that ensure hazardous materials is properly identified from the time it is first packaged until it is loaded on an aircraft. The pilot in command only indicates he/she has received the paperwork, a loader signs certifying that it has been loaded and there is no evidence of damage, but no one verifies the accuracy of the information.

11. Regulatory Compliance and Oversight

Regulatory compliance and FAA oversight to ensure such compliance are key elements in the safety of any airline operation. Many recent NTSB major aircraft accident reports discuss FAA oversight, and in most cases, problems with the oversight have been identified. While there are many reasons for oversight problems, there is no doubt that there are more difficulties associated with conducting oversight of cargo operators than there are for passenger operators.

The nature of the operation - moving packages instead of people - can lead some people to conclude that allocation of scarce resources should favor passenger carriers. Unique aspects of cargo airline operations present logistical difficulties not encountered in oversight of passenger operations. These include such factors as the concentration of night operations, the flexible route structure, often with hubs or destinations at more remotely located airports, including some with no passenger service, and the amount of cargo handling and aircraft maintenance activity that is outsourced to other organizations. These characteristics increase the workload, time and effort required by both the operator and the FAA to ensure compliance with standard operating procedures (SOPs) and the FARs, and adds to the burden of FAA offices, especially when they are understaffed or operating with other significant resource limitations.

This organizational and geographic diversity often results in the distribution of oversight responsibilities among multiple FAA offices for the same airline, which raises several issues. These include the inspectors' familiarity with cargo operations in general, the inspectors' familiarity with the operator or outsource organizations, and the potential for inconsistent application of rules. Clearly, additional effort must be expended to ensure the completeness and continuity of the oversight function.

The air cargo industry is more subject to oversight by multiple regulatory agencies than the passenger industry. For air cargo, these agencies include at least the FAA, the Research and Special Programs Administration (RSPA), and the Occupational Safety and Health Administration (OSHA). This complicates the operators' and regulators' ability to ensure compliance. Ideally, these organizations should coordinate their activity to ensure that, from both a regulatory and oversight standpoint, all aspects of the operation are considered, with minimal overlap. Furthermore, the system of multiple regulatory agencies raises the possibility of 'jurisdictional creep', a condition where one of the regulating agencies inappropriately expands its scope into the purview of another regulating agency. This has the potential to result in inappropriate or ineffective regulation, oversight and compliance.

12. Safety Culture

A core fundamental business practice of any company must be a well defined corporate safety culture. An organization with a strong safety culture views safety as something that influences everything the company does. A strong safety culture is specific, it is deliberate and it is learned. This can be the primary tool that a company has to combat accidents and incidents and then consequently positively affect the profitability of an organization.

A clue to the strength of an airline's safety culture can be determined in observing where its safety department sits in the company's organizational chart and to whom its chief safety officer reports. Some airlines bury their safety department deep in the organizational structure so that safety issues get filtered to the Chief Executive Officer through several layers of management. An airline that views safety as a core fundamental business practice will have their safety department reporting directly to the CEO.

An airline with a strong safety culture must establish clear safety goals for their organization that recognizes the fact that safety is good business and thus has a business plan that maximizes both profit and safety. In order to achieve safety goals, there are some essential initiatives and programs that have been developed and endorsed by the FAA, many airlines, and their associated labor organizations. Voluntary reporting systems that provide a means for front line personnel to identify safety deficiencies so that corrective action can be taken to correct them form the foundation of the safety culture at many airlines. Other programs such as the Flight Operations Quality Assurance Program (FOQA), the Aviation Safety Action Program (ASAP), and Line Oriented Safety Audits (LOSA) have also been implemented throughout the industry.

Today's cargo industry is made up of a wide range of operators from the small "mom and pop" operation to the large carriers operating hundreds of modern jets all over the world. To assess the entire industry's safety culture and attempt to paint all cargo carriers with a broad brush would be both impractical and unfair. However, there is a strong disparity in the number of safety programs and initiatives that have been implemented at passenger carriers as compared to cargo carriers. For example, in the U.S. there are twelve airlines with operating FOQA programs, of which only one is a cargo operator. Of the 32 ASAP programs in operation, only four are at cargo carriers. LOSA audits have been conducted at 16 airlines but not a single cargo carrier has participated in this program.

All airlines need to have a strong safety culture that considers risk management as an integral part of their operations. The type of safety programs and initiatives incorporated into an airline's operation are one measure of the quality of that safety culture. These disparities in safety programs between passenger and cargo carriers are significant and contribute to the some of the safety deficiencies between the two groups.

13. Conclusions

Today a passenger carrier and a cargo carrier can be seen operating the same airplane type, operating in the same airspace and into the same airport. Yet because one airplane is carrying passengers and the other cargo, often the airline and its flight crews are operating under different regulatory requirements and thus to different safety standards. Clearly, there are unique aspects to cargo operations, and these unique aspects may justify standards that differ from their passenger counterparts. However, there should be nothing in the operations, regulations, certification, or training of personnel that allows greater risk in one operation than another based on the aircraft's payload.

Some of the safety issues identified in this paper are unique to operating a freight airline. Others have application to both cargo and passenger operations, and their study may well serve to decrease risk in both arenas. It is important as the regulators and industry analyze and discuss the issues, that those hazards that are not limited strictly to cargo operations not be dismissed with the observation that "the same problem exists for passenger operators." Similarly, we must not fall into the trap of assuming a risk is acceptable simply because it is limited to one segment of commercial aviation: cargo operations. As has been discussed in this and other papers prepared for the NTSB Air Cargo Safety Forum, cargo operations have the potential to impact individuals, businesses, the worldwide economy, and society at large in a significant way. We find ourselves in a time when this industry simply cannot afford to dedicate resources to anything that does not maintain or increase the level of safety while improving our ability to deliver cargo and passengers reliably and efficiently. Given the extreme resource constraints we all face, it is more important than ever before that industry and government work together to identify hazards and develop effective, efficient mitigation strategies. The hazard mitigations we develop throughout the entire aviation industry must ultimately be implementable in the real world in order to have any positive impact on the industry. Therefore we must also consider the feasibility and return on investment, which may well be different for some fleets and operations than others.

While the FAA and industry have made significant progress in attempting to mitigate many of the hazards that have been identified through the analysis of past accidents and incidents in the cargo industry, it is important that more study, discussion and positive change be continued. Recognition of the issues, developing action plans, and issuing Advisory Circulars are a good place to start, but they will not solve all of the problems the cargo industry faces. We must continue to strive toward a commercial air transportation system in which people and their belongings, as well as the flight crews operating every aircraft in the system, are equally protected by a single high level of safety.

ALPA Recommendations Submitted to the NTSB Cargo Safety Forum March 30-31, 2004

As a participant in the NTSB's Cargo Safety Forum, ALPA submitted formal technical papers on eight significant issues. They provided additional detailed information and support for the presentations made by ALPA safety representatives at the NTSB Forum. Below are listed the recommendations that were submitted as part of each of the ALPA technical papers.

A. Flight Time and Duty Time Issues in Air Cargo Operations

Recommendations:

1. Set a weekly maximum flight time limitation for domestic cargo operations that is consistent with the rules for pilots at domestic passenger carriers.
2. Require that cargo pilots receive a mandatory pre-flight rest in a manner that is consistent with the rules for pilots at domestic passenger carriers.
3. Require that time spent on standby duty by cargo pilots with a present responsibility for work should work arise (reserve duty) be counted towards a daily duty period of a maximum of 16 hours, (or less).
4. Decrease the number of hours of daily flight time and duty time that may be required of pilots in the event that the pilot operates in the time period from midnight to dawn. This recommendation, while potentially applicable to all air carrier pilots, is especially pertinent to cargo pilots due to the large percentage of night operations.
5. Decrease the number of hours of daily flight time and duty time that may be required of a pilot in the event that the pilot operates across six or more time zones. This recommendation, while potentially applicable to all air carrier pilots, is especially pertinent to cargo pilots due to predominance of international deadheading to "meet the airplane" in the international cargo industry.

B. Safety Implications of Regulatory Differences in Operating, Equipment and Certification Rules

Recommendations:

Study Actions

1. Determine the nature and extent (historical and current) of problems associated with the condition and functionality of smoke curtains.
2. Determine the fleet wide extent of the major or significant post-delivery Supplemental Type Certificate (STC) modifications on aircraft, which are currently in service in the cargo industry, and some principal indicators of the availability of technical support for these modifications.
3. Determine the industry exposure (in terms of number of aircraft and certification bases) regarding the incorporation (or lack) of certain significant safety-related design improvements such as dual locking fasteners on critical flight control joints, jam-resistant flight controls, etc.
4. Catalog the safety-significant exemptions from FARs that are held by the US cargo operators in order to determine the current level of industry exposure.

Regulatory Changes:

1. Require that all compartments of cargo aircraft be equipped with smoke and fire detection capability.
2. Require that all compartments of cargo aircraft be equipped with temperature monitoring capability.
3. Require that all compartments of cargo aircraft be equipped with provisions for active, remotely operated fire suppression.
4. Require the installation of bulkheads and doors to isolate the cockpit from the main cabin in order to provide the most reliable barrier for smoke, fumes and fire on all cargo aircraft.
5. Require cargo aircraft to be equipped with a means of emergency egress (e.g. slides) that permit rapid self-exit or assisted escape (rescue) of injured or non-ambulatory personnel from cargo aircraft.
6. The FAA should review, and modify as necessary, its provisions for ensuring that the airworthiness of any aircraft is not compromised due to the extinction of a company holding an STC for a component or system on that aircraft.
7. Require that aircraft in Part 121 commercial service that do not incorporate certain safety improvements developed since their original certification be modified to be in compliance with those standards.
8. Modify 14 CFR Part 121, particularly Subparts 'F' and 'S', (dealing with Supplemental operators) to provide the same levels of safety for all operators.
9. Require that certain cargo handling and loading positions be designated as "safety sensitive positions" as defined by FAR Part 121.
10. Modify FAR Parts 121 and 139 to require the availability of Airport Rescue and Fire Fighting (ARFF) services for all-cargo operations.

C. The Need for Greater Standardization of Cargo Handling Procedures

Recommendations:

1. Develop standardized forms to contain specific, safety-critical information in load documentation, load manifests, and other forms used in the loading or cross loading of an aircraft. Design and use of such forms should minimize the potential of incorrectly reporting weight and location information pertinent to the cargo loaded and operation of an aircraft.
2. Develop a uniform weigh scale tolerance and frequency of calibration for scales used in air cargo operations. ALPA recommends a tolerance of plus or minus one percent (±1%) and a frequency of calibration of the weigh scale sufficient to maintain the tolerance.
3. Develop standard procedures and guidance material to allow personnel performing or supervising safety-critical tasks to verify that all task steps are completed in the proper sequence. This process would be enhanced by efforts to ensure that supervisory personnel are not overloaded in their responsibilities such that it would prevent them from properly exercising safety responsibility to ensure the integrity of the load documentation and the cargo on the aircraft.
4. Ensure training programs for cargo supervisors, loaders and ramp personnel include familiarization with the safety implications of aircraft being loaded incorrectly. This curriculum should contain modules that include operational information used by the flight crew and awareness of the potential problems that incorrectly loaded, unsecured or damaged cargo placed in a ULD or on a pallet may have on ground personnel, occupants of the aircraft when in flight, and the aircraft fuselage and structure.
5. Develop a non-punitive reporting process to allow identification and correction of observed hazards by anyone involved in the cargo loading, packaging, or transport process. Such a program should include a means to disseminate such information to all parties performing, supervising, or having operational control over similar functions.

D. Fleet Supportability and Aging Aircraft

Recommendations:

1. The FAA needs to increase oversight of conversion facilities, insure compliance with approved conversion procedures, and foster the use of best maintenance practices for all passenger-to-freighter conversion modifications.
2. The FAA needs to continue monitoring of, and increase inspections and oversight on, aging aircraft issues, including the airframe, avionic systems, and replacement components.
3. The FAA needs to increase inspections of outsource maintenance companies and the airline to ensure: (1) compliance with maintenance procedures, (2) compliance with maintenance schedules, and (3) proper certification of the mechanics performing the work.

4. The industry and the FAA need to quickly identify a replacement for polyamide insulation and aggressively replace polyamide wires because they are a potential source of fire.

E. Training Qualifications and Certification of Ground and Flight Crew

Recommendations:

1. Conduct a special study of 14 CFR Part 121 all-cargo and passenger air carrier operations to determine the systemic causes of the high number of accidents and incidents during non-scheduled operations. Determine if there are unique differences between non-scheduled and scheduled operations and identify additional prevention measures needed to reduce this high number. As a part of the special study, examine the all-cargo accident record to determine the systemic reasons behind the high number of operational accidents and determine whether this is attributed to pilot turnover, general deficiencies in training and standardization, or for other reasons, so that appropriate correctives measures can be taken. An investigation into the differences between European and U.S. all-cargo operations should also be performed
2. Also as a part of the special study, examine the all-cargo incident record to determine the systemic reasons behind the high number of mechanical failures and malfunctions and determine whether this is attributed to the use of older aircraft equipment, inadequate maintenance and inspection, training, qualification and/or experience of maintenance technicians.
3. Re-examine the FAA's responses to Safety Recommendations A-98-47, 48, 50, and 51 to ensure that they are meeting the intent of the Board's recommendations.
4. Urge the FAA and the Cargo Strategic Planning Group to strengthen and issue the draft "All Cargo Operations" Advisory Circular and to include samples of best industry practices in the form of company-wide cargo loading system descriptions, policies and procedures, training curriculum and hours, and how outsourcing of cargo handling is done.
5. Review records for overdue final reports from foreign investigation authorities on all-cargo accidents and incidents and work with those States and ICAO to obtain the information, and update the database records.
6. Urge FAA to conduct a Pilot Training Survey among a suitable sample of all-cargo pilots, similar to that conducted by the American Institutes for Research among non-cargo pilots. Compare the resulting data with that already collected and analyzed in the initial study.
7. In order to ensure that all operators have a "One Level of Safety" baseline, urge the FAA to immediately begin the process of creating a new airman certificate under Part 65 for "loadmaster." Parallel work on the advisory material can be incorporated as appropriate, but this work should not be delayed until the advisory material is completed to start work on this key safety role.

F. Carriage of Hazardous Materials - A Flightcrew Perspective

Recommendations

1. Support and upgrade shipper and airline personnel awareness programs to prevent the carriage of undeclared hazardous materials.
2. Improve and expand required programs to place hazardous materials signage and kiosks in cargo facilities, stores facilities, Post Offices, and third party shipper locations.
3. Create a Hazardous Materials Self Reporting System with immunity provisions.
4. Expand and improve flight crew training requirements for hazardous materials.
5. Initiate requirements for earlier presentation of the NOTOC to flight crewmembers.
6. Do not allow any further reduction in the information presented on the NOTOC, or in what types of hazardous materials require a NOTOC.
7. Supply protective clothing to the flight crew whenever active fire suppression is not supplied to a cargo compartment accessible to the flight crew. This clothing must be sufficient to protect a crew member while fighting a fire after all other provisions have failed, and should include at a minimum nomex coveralls, a nomex hood, firefighter gloves and be useable with protective breathing equipment and those fire extinguishers provided.
8. Supply Spill Cleanup Kits containing gloves and absorbent material in order to allow the flight crew to prevent a spilled substance from interacting with other dangerous substances, or prevent a spilled substance (i.e. corrosive material) from further damaging the aircraft. Use of such a cleanup kit should be accompanied by appropriate training.
9. Ensure that shipments of dangerous goods are loaded in cargo compartments having fire detection and protection, whenever possible, in order to prevent those shipments from contributing to the severity or intensity of a fire from any source.
10. Adopt procedures to create a preferred location for shipments of Class 6.2 (Infectious), and Class 7 (Radioactive) in the lower cargo compartments in order to preclude flight crew exposure. If this is not possible, these shipments should be restricted from the portion of the cargo compartment closest to the flight deck.
11. Review segregation requirements, both for distance between commodities and for the type of substances to be segregated.
12. Require use of the ICAO Emergency Response Guidance for Aircraft Incidents involving Dangerous Goods (ICAO Doc 9481, AN/928), for all flight crews carrying hazardous materials. Require Air Carriers transporting hazardous materials to access information concerning these shipments via their flight following personnel any time those shipments are in transport.

G. Training, Qualifications and Certification of Ground and Flight Crew

Recommendations:

1. Conduct a special study of 14 CFR Part 121 all-cargo and passenger air carrier operations to determine the systemic causes of the high number of accidents and incidents during non-scheduled operations. Determine if there are unique differences between non-scheduled and scheduled operations and identify additional prevention measures needed to reduce this high number. As a part of the special study, examine the all-cargo accident record to determine the systemic

reasons behind the high number of operational accidents and determine whether this is attributed to pilot turnover, general deficiencies in training and standardization, or for other reasons, so that appropriate correctives measures can be taken. An investigation into the differences between European and U.S. all-cargo operations should also be performed

2. Also as a part of the special study, examine the all-cargo incident record to determine the systemic reasons behind the high number of mechanical failures and malfunctions and determine whether this is attributed to the use of older aircraft equipment, inadequate maintenance and inspection, training, qualification and/or experience of maintenance technicians.
3. Re-examine the FAA's responses to Safety Recommendations A-98-47, 48, 50, and 51 to ensure that they are meeting the intent of the Board's recommendations.
4. Urge the FAA and the Cargo Strategic Planning Group to strengthen and issue the draft "All Cargo Operations" Advisory Circular and to include samples of best industry practices in the form of company-wide cargo loading system descriptions, policies and procedures, training curriculum and hours, and how outsourcing of cargo handling is done.
5. Review records for overdue final reports from foreign investigation authorities on all-cargo accidents and incidents and work with those States and ICAO to obtain the information, and update the database records.
6. Urge FAA to conduct a Pilot Training Survey among a suitable sample of all-cargo pilots, similar to that conducted by the American Institutes for Research among non-cargo pilots. Compare the resulting data with that already collected and analyzed in the initial study.
7. In order to ensure that all operators have a "one level of safety" baseline, urge the FAA to immediately begin the process of creating a new airman certificate under Part 65 for "loadmaster." Parallel work on the advisory material can be incorporated as appropriate, but this work should not be delayed until the advisory material is completed to start work on this key safety role.

H. <u>Fleet Supportability and Aging Aircraft</u>

Recommendations:

1. The FAA needs to increase oversight of conversion facilities, insure compliance with approved conversion procedures, and foster the use of best maintenance practices for all passenger-to-freighter conversion modifications.
2. The FAA needs to continue monitoring of, and increase inspections and oversight on, aging aircraft issues, including the airframe, avionic systems, and replacement components.
3. The FAA needs to increase inspections of outsource maintenance companies and the airline to ensure: (1) compliance with maintenance procedures, (2) compliance with maintenance schedules, and (3) proper certification of the mechanics performing the work.

* * *

ALPA Recommendations for Improving Air Cargo Security

The Air Line Pilots Association, International (ALPA) supports the concept of "One Level of Safety and Security" in regulations, policies, and procedures related to all aspects of airline operations, including carriage of cargo both on passenger and all-cargo aircraft. This document provides historical perspective on air-cargo supply chain security and recommendations for improving it.

Background

After the terrorist attacks of Sept. 11, 2001, the U.S. Congress acted promptly to further protect national security by passing legislation that created the Department of Homeland Security (DHS), the Transportation Security Administration (TSA) and numerous regulations affecting aviation security. Various government-sponsored working groups, composed of aviation and security experts, were convened to enhance protective measures primarily affecting passenger airline operations. Some of the resulting improvements included dramatic expansion of the Federal Air Marshal Service (FAMS), hardened flight deck doors, revision of the *Common Strategy* for dealing with hijackers or terrorists, and creation of the Federal Flight Deck Officer (FFDO) program.

The revitalized focus on airline security revealed that regulations pertaining to protecting all-cargo operations were inadequate and that the all-cargo airline industry was often exempted from complying with the stricter policies that are mandated for passenger airlines.

By way of example, all-cargo airlines are not required to install hardened flight deck doors and all-cargo pilots were initially excluded from participating in the FFDO program. "Known Shipper" rules do not apply in the all-cargo supply chain and *Common Strategy* training guidance is not required for flight crews of all-cargo aircraft. This imbalance in regulatory requirements affords all-cargo operations only a fraction of the protections that are being implemented by, and afforded to, passenger airlines.
To address these issues, the TSA created three Air-Cargo Working Groups through the Aviation Security Advisory Committee (ASAC) process in May 2003. These deliberative bodies, which included subject-matter experts from labor and industry, were chartered to examine and recommend security protocols related to three topics: shipper acceptance procedures, indirect air carriers, and security of all-cargo aircraft. In October 2003, the Working Groups provided the TSA with 43 recommendations which ultimately served as the foundation for an Air-Cargo Strategic Plan that then DHS Secretary Thomas Ridge approved in January 2004.

In November 2004, the TSA published a Notice of Proposed Rule Making (NPRM) in the Federal Register (Docket No. TSA-2004-19515) entitled *Air-Cargo Security Requirements.,* It was based in large measure on the recommendations of the Air-Cargo

Working Groups. The NPRM was adopted as the *Air-Cargo Final Rule* in May 2006 and provided a number of significant improvements to the security of the air-cargo supply chain by requiring airport and aircraft operators, foreign and indirect air carriers (IACs) to implement additional security measures. Although the Final Rule mandated some improvements, it failed to apply an equal standard to the security of passenger and all-cargo operations in critical areas. ALPA voiced its concerns in comments provided to the Federal Docket Management System in January 2005.

The air-cargo supply chain is a complex, multifaceted mechanism that begins when a shipper tenders goods for transport. It potentially involves numerous intermediate organizations such as freight forwarders, IACs and other industry personnel who accommodate the movement of goods. The process culminates when a shipment is received by airline personnel, loaded on an aircraft, and delivered to its intended destination.

Because a cargo shipment is exposed to multiple circumstances that merit attention from the time it is tendered until it is delivered, a thorough air-cargo protective system must focus on the entire supply chain. The defensive system must determine opportunities for, and provide reasonable measures to prevent or stop, malicious acts. It must certify the integrity of the goods that are offered and the reliability of the shipper, properly educate and verify the trustworthiness of all personnel who maintain access to shipments, and ensure a secure operating environment. Because the movement of goods is often time-critical, this presents a daunting challenge.

Recommendations for security improvements in all-cargo airline operations

While significant security improvements have been implemented in all-cargo airline operations since Sept. 11, 2001, certain critical areas are still in need of corrective action. Being mindful that enhancements must accommodate the flow of commerce and be cost-justified, ALPA recommends the following:

Greater Use of Technology

The air-cargo strategic plan must incorporate effective, strategically-located screening and inspection technologies which provide the means to detect chemical, biological, radiological and explosive weapons or contaminants. The equipment must accommodate standardized industry practices relative to the movement of goods. The US government should continue its efforts to develop standards for, test and certify technologies which will inspect cargo in an expeditious manner.

Use Known Shipper (KS) program for all-cargo operations

Measures have been taken via the Known Shipper (KS) program to minimize threats that cargo shipments present to passenger aircraft. However, the same protective standards are

not applied in the all-cargo domain. Cargo and passenger aircraft should be viewed equally in terms of exposure to risks associated with improvised explosive devices (IEDs), chemical, biological, and radiological hazards, and the threat of hijacking.

The KS system must include an effective methodology for maintaining accuracy and reliability. Any decision-making process designed to evaluate an organization seeking inclusion in the KS database should incorporate sufficient criteria, beyond a link to terrorism, that will indicate the character, reliability, and susceptibility to compromise of the persons involved, or the potential for disruption of the air transportation system for political or economic purposes that are contrary to the best interests of the United States.

ALPA believes that all-cargo airlines operating under an all-cargo standard security program should accept cargo only from a shipper with a security program comparable to that of the airline. Any cargo accepted from unknown shippers should be screened in a fashion which ensures its integrity.

Apply risk-based targeting methodology to all-cargo operations

A Government Accountability Office (GAO) investigative report, plus risk assessments offered by air-cargo stakeholders and security experts, suggest that the effectiveness of the Known Shipper program is limited at best and that it should not be relied upon as the primary method of securing the passenger air-cargo supply chain.

Recognizing inherent weaknesses in the KS program, the TSA is continuing efforts to develop a method of assigning risk metrics to cargo shipped on passenger aircraft. The Aviation Security Advisory Committee (ASAC) chartered a TSA-lead working group of subject-matter experts to develop a Freight Assessment System (FAS) in order to evaluate specific information about shippers and the goods they tender, and then identify and assign corresponding risk scores to cargo. Cargo that is identified by this risk engine to be of elevated risk will be subjected to additional inspections and scrutiny.

The KS program, coupled with cargo risk assessment and profiling (FAS), will significantly enhance air safety and security. ALPA believes these cargo security initiatives should be expanded to incorporate goods transported by all-cargo air carriers.

Application of SIDA standards for all-cargo airports and operations

The Final Rule on cargo mandated that Secure Identification Display Area (SIDA) requirements be implemented *in a limited fashion* in all-cargo facilities and on all-cargo ramps at airports currently hosting passenger airline operations. While these new requirements have somewhat improved the level of security for all-cargo operations in such locations, they still provide an unequal standard when compared to passenger operations.

Of greater significance, these current regulations fail to require SIDA-standards at airports which serve all-cargo operations only, dramatically reducing security at these facilities when compared to that required for passenger operations. SIDA requirements detail perimeter security protocols, clearly define entry and exit procedures, specify identification media display and ramp security procedures, and require a mandatory 10-year, fingerprint-based criminal history record check (CHRC) for employees who maintain unescorted-access privileges within the SIDA.

The application of SIDA-standards undoubtedly would enhance the protection of general operations, cargo, all-cargo aircraft, and greatly improve the security screening standards needed to vet ramp personnel and others who have access to all-cargo aircraft. This point takes on higher significance in light of the fact that there are a number of private, domestic airfields serving major all-cargo operations which employ large, wide-body aircraft. These airfields operate under government-approved security programs that are markedly less demanding than those required for airfields serving passenger operations. The associated potential risks are significant, particularly when viewed in terms of the fact that hijacking poses the greatest threat to all-cargo operations according to the US government.

ALPA recommends that any airport serving regularly scheduled, Part 121 all-cargo operations be required to maintain a SIDA and a security plan which provides the same level of security that is required of passenger airports servicing similar aircraft types. Further, ALPA recommends that the TSA ensure through strict compliance that airlines adequately address the vulnerabilities posed by non-SIDA operations areas, to include maintaining proper staffing and training of persons who will be charged with the responsibility of performing the requisite security functions.

Install Hardened Flight deck Doors and Secondary Barriers on All-Cargo Aircraft

A significant number of all-cargo aircraft, including large, wide-body aircraft, lack bulkheads and flight deck doors which separate the flight deck from the aircraft's interior. To deter persons who possess malicious intent and impede their ability to execute a hostile takeover of an aircraft, physical barriers must be designed and installed which separate the flight deck from accessible cargo areas.

The significance of the lack of these protective measures is highlighted when considering that all-cargo aircraft frequently carry additional personnel known as supernumeraries. These individuals might be air carrier personnel, couriers accompanying high-value shipments, or handlers accompanying livestock. Often, they are subjected to less background security vetting protocols than those applied to persons traveling on passenger aircraft. The reduced level of security permitted for private airfields serving all-cargo operations takes on heightened importance when viewed in these terms.

ALPA recommends that all-cargo flight decks be clearly delineated and protected in the

same fashion as the flight decks of passenger aircraft, to include provision of hardened flight deck doors, secondary flight deck barriers and standardized crew access procedures.

Need to vet persons with access to cargo and all-cargo aircraft

To best protect the integrity of the air-cargo supply chain, persons with unescorted access to shipments destined to be transported on passenger or all-cargo aircrafts (i.e., persons who receive, inspect, transport and load air cargo, and those who work, unescorted, around all-cargo aircrafts) must be vetted by a threat matrix that measures more than a potential link to terrorism.

ALPA believes that all persons who have unescorted access to cargo destined to be shipped by air should be screened by a fingerprint-based Criminal History Records Check (CHRC) and threat matrix as is applied to applicants for unescorted SIDA access. This CHRC assessment tool should be applied equally to all persons who receive, inspect, transport, or load air cargo, or who have unescorted access to all-cargo aircraft

The TSA does not require non-crewmembers (supernumeraries) flying on all-cargo aircraft to undergo a Security Threat Assessment (STA) background investigation. All-cargo flights often carry company employees, couriers and animal handlers, many of whom are foreign nationals. These individuals often sit immediately outside the flight deck, unsupervised and possessing items that are normally prohibited on passenger aircraft. This practice is particularly troubling in view of the lack of hardened flight deck doors on most all-cargo aircraft, Federal Air Marshals, flight attendants, and able-bodied passengers who might assist in protecting the flight deck and crew from attack.

While new legislation addresses physical screening requirements for these supernumeraries, the TSA declined to subject them to a background security check. ALPA respectfully disagrees with the TSA position on this matter, and supports background security checks for all non-crewmembers traveling on all-cargo aircraft.

Air carriers are required to ensure that the employers of supernumeraries have completed background checks on them and maintain records of such. Unfortunately, this process has not been error-free. The practice of allowing the airline and/or the vendor to be responsible for these investigations, many of which have proven to be cursory, should be eliminated. ALPA recommends that the TSA assume responsibility for ensuring the completion of fingerprint-based CHRCs for supernumeraries flying on all-cargo aircraft.

ALPA further recommends that all persons transported aboard all-cargo aircraft be subjected to the same pre-travel screening methodologies (e.g., checking them against terrorist watch lists) as are applied to persons carried on passenger aircrafts.

Security training for all-cargo flight crew members and cargo handlers

Government-approved security training, equivalent to that which is required in the passenger domain must be mandated for flight crews and ground personnel involved with all-cargo flight operations and cargo handling. Basic and recurrent training for all-cargo flight crews should include instruction on the *Common Strategy for All-Cargo Carriers*, and they should be provided access to pertinent TSA-issued Security Directives (SDs) and Information Circulars (ICs). Security training for all-cargo flight crews and ground personnel should include instruction on: identifying and countering threats presented by explosives; chemical, biological, radiological weapons; contaminants and other dangerous goods. Security training must also be provided to any individuals within the air-cargo supply chain who have unescorted access to cargo destined for shipment by air.

Expanded TSA compliance enforcement

ALPA encourages the TSA to continue its use of an expanded staff of field inspectors, to create a voluntary disclosure program, and to develop and distribute security training materials to educate cargo industry employees and agents. These efforts, coupled with strict enforcement of compliance with appropriate regulations and enhanced electronic communications capabilities, should provide effective management tools to ensure secure all-cargo operations.

By way of example, the TSA continues to scrutinize the security processes of those businesses attempting to gain Indirect Air Carrier (IAC) status, strengthening both the requirements for periodic recertification of IAC status, and the security requirements for the acceptance and processing of air cargo. ALPA believes strict enforcement of these requirements and confirmation of information supplied by IAC's is paramount. Participants in the system must understand the reasons for the regulations and the critical need to comply with the mandates.

Conclusion

ALPA believes the costs associated with implementation of needed all-cargo security enhancements are minimized when compared to the price of failing to properly protect the air-cargo industry from viable threats. Since Sept. 11, 2001, cash-strapped and bankrupt passenger airlines have added multiple layers of security enhancements while many all-cargo airlines, currently enjoying robust growth and sustained record profits, have made few such improvements.

Effectively protecting flight crews, passengers, and aircraft engaged in or affected by air cargo operations requires that government and industry stakeholders work together in a cooperative manner to achieve proper security. A threat-driven, risk-based approach must be used to identify and counter existing and future vulnerabilities. ALPA will continue to work in a collaborative spirit with its government and industry partners to develop reasonable, cost-effective solutions to the common challenges faced in securing the air

cargo supply chain.

"Results and Analysis," Executive Summary, December 2002, Runway Incursion Joint Safety Implementation Team

The Runway Incursion Joint Safety Implementation Team (RI JSIT) was chartered by the Commercial Aviation Safety Team (CAST) and General Aviation Joint Steering Committee (GA JSC) to develop a plan to effectively reduce the severe threat of fatalities and loss caused by commercial and general aviation runway incursion accidents/incidents. CAST's goal is to reduce the US commercial aviation fatal accident rate by 80% by the end of the year 2007. To help accomplish this goal, the RI JSIT brought together expert representatives from across the aviation community including participants from government, industry, and pilot and controller unions. These experts developed, prioritized, and coordinated a plan to implement the most effective analytically data-driven intervention strategies recommended by the RI Joint Safety Analysis Team (JSAT). Those 115 intervention strategies were joined with 37 GA JSC intervention strategies and were analyzed by the RI JSIT to determine the feasibility of gaining significant safety benefits through implementation. From the overall effectiveness and feasibility scores, twenty-two "Safety Enhancements" were incorporated into seven Detailed Implementation Plans.

FAA data on runway incursion incidents and accidents from 1997-2000 reflects that 55% were caused by pilot deviations, 25% were caused by controller operational errors, and the remaining 20% were caused by vehicle or pedestrian deviations. Further break down of this data indicates that of the most serious incursions (Category A and B) 54% were due to pilot deviations, 35% were controller operational errors, and the remaining 11% were vehicle or pedestrian deviations.

An executive overview of the seven Detailed Implementation Plans follows:

Standard Operating Procedures (SOPs) for Ground Operations

Industry wide, standard operating procedures have been among the highest scoring safety enhancements across five accident categories including Controlled Flight into Terrain, Approach and Landing, Loss of Control, Runway Incursion, and Turbulence. The implementation of Standard Operating Procedures (SOPs) for surface operations is one of the most powerful near-term interventions in mitigating the risk of runway incursions. This project would build upon Advisory Circular 120-74, "Flight Crew Procedures During Taxi Operations", to develop templates of SOPs. These templates would be used by air carriers, general aviation pilots, and ground personnel who tow or otherwise operate aircraft on the airport surface.

Just as pilot deviations in the air (e.g., altitude deviations) have been reduced by increased standardization of cockpit procedures, the incidence of runway incursions and other surface incidents could also be reduced by increased standardization of pilot procedures for ground operations. Although most airlines have detailed procedures for airborne operations, relatively few airlines have standard procedures for operating in the increasingly complex surface environment. The purpose of this project is to reduce the

risk of runway incursions and surface incidents by recommending that all FAR Part 121 operators and Part 135 operators: establish, document, train to, and follow, standard operating procedures (SOPs) for ground operations.

The enhancements, recommended in the SOP for the ground operations plan, call for:

1. Developing SOPs from a survey of industry "best practices". Operators would implement these SOPs by training to proficiency and ensuring their use.
2. Adapting these best practices for use in single-pilot (Part 91) operations.
3. Developing "best practices" for ground personnel that taxi or tow aircraft on the airport movement area.
4. Developing "best practices" for ground vehicle operations in the aircraft movement area and incorporating them into training programs for drivers.

This plan is highly cost-effective, and could be implemented immediately with minimal additional effort on the part of the air carriers. With industry-wide implementation of the proposed SOPs, pilot behavior would become more standardized, and less likely to result in a runway incursion.

Air Traffic Control Training

More than a third of the most serious runway incursions have been attributed to controller operational errors. These errors have been attributed to: memory lapses, a lack of controller teamwork, improper scanning, poor prioritization of duties, and on-the-job training (OJT) being conducted during actual operations. All of these causal factors could be mitigated by the interventions proposed by the ATC Training Detailed Implementation Plan. The initiatives within this plan are interdependent and should be viewed as a whole.
1. Training controllers on the capabilities and limitations of human memory is an important first step in preventing operational errors due to controller memory lapses. Providing controllers with tools to help manage their memory resources while working in ever-changing, dynamic conditions can help prevent memory lapses, and prevent and correct these errors before they develop into incidents or accidents.
2. Air Traffic Controller course curriculums for initial and refresher training need to be revised to ensure that controllers utilize the essential skills of scanning, anticipated separation, and prioritization of control duties. Notably, these skills could be taught and strengthened with simulator training.
3. Team effectiveness training would provide a version of cockpit resource management (CRM) for all tower controllers. This training fosters a culture of teamwork in the tower environment to help prevent, detect, and correct controller and pilot errors before they result in runway incursions and accidents.
4. Currently, tower controllers do not benefit from training in visual simulators. Simulators have been recognized as a successful and cost-effective means for flight training for decades and it is the industry standard to provide training in simulators for emergencies and unusual situations. Simulators provide an optimum environment for training to improbable, but safety-critical situations. Providing training for controllers in a visual high-fidelity tower simulator is an efficient, effective use of resources. Also, the

use of simulators for initial controller training would ensure that this training is conducted with no risk to the flying public. Finally, providing initial training in a simulator would cut training time, and increase the knowledge base and experience of new hires before they work in an operating tower. This will become increasingly important with the expected attrition due to retirement and the concurrent influx of hundreds of new controllers.

Air Traffic Control Procedures

The ATC Procedures project will help to reduce the incidence of runway incursions by:

- Increasing controller situation awareness;
- Reviewing (and revising as necessary): capacity enhancement programs, required controller and pilot phraseology, and implicit clearances to cross a runway.

These two objectives will be accomplished by:

1. Establishing national standards for tower control positions to help promote increased situational awareness for controllers with respect to surface operations.
2. Reviewing capacity enhancement programs to determine whether they contribute to surface incidents; if so, they would be revised or eliminated.
3. Reviewing phraseology used for surface operations for greater efficiency and clarity, and then revised as needed.
4. Conducting a study to determine whether revising FAR 91.129(i) would help reduce runway incursions.
5. Initiating rulemaking to require that pilots read back all instructions to: "hold short", "taxi into position and hold" or otherwise enter a runway.

Situational Awareness Technologies for Air Traffic Control

This project will develop and implement technology tools to provide and/or enhance airport surface situational awareness for air traffic controllers. Examples of these technology tools include, but are not limited to, Airport Movement Area Safety System (AMASS), Airport Surface Detection Equipment (ASDE-X), Automated Dependent Surveillance – Broadcast (ADS-B), Next Generation Air-Ground Communications System (NEXCOM), Surface Movement Advisor (SMA), and Airport Target Identification System (ATIDS). These technologies will also support pilots with a clear understanding of airport layout and clearance instructions to avoid deviations in all visibility conditions. The implementation of these interventions would be accomplished through the following activities:
1. New technology tools would be developed by the FAA to enable enhanced surveillance, information, communication and conflict detection for ATC operations.
2. FAA and airport operators would provide airport surface surveillance equipment with conflict alerting capability at air traffic control towers.
3. Digital data link capability would be developed and implemented to enable automatic transmission of ATC instructions/information (between the ground and aircraft).

4. Situational Awareness Displays developed in support of the above listed strategies would incorporate industry best practices for computer-human interface (CHI) design to enhance and support ATC decision-making.

Visual Aids Enhancement and Automation Technology for Airports

Numerous runway incursion incidents and accidents have resulted from pilot and vehicle operator ground movement navigation errors. Substantially improved ground movement navigation guidance is needed to prevent such accidents and incidents. The four Visual Aids Enhancement & Automation Technology Project safety enhancements that follow provide the capability to present needed information in the normal field of view of pilots and vehicle operators:
1. Variable message signs would have the capability to present critical clearances such as "hold", "cross" or "take-off."
2. Improved airfield marking & lighting would enhance the conspicuity of runway and taxiway centerlines and other critical airport markings.
3. Providing runway occupancy information to pilots on final approach would prevent accidents and incidents due to a "land over" where an aircraft on final approach jeopardizes, or collides with, an aircraft on the runway awaiting takeoff clearance.
4. "Smart" ground movement lighting that indicates the taxi route clearance would substantially reduce runway incursions resulting from pilots getting lost and proceeding onto a runway or taxiway without a clearance.

Pilot Training

Pilot deviations account for more than half of all runway incursions. Enhancements to pilot training would substantially contribute to runway safety by helping pilots to avoid, detect, and correct errors before they result in runway incursions. By increasing the number of surface movement tasks on written and practical test standards, and incorporating new and revised training material significant improvements in pilot training can be achieved. The training material would entail:

- Increasing situational awareness in the airport environment
- Effective pre-taxi planning and briefing
- Use of standard operating procedures for surface operations
- Task prioritization
- Effective crew resource management

These interventions proposed by the pilot training workgroup would be implemented through the existing infrastructure within the FAA and industry. Policies, procedures, and implementation guidelines for pilot training programs to prevent runway incursions would be developed and implemented using resources available to FAA, GA, military, and air carrier pilots (such as advisory circulars, and safety material compiled from government, industry, academia and DOD).

Aircraft /Vehicle Upgrade and Installation (Moving Map Display)

The Runway Incursion JSIT determined that the moving map display systems were the most powerful intervention for runway incursion prevention. As mentioned previously, pilot deviations account for more than half of all runway incursions. The RI JSIT estimated that nearly half of these deviations can be prevented using a moving map display with only GPS own-ship position. Using the JIMDAT process, the RI JSIT determined that a moving map display with own-ship position and airport traffic displayed (e.g., ADS-B/TIS-B), would have been highly effective in preventing the runway incursion accidents and incidents considered by the RI JSAT. Further enhancements such as runway occupancy alerting and graphical taxi clearances, would provide additional benefits.

There is a range of hardware solutions to implement these capabilities, from that of a hand-held device to a moving map integrated into the primary flight display. This range of implementation solutions is provided to address the diversity of aircraft type and operational capabilities.

While cost remains the biggest barrier to implementation, a phased approach is proposed which minimizes cost and provides an immediate and measurable safety benefit. The initial phase will address the development and installation of an airport moving map cockpit display with own-ship position (enabled by GPS). Subsequent phases will address the addition of data-linked traffic information, runway occupancy advisory systems, and taxi routes and clearance limits. Operational benefits achieved through the implementation of moving map technologies (such as those that will enhance capacity and efficiency) will also help to offset equipage investment.

The enhancements proposed in these plans would reduce the number of runway incursions by:

1. Improving pilot situational awareness with the implementation of moving map displays in the cockpit. This is proposed as a voluntary equipage with a phased implementation. The first phase provides the capability of a moving map showing GPS own-ship position. The second phase adds traffic to the display via datalink technologies. The third phase adds runway occupancy advisories. The final stage adds graphical and/or textual presentation of taxi clearances and clearance limits.

2. Improving situational awareness of airport vehicle drivers with the voluntary implementation of moving maps in vehicles that operate on the airport. This would help prevent runway incursions caused by driver error and enhance their understanding of the operations on the airport.

Recommendations

The unifying goal of the Runway Incursion JSIT was to produce a practical agenda yielding significant safety benefits, not for a selected group of organizations, but for the entire aviation community. Because not all organizations comprising the general and commercial aviation communities are represented on CAST and GA JSC, the RI JSIT

recommends that CAST and GA JSC ensure prompt distribution of this report to all major organizations comprising the U.S. commercial and general aviation community, the presidents of IATA, IFALPA, the Chairman of the JAA Board, and the President of the Council of ICAO.

Additionally, the RI JSIT is the first of the CAST JSAT and JSIT teams to focus on incident data analysis as their primary source of generating Safety Enhancements. As industry and government collectively move toward a National Strategic Plan for Aviation Safety, they will be required to increasingly move from a reactive to a preventive model of mishap elimination. Achieving the next order of magnitude reduction of risk in aviation may require an expanded focus on other sources of data (e.g., incident data as well as accident data) to identify the precursors of catastrophe. The move from studying primarily accident data to a reliance on incident data will require improved data collection systems, procedures, and protections among all the stakeholders within the aviation community. Most importantly, the RI JSIT recommends that CAST and its member organizations implement the seven projects identified as soon as possible.

In summary, the data driven and consensus based process that the RI JSIT has used yielded seven major project areas with twenty-two specific Safety Enhancements. It is the consensus of this group that the implementation of the recommended "Safety Enhancements" should be pursued with a system approach. The causes (precursor events) of runway incursion are many and varied.

The mitigation of the growing threat of Runway Incursion will require a multi-faceted approach.

Aviation stakeholders will have to CAST a broad net if we are to significantly reduce the risk of fatal runway incursions.

Concept of safety management system embraced by many countries

In the United States, a newly issued SMS standard for use by air operators is the product of extensive research and collaboration involving industry, labour and government safety regulators

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A safety management system (SMS) standard for use by aircraft operators of all types and sizes was issued by the Federal Aviation Administration (FAA) in late June 2006. The new standard is the product of extensive research as well as inputs from industry, labour, and both U.S. and other government safety regulators, and is described in an FAA advisory circular entitled *Introduction to Safety Management Systems for Air Operators.*

Under an ICAO provision that took effect on 24 November 2006, member States are required to ensure that aircraft operators, aviation maintenance organizations, air traffic services providers and aerodromes implement safety management systems. The United States, among many other nations, has enthusiastically endorsed the SMS concept.

Product of necessity

The current operating environment for commercial aviation is characterized by complexity and almost constant change. This requires that air operators and aviation service providers constitute open systems, continually adapting to this dynamic environment in order to survive. The modern aviation system is best viewed as a "system of systems" with complex interdependencies and a variety of business models and adaptable relationships.

The FAA, together with ICAO, recognizes the need not only for a more systems-oriented approach to safety than has been previously practised, but for a more managerial approach to safety on the part of both government and industry. Notwithstanding the FAA's responsibility to promulgate regulations and standards, progress in aviation safety can be enhanced with a more integrated and cooperative relationship with industry versus a legalistic, adversarial approach. Safety management is, therefore, more rightly viewed as a shared effort by government and industry.

Trends in management theory indicate that a structured approach to management, where clear goals and requirements are set and where management processes are put in place to assure attainment of these goals, are more reliably effective than other approaches. The FAA is in the process of instituting a completely systems-based approach for air carrier oversight. Both the agency and industry recognize that this transition cannot be effective through the regulator's actions alone. System safety must be infused into the management systems of air operators and other service providers if it is to have the desired effect on safety outcomes.

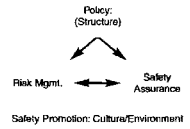


Figure 1. The relationship of major elements of an SMS

It is to this end that the SMS standard was developed. The standard is designed to be used by operators to develop a management framework for safety risk management and safety assurance. Moreover, the standard postures the safety management efforts in such a manner that they can be integrated with the other management systems of the airline as well as provide an interface with the regulatory oversight system.

The process

At the time that the FAA began considering development of SMS standards and implementation by U.S. airlines, several other countries had already developed material on the subject, as had the Air Line Pilots Association (ALPA) and several U.S. airlines. A number of other innovative quality management and system safety efforts were also in play that employed many of the concepts seen in a typical SMS. It was clear at the outset that the future system would benefit from commonality and harmonization with existing systems, and so the FAA/industry team commenced a process of research to avoid reinventing the wheel. However, the FAA/industry team has also made its own unique contribution along the way.

The research project was conducted under contract to the FAA Technical Center after a review of requirements using a focus group with representatives from different FAA entities, several major airlines and ALPA.

The research project entailed a detailed literature search of documented aviation safety management systems, as well as existing management systems developed for quality assurance, occupational safety and health, and environmental protection. Beyond the literature search, site visits and interviews were

conducted with representatives of regulatory agencies and operators in Australia, Canada, New Zealand, and the United Kingdom. Interviews were also conducted with representatives of the Joint Aviation Authorities (JAA) and several third-party industry groups.

The research team also considered the work of several contemporary aviation theorists, notably, Dr. James Reason, and several other common sources of system safety background, such as the U.S. military standard Mil-Std 882.

Standard development. As the project progressed, a growing recognition of the need for a universal standard emerged. The FAA/industry team perceived that there was a need for conceptual harmonization across the various service providers in the aviation system. A team was formed under the FAA's Joint Planning and Development Office (JPDO) to develop a universal SMS standard template that was designed for broad applicability across all types of aviation service providers. This approach allowed for discussion among representatives of the component industries of the system and their respective oversight organizations, and provided a forum for review of the emerging documents.

Structure and functions. The standard is designed to take a functional orientation; that is, requirements are laid out to delineate what processes are expected rather than how they will be implemented. This allows operators the maximum latitude to build programmes that align with their existing or proposed business and management models while assuring a common set of SMS processes across operators.

The individual processes in the standard's clauses were organized under the structure of the "four pillars" defined in the draft SMS manual for the U.S. Air Traffic Organization (ATO), which was already under development because of an earlier ICAO mandate for implementation of safety management systems in the air traffic management (ATM) field. The four pillars constitute policy, safety risk management, safety assurance, and safety promotion. Of these cornerstones, the risk management and safety assurance pillars define the two principal, interactive processes of the SMS. The policy pillar provides structural documentation of the system, including a requirement for assignment of responsibility and authority for management processes and provision of related procedures. The procedure for safety promotion, along with certain policy requirements, provides for an organizational environment that supports a healthy safety culture. *Figure 1* shows the relationship of these elements in the SMS.

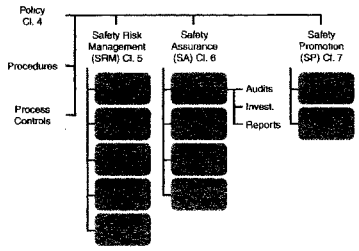


Figure 2. Functional description of the FAA SMS standard

Systems must also facilitate audits by both operators and third parties. For this reason, the general format of the ISO standards was favoured as a pattern. The environmental standard, ISO 14001, was chosen as the basic template. This standard was selected because the system requirements for environmental protection, like those required for safety, are based more on objective assessments of the impact on system users and on the public than on customer satisfaction. At the same time, the safety assurance processes of the SMS drew heavily on the auditing, analysis and preventive/corrective action processes defined in ISO 9000. Therefore, ISO 9000 was used as the basic template in these areas.

Figure 2 provides a functional description of the SMS standard's clauses, showing the organization of the document and the relationships of its principal elements. Clauses four through seven constitute the four pillars of the SMS as described above. Clause 4 (policy) contains a requirement for procedures and organizational controls to be defined throughout the system. A number of individual processes also call for measurable criteria. The remainder of the figure shows subprocesses that are described within each major clause.

Safety policy is the underpinning of the SMS. Effective safety management begins with policies that convey to all staff members the top management's emphasis on safety and their objectives. These policies include assignment of responsibility and authority throughout the organization with respect to all safety-related functions. Policies must also be translated into procedures to provide staff with clear instructions for accomplishing their safety-related functions as well as organizational controls to ensure that these functions are performed as intended.

Safety management is founded on risk management. The fundamental objective of any safety programme is to identify hazards, analyse and assess associated risks, and design and implement controls for those hazards and risk factors. The safety risk management (SRM) pillar in the FAA's SMS standard for air operators is based upon a model that is used in several popular system safety training courses, including the course taught at the FAA Academy. The FAA's SMS standard starts with a careful analysis of the organization's systems and goes on to provide structured processes that result in the development of risk controls. The principal steps in the SRM process include system and task analysis, identification of hazards, and risk analysis, assessment and control. Each of these steps is described in brief below.

• System/task analysis: Both physical (e.g. equipment, aircraft, facilities) and organizational systems are to be defined in order to gain a thorough understanding of the conditions in which hazards may arise.

• Hazard identification: Systems, processes and tasks are analysed to identify the existence or conditions that could create hazards to personnel or property.

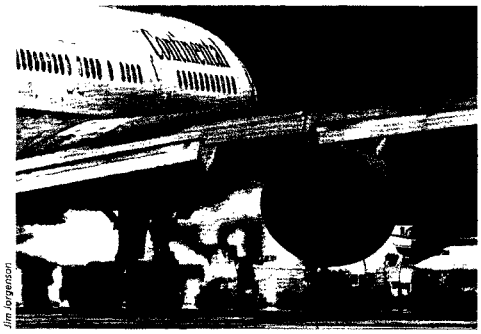
• Risk analysis: Hazards are further analysed to determine factors related to risk severity and likelihood. These will later become the basis of risk controls.

• Risk assessment: Overall risk is evaluated for its acceptability. The FAA's SMS advisory circular, AC 120-92, uses a risk matrix based upon severity and likelihood definitions provided in the ICAO *Safety Management Manual*.

• Risk control: Where necessary, controls are developed to eliminate hazards or to reduce their potential effects. These controls then become system requirements, which will be continuously evaluated by the safety assurance function of the SMS, a process that operates similar to a quality management system.

Safety assurance, the third cornerstone of the safety management system, involves safety, quality and integrated management. Risk controls developed under the safety risk management pillar now become organizational system requirements. Safety assurance involves taking these requirements and applying quality management techniques to the process of ensuring that these controls are being correctly implemented and that they are producing the desired results.

The group that developed the standard kept in mind that airlines are really a collection of systems. There are the technical systems that make up flight operations, ground operations, maintenance and training, as well as other management systems that must be in place for the business enterprise to run. Moreover, other areas of health and safety must be managed by these businesses, such as occupational safety and health management systems and environmental management systems. While the focus of the SMS is on safety, the standard was drafted in full recognition of the need for airlines to balance requirements and to make them fit together with a minimum of duplicated effort.



Jim Jorgenson

The final version of the FAA's SMS standard and associated guidance material will be based on feedback and data analysis involving a diverse group of operators and service providers

Safety promotion, the final pillar, is the foundation of a sound safety culture. It was developed with recognition of the importance of a sound safety culture to the safety management process. Employee knowledge, involvement and motivation are crucial to safety management success.

The safety promotion pillar stresses training and awareness, communication, and active participation. It also sets the groundwork for support of a "just culture" in which employees are encouraged to report safety deficiencies with confidence that their management will be fair and responsive to their input, and without fear of punitive actions.

A sound, just safety culture recognizes that well trained, motivated and responsible employees are nonetheless vulnerable to making errors and emphasizes correction of safety deficiencies rather than apportioning blame and punishment. The safety promotion pillar is also closely integrated with the SRM and SA pillars, as it is an important source of information for both.

The foundation of a healthy safety culture is based on well-designed operational procedures that are harmonized cross-functionally and then fully engrained into employee behaviours using a robust employee training programme. This is clearly a responsibility of the management team. However, the conduct of operational activities in a safe manner rests on the shoulders of each employee as they perform technical and service-related tasks. Safety is, therefore, both an individual and corporate responsibility. Safety promotion is laced throughout all initial and recurrent training activities and also throughout all operations so that it can continue to nurture the organization's safety culture.

Programme integration

The SMS standard was developed with the understanding that various safety programme components might already exist separately in an organization. The SMS concept provides a framework for integrating all of these government and industry programmes into a comprehensive system. Most of the existing programmes are treated as optional, but current and future efforts will be directed toward more seamless integration.

Several programmes have more extensive requirements that are over and above the minimum requirements of the SMS standard. For example, the standard requires participating operators to have a confidential employee reporting system and to use these reports in the safety assurance process. The Aviation Safety Action Programme (ASAP), for example, provides such a process with detailed data collection, review, analysis and data

management functions. ASAP was designed for large- to medium-sized operators and the requirements may be beyond the resources of many smaller organizations. Thus, the SMS standard was created with fundamental requirements while treating the more extensively developed programmes such as ASAP as an optional means of meeting the requirements for those organizations capable of making the necessary investments. ASAP is one non-punitive reporting system, but other systems can also be designed to meet the requirements of the standard.

The standard is written so that a company can develop an integrated management system to tie safety and quality disciplines together by harmonizing supporting programmes with the organization's risk management efforts. Since

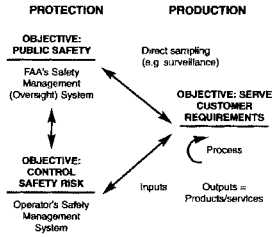


Figure 3. Relationships between an operator's SMS and the oversight system

each of these programmes can identify and assess risk from a unique perspective, integration of management systems can be highly beneficial. The role of an internal evaluation programme (IEP), for example, is to assure the safety of operational activities, verify regulatory compliance, ensure conformance to organizational procedures, and identify opportunities for improvement. An IEP will be more effective if it evaluates safety issues identified by programmes such as ASAP and Flight Operations Quality Assurance (FOQA) or other sources of safety information that may also be in place in the company. Corrective actions are implemented for these safety/quality issues and system effectiveness is again measured by these component programmes, thus continuing the cycle. Senior management is able to track the organization's health when the information generated by these programmes is effectively integrated and analysed.

Oversight system

The FAA fully supports the ICAO position that safety should be addressed by a managerial approach, and furthermore that there are distinct roles for both government regulators and the business entities that they oversee. The FAA began a movement to a more systems-oriented method of oversight in 1998 with the advent of the Air Transportation Oversight System (ATOS). Since then, the agency has encouraged operators to use the same tools that are used by FAA inspectors to design and evaluate organizational systems. Safety is most effectively achieved though an open and collaborative approach, wherein information moves freely not only inside the oversight system and the airline, but between them as well.

Figure 3 depicts the general relationship between the three main entities in the safety equation. The first distinction made in the model is that between production and protection, a concept brought forward by Dr. James Reason, a prominent organizational theorist. In traditional oversight, most of the interaction between the oversight system and the business entity occurs along the diagonal line, direct, interventionist approach. In the safety management approach, safety assurance by the regulator is primarily carried out via the relationship with the operator's SMS. Safety risk management, which is primarily the responsibility of the operator's management, is carried out in the SMS. However, the continuous and open relationship facilitates close collaboration on both risk management and safety assurance.

The depiction of protective and productive functions does not, however, imply a matching organizational structure. In fact, the most important functions of the SMS are carried out by line management, those who are responsible for production and who have the authority to direct activity and allocate resources.

The future

Safety management systems are currently voluntary in the United States, and AC 120-92, the current SMS document, describes an optional process for air operators. However, the FAA came out in favour of the recent amendment to ICAO Annex 6, including a new requirement for States to ensure that aircraft operators implement safety management systems, and it intends to implement the Annex 6 provisions according to the prescribed schedule.

To this end, the FAA is in the process of organizing a proof-of-concept with feedback and data analysis across a diverse set of sizes and types of operators and other service providers. In this manner, both industry and government participants can learn important lessons while the systems are still voluntary and can consequently be tailored more freely.

A collaborative approach among the FAA and industry groups, including representatives of management, labour organizations such as ALPA and other industry advocacy groups, will be used over time, and analysis of the proof-of-concept experiences will allow for better implementation of the SMS concept across the industry. The final version of the standard and associated guidance material will be drafted and edited based on experience.

continued on page 39

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Opinions expressed in this article are those of the authors and are not necessarily the official position of the FAA or other organizations with which the authors are affiliated

SMS standards

continued from page 12

Another initiative is to better integrate the existing suite of advisory circulars into a comprehensive safety and quality management system concept for the aviation industry. Part of this effort will include the development of more sophisticated operational risk analysis techniques including the effects of operational changes on system safety. Particular targets for these efforts will include existing advisory circulars and other documentation for an internal evaluation programme, continuing analysis and surveillance systems and the Voluntary Disclosure Reporting Programme (VDRP). Along these same lines, future study will also explore safety management in other fields of aviation, as well as industry-developed management programmes in common use.

The FAA further plans to infuse the concepts of SMS into the agency's oversight systems. The four pillars will be applied to the processes of producing regulations, standards and policies such that these will be viewed as system risk controls. Future rulemaking will be based more on risk analysis so that the FAA can be sure that necessary controls are in place, and that obsolete regulations that no longer are needed to control risk can be eliminated.

In a similar manner, safety assurance of the overall aviation system will be based on analysis of data coming from FAA field elements as well as directly from aviation service providers. Information sharing will receive much greater emphasis than before as a fundamental part of the FAA risk management and safety assurance strategy. In this manner, the total government/industry safety management strategy can be made more effective and efficient. □

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Background and Fundamentals of the Safety Management System (SMS) for Aviation Operations

Prepared by

The SMS Project Team

of

The Air Line Pilots Association, International

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Introduction

This text provides an introductory view of the Safety Management System (SMS). SMS is a proactive approach to ensuring the health of air carriers through effective management of the hazards that are a natural part of aviation operations. Plainly stated:

- SMS is an ***Operator*** based safety approach
- SMS integrates Employee and Management experience and information
- SMS interfaces with the Regulator's oversight systems

Objective

Our objectives are to explain the background and theory of SMS and to outline the actions an airline would use to develop and implement an effective company SMS program. We will examine Management and Employee roles and actions, and we will provide exposure to Safety Risk Assessment (*SRA*) methods that lie at the heart of SMS.

SMS Benefits

In aviation safety, one of the biggest challenges is to make positive change at your company to improve safety. In this, you must guard your credibility and objectivity if you're going to be effective. Armed with proper knowledge and skills, you can make lasting improvements in your company's safety achievement.

This manual provides a means to assess the safety performance of your airline and effectively bring about change, when and where change is needed. This perspective will also help you work more effectively with government agencies as they begin to introduce the same concepts and methods into their operations.

SMS programs have begun in the United Kingdom and Australia; the Joint Aviation Administration also recommends SMS. Further, in North America, Transport Canada is in the process of a phased application of SMS in all aviation operations through regulatory requirement and the U. S. Federal Aviation Administration is moving toward internal use of SMS.

In this manual we aim to provide knowledge and skills that yield improved risk management decision-making and increase your ability to target resources to those issues having the greatest threat to your company's operations. Using SMS methods helps you effectively assess risk and develop solutions. SMS moves debates beyond emotional appeals and provides a method of communicating safety issues that will be compelling and convincing to the company's decision makers.

SMS focuses on the entire organization. It incorporates line management, safety expertise, and employee involvement to produce a "safety culture." That safety culture is vital to a company's survival and prosperity. The SMS shift from traditional safety approaches to that of the organization is key to safety achievement.

Early in the 20-century, a famous British jurist observed that,

"Every accident is a failure of organization."

Here, in the 21st century, that observation still holds true. The Safety Management System provides a way of changing organizations in a positive way. But, it requires the full participation of all the company to make it effective.

Notes:

Chapter 1 - Background

The Eras of Aviation Safety[1]

Change is the mother of twins: Progress and Worry

The Machine Period

The machine period began with the Wright brothers' first flight. In these early days, safety management was characterized by the phrase, "fly-fix-fly." As aircraft broke down and builders identified the failure, changes were made to try to prevent a recurrence. Aviation companies were small scale so safety fixes were developed quickly. Significant Improvements were made to aircraft engines2, airframes and systems. The preventive actions mostly were improvements in design and airworthiness in response to the high incidence of mechanical-based accidents

The Human Period

The human period flowered in the mid-1970s as safety practitioners began to emphasize the man / machine interface. Following a number of serious accidents, programs such as Crew Resource Management and Pilot Decision Making training were developed. There was emphasis on improved personnel selection and training. Flight deck interaction of crewmembers and of the crew with the aircraft got new emphasis. The human period was a response to the then current perception of 70-80% of mishaps being "human factor" accidents.

The Organizational Period

The organizational period began in the late 1980s and focused our attention on organization and management influences in accident causation. As accidents continued to occur, notwithstanding the attention paid to the individual, safety specialists and accident investigation agencies looked deeper into accident causation.3 Accident investigators began looking at underlying factors which "set up" accident potential."

Two "models" of organizations and safety implications became most important to safety efforts. The two are:

---

1 The concept of safety eras is from Mr. Mike Doiron, President of the Moncton Flight College in Moncton, New Brunswick, Canada.

2 The greatest safety advance in the last 50 years must be the introduction and perfection of the jet engine. The failure rate of modern engines is such that a major accident as a result of engine failure is an extremely rare event.

3 The Moshansky Inquiry into an Air Ontario F-28 accident at Dryden, Ontario, Canada is considered the most thorough accident investigation, ever. Mr. Justice Virgil Moshansky identified a wide range of related factors, which set the stage for the accident. These factors included actions by the pilots, the company, the regulator and the government.

1. Professor Ron Westrum's classification of organizational types and their behavior, and
2. Professor James Reason's model of ***organizational failure.***

The Westrum and Reason models give us practical views of how accidents are generated and prevented and they account for the influence of organizational issues on accident causation in a way that makes sense to managers.

After a basic review of Westrum's organization types we'll show how useful the Reason model is for identifying safety hazards and deficiencies. The Reason model is effective because it translates so well to corporate managers and to employees.

Notes:

Westrum's View of Organizations

Professor Ron Westrum of Eastern Michigan University has identified three basic types of organizations.4 The three aptly cover the organizations we work in and with in the aviation industry. No matter whether you look at airlines, government bodies or aviation interest groups, the Westrum models fit.

The Pathological Organization

The pathological organization is best described as dysfunctional. If it functions, it functions in spite of itself. In any event, it is not a good place to work.

In the pathological organization Information is blocked or controlled and is used to promote or punish. The idea that "knowledge is power" probably came from a pathological organization. It this sort of organization, it's difficult to achieve positive

4 "Complex Organizations: Growth, Struggle and Change" by Professor Ron Westrum, (out of print)

change since the motivation is to blame the messenger and crush new ideas. Failure is covered up and those within the organization have developed a culture to shirk responsibility. Additionally, there is no or little employee/employer bridging or bonding. Management, employees, and their agents, are extremely separate.

The Bureaucratic Organization

A bureaucratic organization is one that is run "by the book." Here the emphasis is on process and well-established information flow channels. Change is top down, and the organization is inflexible. Most regulatory authorities by their nature are bureaucratic. Bureaucratic organizations aren't all bad, though, as they are functional in a *stable* environment. However, they are dysfunctional in a *dynamic* environment. Paperwork and lots of meetings characterize bureaucratic organizations. Unfortunately, for us, aviation is a fairly dynamic environment and that may explain why many of us see the regulator as a bit of a dinosaur at times. It also explains why change is so hard to achieve in or with a bureaucratic organization.

The Generative Organization

The generative organization is a healthy organization. It is flexible. Information flows freely and effectively. The emphasis is on achievement, not process, and the organization responds well to problems. Positive change may come from all levels as the organization actively seeks information and willingly shares responsibility. New ideas are welcomed. There is continuous evaluation of product. Performance and employee/employer bridging is encouraged and rewarded.

As we move further into this text and introduce you to the concepts of SMS, you will see that the objective is to move corporations towards becoming generative.

Notes:

The Reason Model of Accident Origins

Professor Reason's work can be summed up as the "Swiss cheese" model of accident causation.

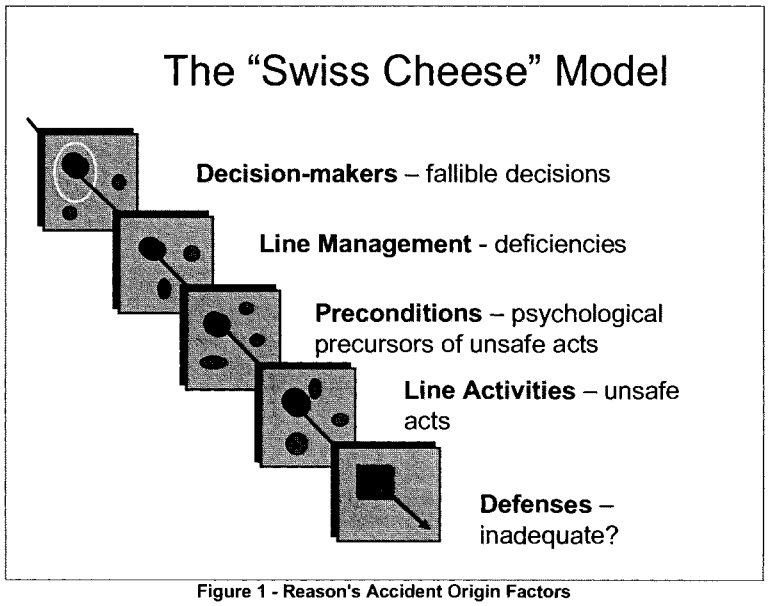

Figure 1 - Reason's Accident Origin Factors

Reason identifies five factors which he characterizes as either *"elements of production"* or *"those who participate"* in the various elements.

- First are the decision makers - system architects, senior managers;
- Second is line management - specialists who interpret and implement the strategies of the decision makers;
- Thirdly, there are organizational preconditions which impact outcomes (the organization's "culture" – e.g., skill, knowledge, motivation, alertness of the workforce;
- Fourth, there are productive activities - actual performance of people and machines; and,
- Fifth are the system defenses or safeguards against foreseeable injury, damage and outages.

We can see the slices of "cheese" that really are parts of our organizations and that all are part of enabling an accident or loss. As an accident process begins it must move through each of Reason's five factors much like moving through filters. Two things stand out when you look at accidents in this way:

1. You can see that each of the five has a role in enabling an accident to occur, but ...
2. ...you also can see that action in these parts of organization function can block or prevent an accident.

This is a full view of the accident process, but if you think about the bottom or last filter, "Defenses," you'll see something important. This is the area that most of our safety actions have been aimed, *up until the present*. An important distinction to realize is that SMS programs view and act upon the *entire* process, not just a single part.

Types of Organizational Failure

The Reason model includes two types of "failures" that happen in an organization. Recognizing them is an important part of managing a safety program:

> **Active Failures** - errors and violations having an immediate, adverse effect.
>
> **Latent Conditions** – existing or sometimes hidden situations in an organization. These are placed in the system by decisions or actions of those at some distance from the operation. Latent conditions may be compared to medical pathogens, which invade the body and lie dormant until a triggering condition (active failures), such as fatigue or stress, brings on illness or disease.

You could consider the Latent Condition in an organization as a compressed spring and the Active Failure as the trigger, which releases the spring. The important thing to realize about these two failure types is how an organization can get best value for its money when addressing them. SMS is all about saving our companies the expense of losses and making the companies more effective.

Up to the present, aviation safety programs only saw and went after Active Failures. That has meant going after only *one* thing – commonly viewed as the "cause" of the accident. Most of our safety history has been oriented to investigating accidents and then solving *one* thing, in *one* place ------- which keeps repeating at other times and in other places.

The problem of Latent Conditions is critical to organizations' efficiency and safety record. Latent Conditions, such as policies or common practices, are embedded in an organization's normal functions and can enable many accidents – not just one. For controlling loss, here's where the most gain can be made. Safety efforts aimed at Latent Conditions have a broader effect than those aimed at Active Failures.

Notes:

"Traditional" Safety Management

Safety managers – This is the common form for safety programs that you see today. It's based on the limited view of Machine and Human models (Active Failures) of safety. Its great weakness is that, in effect, it makes the appointed Safety Manager "responsible for safety." Here, the Safety Manager may be called a Director of Safety, or even a Vice President, but this person still is the one who's responsible.....and vulnerable.

The Safety Manager usually conducts safety meetings, puts up safety posters, reacts to incident reports, and investigates accidents. A big part of the job seems to be taking his or her lumps from the rest of management, from the employees and from the regulator. Safety is compartmentalized into a relatively isolated branch of management, leaving line management to deal with "real" concerns such as operating the airline.

This approach permanently restricts the scope and activity of safety efforts. So long as safety programs and safety managers are "outside" the normal management flow and function, they are vulnerable to arbitrary reduction in scope, staff, and budget. As this occurs, their effectiveness dwindles and so does the safety margin inherent in the operation.

Safety Innovation

The Safety Culture - An organization's culture is a set of beliefs, norms, attitudes, roles, social practices and technical practices. In simple terms, a culture is, "The way we do things here!"

The aim of a CEO and his/her managers needs to be establishing a culture within which constructive criticism and safety observations are encouraged and acted upon in a positive way. The term for this is a "Safety Culture."

A Safety Culture is a set of beliefs, norms, attitudes, roles, social practices and technical practices *concerned with minimizing exposure of employees, managers, customers and members of the general public to conditions considered dangerous or hazardous.*

What characterizes a Safety Culture? Here are its hallmarks:

An *informed* culture

- Management and Employees understand "hazards" and "risk"
- The workforce knows and agrees on what Risk is acceptable and what Risk is unacceptable
- The company seeks to learn what lies behind "errors" so they can be prevented, but it does not tolerate "willful violations"

A *reporting* culture

- Employees and Management are encouraged to voice safety concerns. No one "shoots the messenger"
- When safety concerns are reported they are analyzed and appropriate action is taken

A *learning* culture

- People are encouraged to develop and apply their own skills and knowledge to enhance organizational safety
- Staff are updated on safety issues by management
- Safety reports are fed back to staff so that everyone learns

A *proactive* culture

- Employees and management work continuously to identify and overcome hazards

Notes:

Chapter 2 - Fundamentals of SMS

Origins

SMS has grown out of the aerospace discipline called "System Safety." System Safety originated in the 1960s when spectacular losses made it obvious that the aerospace industry needed an organized approach to loss control (or safety) – an approach that included *Man, Machine and Environment*. These three are the hallmarks and credo of System Safety.

From that realization grew the organized and integrated view of safety that has been responsible for much success in aerospace activities. Other industries saw the advantages offered by System Safety and likewise adopted its practice.

In System Safety, the idea of "Safety" has a definition:

> *"Safety in a system may be defined as a quality of a system that allows the system to function under predetermined conditions with an acceptable minimum of accidental loss."*
>
> Roland and Moriarty

In simpler terms, think of System Safety as:

> *"Organizing to put your hindsight where your foresight should be in the identification and management of risks."*
>
> Jerome F. Lederer

When safety professionals applied System Safety, they did it in steps that were documented and repeatable. Safety efforts before this had lacked this organized approach. One of System Safety's strengths is that it is a "life cycle" oriented process. System Safety is active throughout the entire life cycle of a "system." Here, safety analyses and hazard control actions begin during the conceptual phase of a system and continue through the design, production, testing, use and disposal phases until the system is retired.

System Safety Steps

There are clear steps to follow when you use System Safety:

1. Identify Hazards
2. Determine possible consequences of each Hazard
3. Assess Hazards for associated Risk based on severity & probability

4. Review current or planned mitigation or controls for hazards (system defences)
5. Make recommendations for positive change
6. Perform continual, real-time, system evaluation (howgozit)
7. Do loss investigation
8. Monitor, get feedback, evaluate previous assessments
9. Modify the system as "monitoring" shows necessary

This is a commonsense process and includes a lot when you consider the many aspects of "Man, Machine, and Environment." Note item number seven! Up until recent times, loss or accident investigations were the foundation of safety programs and often were the *entire* safety program. In System Safety, investigations were put in proper perspective and used in a productive manner. In System Safety and SMS, investigations are not done purely for the sake of doing investigations.

SMS / System Safety Definitions

There are some specific safety terms that we use in SMS and System Safety. They are concepts with fairly simple definitions, and they're important to know:

- **Accident** – Any unplanned event or series of events that results in death, injury, or illness to personnel or damage to or loss of equipment or property, or damage to the environment, i.e., mishap.

- **System** - A group of interacting, interrelated, or interdependent elements working together within a given environment to achieve a given purpose within a given time period.

- **Hazard** - An event, condition or circumstance, which can lead to a loss when combined with certain conditions in the environment

- **Risk** - The consequence of a hazard, measured in terms of probability (frequency) and severity. How often does it happen? How bad can it be?

- **System Deficiency** - The circumstances which permit hazards of a like nature to exist within a system

- **Mitigation** (System Defenses) – A technique, device or method taken, or proposed, to control the hazard or to reduce the probability or the severity of its associated risk. Mitigations often are also called **"Hazard Controls"** or **"Countermeasures."**

Notes:

SMS Arrives

In the 1990s safety professionals and managers evolved their views based on System Safety and on new corporate management oriented safety models such as Reason's. While System Safety processes are perfect for the life cycles of aircraft, ships, and buildings and such, they have limits when applied to the *operators* of the systems.

For an airline, we'd like to think that there's no "life cycle" involved. We want our airlines to be ongoing, which means healthy and profitable. Safety is an important part of ensuring that airlines do "go on." To this end, the effective techniques of System Safety required adaptation to meet the needs of operators, our airlines.

The result is the Safety Management System (**SMS**). SMS focuses corporate management activity on loss control as part of the normal line management functions in running a company. In a sense, corporate SMS programs can be called "organic." They are part of the corporate fabric instead of a vulnerable "extra" tacked onto the corporate structure and functions.

What SMS Means to the Operator... and the Industry

In SMS, the idea of Safety is expanded to include and integrate several ideas:

- Safety – managing risk to agreed and acceptable levels
- Management - allocation of resources
- System - interacting, interrelated, or interdependent elements forming, or regarded as forming, a collective unity

You can see that SMS strongly emphasizes the idea of management. Management is, in turn, something that Operators are highly conscious of. In using SMS, Operators develop, use and update:

- Safety Strategies – aimed at compliance with safety rules and at prevention/reduction of harm arising from decisions/operations
- Business Strategies – aimed at creating and fostering shareholder value
- A Management Framework - aimed at enhancing organizational performance through integrating line and safety management.

For Operators, one of the most attractive parts of SMS is that each Operator "owns" its own SMS program. While each program will have basic similarities, each will be tailored to meet the specific environment and needs of its "owner."

The SMS Relationship

For airlines, SMS programs are a three-way relationship of the Operator, Employees, and the Regulator. Each of the three has actions to perform, and those actions relate to similar actions between the other two. Consider this something like a three-legged stool. It works well with all three legs, but is unstable with two and worthless with only one.

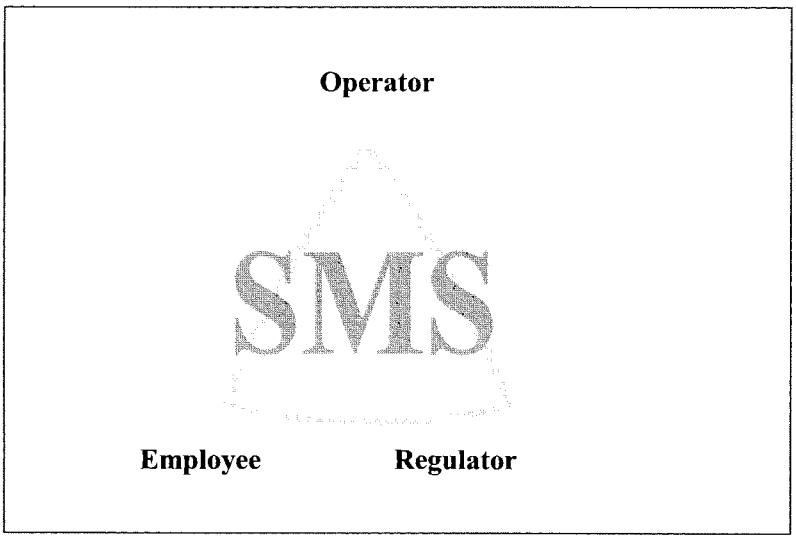

Figure 2 – The Relationship of SMS "Actors"

SMS Activities

SMS programs require three sorts or types of activity. These form the basic framework within which the three SMS "actors," Operator/Employee/Regulator, work. SMS activities fall into one of the three types of action:

1. Organization – actions that set up the program and guide its administration. This would include policies and procedures, and, most importantly, a specific person accountable for the safety of the operation. This is the "accountable executive" and is the person who sets the goals and direction for the company, the person who directs where and how the money is spent, the person in charge.

2. Risk Management – these actions include detecting, analyzing and acting to mitigate or control hazards. In aviation, Risk Management actions are common because this is the classification of most "traditional" safety actions, on a piecemeal instead of coordinated basis.
3. Information – No safety system can be effective without good information. You need it to manage risk. You need it to detect new problems. You need it to verify your "fixes" are working. While you may need to develop new types of information, you'll find that a lot already exists and is merely waiting to be coordinated and viewed by the right people.

The table, below, shows the high level view of how SMS is organized.

SMS Activity	SMS Actions
Organization	• A designated "accountable executive" • A documented program, policies and procedures • Employee inclusion
Risk Management	• Hazard detection and analysis systems • Hazard control systems and practices • Management/Employee inclusion and involvement
Information on hazards and controls	• Means of gathering safety related information • Detect new hazards • Verify that hazard controls are working • Employee input of safety information via non-punitive reporting systems.

Figure 3 – The Overall SMS Framework

You also can view SMS activity as a pyramid. Here, clearly, the quality of everything depends on the foundation of good safety information. It's also just as clear that everything in SMS flows downward from the way the program is organized.

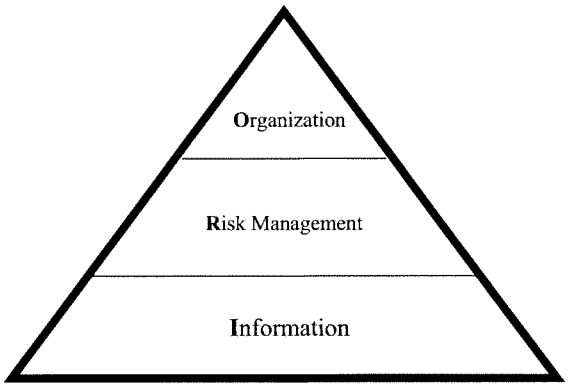

Figure 4 – Another View of SMS Actions

These are the three activities that the three actor groups carry out, but they are done in relation to each other – *not in isolation*. The table, below, shows a basic grid style view of the complete relationship:

SMS Activity	SMS Actor Groups		
	Operator (airline, airport, etc.)	**Employee** (ALPA, etc.)	**Regulatory** (FAA, TC, ICAO, etc.)
Organization	ORG	ORG	ORG
Risk Management	RM	RM	RM
Information system on Hazards	INFO	INFO	INFO

Figure 5 – The SMS Grid

This Grid orients you to the types of activities in SMS and the three-way relationship of the program. Appendix 1 provides an expanded view of the Grid that is more specific concerning what activities each Actor performs in relation to and cooperation with the others. The main point of this "basic" Grid is that each actor in an SMS program has

actions and responsibilities in each type of Activity – these all knit together and support each other.

The SMS program on the airline's property includes both SMS activity by the Airline/Operator and by the Employees. Operator and Employees each have actions in Organization, Risk Management and Information activities.

The focus of this Manual is that of the Operator or airline, so we need to take a closer look at the part of the Grid that applies. Like zooming in from a large chart to a smaller one, we see more detail, but still not as much as in Appendix 1. In the view, below, the emphasis is that the Employer and the Employees each have activities to perform that mate with those of the other. However, there are essential differences, especially at the Organizational level of the program. We will discuss these in more detail, later.

At this point the concept to grasp is that Employer and Employee are linked by formal involvement. Success of the airline depends on both working together. Few things are more frustrating to observe than a boat with two rowers, each pulling in opposite directions. At the best, that describes a static and non-productive relationship going nowhere and achieving nothing. If you place the boat and the rowers in the context of a river moving toward a waterfall, then you see "counter productivity" taken to the ultimate level...self-destruction.

SMS for the Airline

SMS Activity	Operator SMS	
	Operator (airline, etc.)	**Employee** (ALPA, etc.)
Organization	• "Accountable Executive" • Policies/ Procedures	• Formal involvement • Trained Reps
Risk Management Activities	• Hazard Detection • Risk Management	• Hazard Detection • Risk Management
Hazard **I**nformation Systems	• Hazard Control/ Detection systems • Non-punitive reporting system	• Hazard Control/ Detection systems • Non-punitive reporting system

Figure 6 – The Basics of SMS at an Airline

The Operator's SMS program is self-contained, but it mates with the SMS activities of the Regulator. Viewed from the other side, the Regulator must be able to react positively and supportively with the SMS activities of the Operator. The Regulator, in SMS, interacts with the self-contained Operator's SMS program.

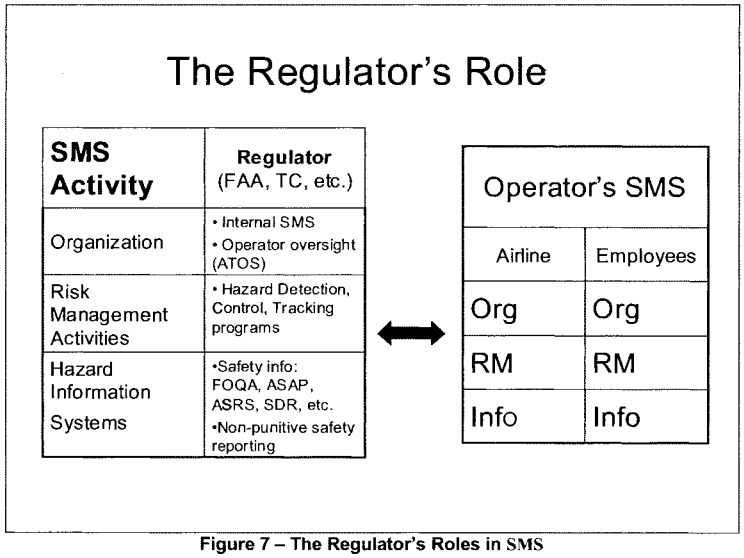

Figure 7 – The Regulator's Roles in SMS

Notes:

Chapter 3 - SMS Details

Now that we have the "big picture" of SMS in mind, it's time to get into some of the details of SMS Activities. We'll look, first, at Organization, then Risk Management, and finally at Information.

Organization

The SMS program belongs to the Operator, so it involves action by the Chief Executive or Operating Officer to make SMS take place. This is the *Accountable Executive* – the person at the top who has the final say and who is responsible for the success of the business. The Accountable Executive is the person that the public and the Regulator see as "in charge." If the airline does well, the Accountable Executive gets the credit. If the airline flounders, the Accountable Executive gets the "credit" for this, too.

For the Accountable Executive, SMS is the "loss control" part of the Business Plan. To make SMS work, the Accountable Executive develops and publishes policies and procedures that incorporate SMS into the normal management of the company. When safety efforts flow from the "top," they are an integral part of corporate planning and decision-making at all levels.

Culture and Safety Culture

Each organization or corporation has its own, unique culture. In simple terms, this culture is what the people in the organization do and how they do it. It is the common body of perceptions and modes of action that characterize one organization vs. another.

A common mistake among organization managers is their perception of safety in an operating organization. Commonly they believe that they can force their organization to be an "operational culture" where everything is oriented to the mechanics of operating the airline. Also, commonly, managers perceive that safety is the opposite of the operational orientation. In other words, the perception in some organizations is that "being safe" takes away from the operational reality of airline operations.

This misses the point. The goal is not merely to be safe. **The goal is for an organization to *operate* safely.** This requires that the airline foster a "safety culture." If the airline doesn't operate safely, it incurs losses of people, equipment, money, and reputation. These losses drag an organization down and can even bring it to an end. Factors such as personnel and passenger casualties, equipment damage and loss, and financial outlays for unplanned repairs all have dollar values. Even the spin-masters of the Marketing department probably would admit that their airline's reputation could have

a dollar value put on it in terms of lost business. Losses of any sort are costly.

An airline using SMS aims at involving the entire resources of the company in loss control. Here the idea is to be proactive in avoiding or minimizing losses to the company. It requires:

- An awareness of the ways that the company is confronted with potential losses.
- A willingness to coordinate all the company's resources in avoiding losses.
- Tying management and employees together in the loss control process. With this slant, the company increases its efficiency.

A company that takes this approach has a "safety culture." This is the company that recognizes Hazards and assesses Risk associated with each Hazard. This sort of company goes on from the Assessment stage to managing the Risk. You can see that this works best when the airline ties all its resources together:

- Organization - management and employees all are proactive on detecting hazards and organizing the response.
- Risk Management – all the parts of the company combine information to accurately assess Risk and develop realistic controls or mitigations for the hazards. At the best this eliminates "silos" common in corporations; at the least it opens up means of "cross-silo" communication.
- Information - Existing and new sources of information are applied to the problem of detecting hazards, verifying hazard controls are in place and confirming how effective hazard controls turn out to be.

A Management Framework

A great deal of SMS depends on management from the top. It requires Policies and Procedures. It requires Planning. Fortunately, these all are normal functions of management.

While a newly organizing company has to create everything from "scratch," existing companies already have management structure and practices. For the existing company this is both an advantage and a disadvantage. It permits an existing company to pull together existing practices and resources into an SMS system. It also saddles a company with existing misperceptions and dysfunctions.

For the new or old corporation, the first parts of setting up SMS are the same:

Designate the Accountable Executive - The SMS program flows from the direction of the Accountable Executive, so the company must first decide what officer is the Accountable Executive. This selection and designation is something that must be

practical in terms of the flow of policy in the company. Designating the Accountable Executive also must agree with the Regulator's practical understanding of what makes the company tick. There is no advantage to selecting a "figurehead." Since an Accountable Executive is concerned about revenue, asset utilization, productivity, and company financial health, SMS needs to originate from that same person.

Establish Policy – A company must have a policy setting out the goal of the SMS program and directing that it be implemented throughout the company. The policy needs to establish the idea that safety achievement must be planned and measured. The management structure will be responsible for safety achievement and accountable for it, too. The policy motivates and involves all company management and employees. The Policy is a statement of organizational and individual responsibility

To implement effective SMS you must define:

1. The organization's safety objectives,
2. What form SMS will take and
3. Who has what responsibility?

The policy makes it clear that the company will be *proactive* in safety, not *reactive*, e.g.:

Proactive	Reactive
• Safety reporting can be proactive • System surveys are proactive • Risk assessments of ***proposed*** operations are proactive • Risk assessments of ***current*** operations (not triggered by an incident or concern) are proactive	• Accident investigations are reactive • Incident investigations are reactive • Error management is reactive • Deviation analysis is reactive

Figure 8 – Proactive and Reactive organization actions

Establish a Plan – SMS does not happen overnight. The company needs a plan for moving from the current mode of operation to SMS. The Plan must reflect the time required to change current practice and to develop new company practices and procedures where and when needed. While a small company operating a few aircraft in a limited geographic area probably could move into SMS in only a few months, a large airline with many aircraft operating in a variety of environments could need a few years to complete the changeover. Appendix 2 outlines one possible approach to organizing SMS at an airline.

The time period involved in establishing the Plan depends on two important things:

1. The "push" applied by the Accountable Executive and
2. How many of the elements of SMS already exist in the company.

The company's SMS Plan, like any other company plan, will require Goals, Milestones and defined Steps to mark out the way. Here, the various parts of the company need to be realistic in determining what needs to be done and how quickly it can be done, in coordination with the rest of the company.

Plan for whatever specialized training might be required, however, recognize that the need for such training is limited. SMS takes advantage of existing management and employee expertise, so general training is not needed. The personnel who are doing the overall planning and coordination may need training, but not the general group. As the SMS program develops, training needs may become apparent, but plan to accomplish these as normal training would be accomplished. Plan to "grow" the SMS program, not "mint" it.

Organize Procedures and Practices – Procedures and practices of a company are both the road to follow and the drumbeat that the company marches to. In setting up procedures and practices, SMS designers need to:

- Define roles, resources, responsibilities, "top down" accountabilities with a reporting structure, and cross silo coordination. Define who makes up safety committees and what they are to accomplish.

- Seek compatibility and integration with other management systems to avoid "reinventing the wheel." This goes to the issue of credibility for the designers of an SMS program. Incorporate as much of what exists as is possible to allay the natural suspicion of "empire building" that arises.

Set Up Controls - An airline needs Controls as part of its SMS program. This means that when safety results are assessed, there are standard means for initiating corrective action when needed. Off-target safety performance needs to be recognized and dealt with in the management structure. Internal audits and inspections are a valuable means of getting at safety achievement and shortfalls. In all cases it's preferable that companies find and fix their own problems before outside parties get involved.

Define the Role of the Safety Manager – While the title may vary, the airline will need a designated person and staff to advise the "accountable executive" on safety issues and problems. The safety manager aids the "accountable executive" by monitoring

SMS processes. The safety officer aids company managers by providing expertise in loss prevention methodology and techniques.

In defining the Safety Manager's job, SMS designers must keep in mind that the Safety Manager and/or the Safety Department do not implement the SMS program. The airline's management implements SMS. The Safety Department may gather and analyze hazard and risk information, but developing and implementing hazard mitigations is a line management function.

One of the most important services a Safety Department can provide is that of the "feedback loop." An essential part of SMS and System Safety is the information loop that looks at how well hazard mitigations work. It's not realistic for managers to command fixes and assume that they do what was intended. Good ideas may not work. Situations may change. Fixes may be misapplied. Etc. For whatever reason, it is normal that companies adjust the ways it reacts to hazards. Making good adjustments requires information that accurately reflects the way the company operates.

Define the Role of the Employee – One of the innovations of SMS is that employees are actively and continuously involved in company safety achievement. Depending on your experience and bias, it may seem natural to involve employees or it may seem highly irregular. The important thing to realize is that employees have the best knowledge of what's going on in the field. They are the part of the company "where the rubber meets the road." Understanding that is part of establishing and maintaining a "safety culture."

With that in mind, SMS Policy and Procedures need to aim at the following:

- Employees need to know and understand the requirements of SMS, particularly, to access non-punitive safety information and reporting provisions
- Employees are knowledgeable in operations and a good source of reports on operating deviations
- Employee involvement depends on feedback and an explanation for action or inaction when an employee reports safety information
- Key employees will need SMS training
- A company needs to develop and implement employee/employer agreements to support SMS and ensure protections are in place. It's not realistic to expect employee involvement if there's no protection from company and regulator when they provide a report. Reports are "data points." The company needs data to keep its operation efficient.

A company needs to be able to distinguish between employee actions that are part of the normal job process and employee actions that purposefully bring about harm. Purposeful harmful acts merit direct action regarding the employee. This is very different from an employee making a safety report that involves normal actions and

brings hazards to the attention of the company. In the first case, safety is not the issue so much as a willful act that needs to be dealt with. In the second case, the act of safety reporting needs to be encouraged by impunity from company or regulator disciplinary actions.

Notes:

Chapter 4 - Risk Management

"We do not know how to predict what will happen in a given circumstance. The only thing that can be predicted is the probability of different events. We can only predict the odds."

Richard P. Feynman
Nobel Laureate - Physics

Definition: Risk Management is the process where management decisions are made concerning control and minimization of hazards and acceptance of residual risks.

If one wants to "manage" risk, one needs to recognize that "management" entails the idea that some level of risk is acceptable. To follow up that idea, "safety" means drawing a line between the acceptable and the unacceptable – then working to make that distinction work in the real world.

Airlines, Employees and Regulators all proceed with different concepts of Risk, based on the perceptions of their people, their experience, public pressure and any number of other "environmental" factors. If differing Risk strategies and views exist, then there are inevitable disagreements, any of which drag the operating process down. If the three Actors can come to agreement on the ideas of Risk, then the operating process can go smoothly and efficiently.

Risk Assessment

Risk needs to be used as a term attached to a specific hazard...and hazards can become known in many ways. We can learn of hazards from accidents, we can learn of hazards from peoples' innate ability to forecast or infer, and we can learn of hazards from collecting information from the operating environment. Appendix 3 expands the approach to Risk Assessment used in the Safety Risk Assessment (***SRA***) process.

In an SMS program, when we have a specific hazard to work with, then we need to assess or analyze it before we run off in some direction meant to "fix" the problem. A lot of traditional safety activity, over the years, has been devoted to promoting "fixes" in search of hazards. That's a poor investment of energy, time and money.

In SMS, the Operator and Employees cooperate in hazard detection and then in Risk Management. Together, they assess the risk that goes with a hazard and agree on the acceptable level of risk. Assessing each hazard for Probability and for Severity does this. In other words, the Employer and Employees pull together quantitative and qualitative information to figure out "How bad could it be?" and "How likely is it to Happen?"

Quantitative information makes the Assessment easier to do and to defend, but often there isn't enough such information. In that case we must fall back on experience and expert opinion – *Qualitative* information. Certainly, that makes the Assessment harder to arrive at, but it still is valid if arrived at by discussion between informed Assessors. When a Risk Assessment rests on the opinion of one "expert" or a single instance, it is not as valid as when arrived at by consideration of a group of experts with experience in the matter.

Problems in Risk Assessment

When a company starts a Risk Assessment process it needs to understand where the problems in the process lie. That understanding will lead to a better "product" for the airline – *useful* insights regarding a hazard.

Inputs

Information deficiency – one of the obvious problems in Risk Assessment is lack of information. Hazard data can be scarce, and sometimes the first step in assessing the probability and severity of a hazard may be to do concentrated research to fill a void in information.

Measurement error – obvious, but possible, is making errors in measuring probability and severity of a hazard. As in anything else, be careful, and use correct measurements.

Uncertainty – Several types of uncertainty plague risk assessments.

- Uncertainty in cause and effect – this is offset by bringing in expertise of knowledgeable persons
- Uncertainty in human and management factors – often risk is viewed from the context of hardware. Human factors are a less clear quality to analyze
- Uncertainty in predicting the future – again, expert opinion is valuable, as assessors need to have a valid perspective on the way things will be.

These uncertainties aren't abnormal. In fact, they're typical of any management activity involving assessment. They can't be eliminated, but they can be accounted for to the best ability of the assessing group.

Motivations

The motivation and driving force behind risk assessment can contain pitfalls for a company. At a minimum, Risk Assessors need to follow an organized, "systems" approach that is well thought out – not "quick and dirty."

To go further, the process has to be based on correct assumptions where they are required. One can assume normal wear and tear that degrades equipment, but is that assumption valid if the equipment is operating in a high, hot and sandy desert climate?

One of the most basic Motivation problems that can face Risk Assessors is that of resources. It is too easy to base a risk assessment on the resources available (or perceived to be available) rather than on the risk associated with a given hazard. This could be summarized by the expression, "No matter what the question is, the answer is....."

Compensating

In Risk Assessment, it's important to offset the problems in the assessment that we've described. In most cases, the best things to do are clearly document the risk assessment process and then explain where the uncertainties lie. This includes describing the thought process behind Risk Conclusions. If you have only one "data point" then it's valid to explain how the Risk was inferred from that minimal data set. It is not valid to demand actions, in dramatic prose, and not "mention" that the actions are based on inference rather than analysis. You'll only get just so far by declaring that "the sky is falling." That's no way to gain and maintain credibility with managers or employees.

Managing Risk

Once the Risk of a Hazard has been understood to the best degree possible, then it's time to figure out what that means. That in turn leads to conclusions on what to do about the risk.

The Risk Assessment Matrix is a basic tool for Risk Management. The matrix ties hazards to the risk qualities of Severity and Probability. The matrix can be in as much detail as is useful, and doesn't need to offer more detail than is realistic. Where lots of data exists, there may be five or six levels of probability and severity that could be looked at. With scanty data, or in qualitative analysis, it may be more appropriate to use a less complex matrix on the order of "small, medium, and large." Don't lock into a 5x5 matrix or a 2x2 matrix. Set up a matrix according to need and information available.

The Risk Assessment Matrix

Following are two example Risk matrices. One commonly is seen in Canada and the other in the U. S. One ranks left to right; the other ranks right to left. The format does not matter, since they both display the same information. Again, use the format that's useful to you and to the people who will be reviewing it.

Example Risk Assessment Matrix No. 1:

Severity	5	5	10	15	20	25
	4	4	8	12	16	20
	3	3	6	9	12	15
	2	2	4	6	8	10
	1	1	2	3	4	5
		1	2	3	4	5
		Probability				

Figure 9 – "Five by Five" Risk Assessment Matrix

Typically, we describe Severity and Probability measurements in "most to least" terms such as:

Severity	Probability/Frequency
5 – Catastrophic	5 - Certain / Imminent
4 – Severe	4 - Probable
3 – Major	3 - Likely
2 – Minor	2 - Occasional
1 – Negligible	1 - Remote / Unlikely

With Severity and Probability assessed, the range of response typically is as follows:

Red		Unacceptable
Magenta		Undesirable
Yellow		Acceptable – with action
Dark Green		Acceptable with monitoring
Light Green		Acceptable

One of the tasks of a Risk Assessment exercise is to arrive at a common scale for each of these qualities of Risk. In some cases, numeric values can be set, but often the descriptions will be purely verbal. Agreement must exist on the definitions of the scale.

Example Risk Assessment Matrix No. 2:

Likelihood	***Severity***			
	Catastrophic	Critical	Marginal	Negligible
Frequent				
Probable				
Occasional				
Remote				
Improbable				

Figure 10 – "Four by Five" Risk Assessment Matrix

Severity is viewed in four grades, which users can define by dollars, damage or any other useful concept.

Likelihood is broken down into five groups. While these can be qualitative judgments, some users assign numeric values to the Likelihood / Severity scale. An example of this is:

Frequent	1.0	
Probable	10^{-3}	(one in a thousand)
Occasional	10^{-5}	(one in 100,000)
Remote	10^{-7}	(one in 10,000,000)
Improbable	10^{-9}	(one in 1,000,000,000)

In this example, the ranking of Assessed Risk is fourfold:

High	Red	
Serious	Yellow	
Medium	Blue	
Low	Green	

In either version of the Risk Assessment Matrix, you see the same ranking and rating idea adapted to the needs of the organization that uses it. The theory and use are the same – only the display is different.

It's relatively easy to determine that a hazard that is both Catastrophic and Imminent is something that deserves action. Likewise a hazard gauged as Negligible and Unlikely will go to the bottom of the list for action. Such a hazard may even be discarded for further consideration – with appropriate documentation of the decision. However,

there's a broad area of risk assessment between the two extremes that is the area of value judgment and decisions regarding risk acceptance. Risk Assessment matrices are a tool in deciding what deserves action. They're a means of relating the risk of one hazard to that of another.

As a practical matter, when a Risk Assessment team identifies hazard control actions that are easy and inexpensive, these actions should be done without a lot of debate. Always do the easy stuff quickly, while you're still debating the more complicated stuff.

Risk Value Judgments

At some stage, organizational values and subjective judgments enter the decision-making process and you have to consider:

- The importance of the estimated risk
- Associated social, environmental and economic considerations
- The potential cost of acting vs. not acting

Part of these judgments is having a good knowledge of your environment. Certainly you need to view Risk in terms of the physical environment, but you also need to have an accurate view of other situations in which the organization functions. For instance, what are the policies, practices and prejudices of the Regulator that apply to the hazard you're looking at? What parts of the organization will have to be involved in hazard mitigation? What public perceptions bear on the hazard and associated risk? Sometimes, matters such as these alter the purely objective view of a Risk Management group.

Risk Acceptance

A risk assessment team develops and documents an understanding of a hazard and its risk. From that understanding, the team needs to go on to developing mitigations for the hazard, and from that the team heads into the touchiest part of Risk Management – the level of risk acceptance that will bear on the hazard.

Of course we want to eliminate all risks and their hazards, but experience teaches us that complete mitigation or control is not feasible or realistic. That means that there always will be some level of acceptance that applies to risk.

This is the point when technical experts bring decision makers into the effort. Sometimes decision makers are left out or they choose not to participate until the time comes to make a decision. However, it's always better that decision makers participate in the Risk Assessment process so that they have a good basis of knowledge.

This is why it's so important for the Risk Assessment group to thoroughly document its research and conclusions. All of this needs to be explained to the decision makers.

Sometimes Risk Assessment conclusions must be explained to the regulator, and sometimes even explained to the public.

For the Decision Maker(s) there are two questions that bear on their Risk Management:

1. What risk will I accept?
2. What risk will those I represent accept?

They aren't easily answered questions and they shouldn't be. This is not "shoot from the hip" decision making. This is decision making based on the Risk Assessment that's been furnished and based on the decision maker's knowledge of the organization's environment. It's possible that the decision maker may send the Assessment Team back to do more work. Decision makers get to do that. However, this may not be a good idea if the hazard is rated as Imminent and Catastrophic. The Risk Assessment group needs to clearly describe the importance of its recommendations.

Once the decision on Risk Acceptance and actions is made then Documentation needs to take place. Documentation serves two important purposes for the company:

1. Documentation lays out the rationale for Risk Acceptance based on Risk Acceptance. This is the material that Decision Makers will need for reference when questions arise.
2. Documentation preserves the Risk Assessment and Acceptance work for those that come along later. It can spare later Assessors from having to start from a zero knowledge point, and it shows what the situation was at the time of the original work.

Notes:

One operator responded its Decision Making problems by developing the structured approach shown in the table, below:

Assessment	Follow Up	Level of Communication	Advice to Others
Unacceptable	• Stop operation • Do detailed Quantitative Engineering and Operational Risk Assessment	Regulator Manufacturer Other operators Management & Employees	Warn all
Undesirable	• Restrict operation • Do detailed quantitative and/or qualitative engineering and operational risk assessment	Regulator Manufacturer Other operators Management & Employees	Warn all
Acceptable – with action	• Restrict operation as required • Detailed action plan to resolve problem	Management & Employees	Alert Management & Employees
Acceptable – with monitoring	• Establish monitoring parameters • Set timelines for assessment	Management & Employees	Alert Management & Employees
Acceptable	• Risk profile monitoring	Management & Employees	Advise Management & Employees

Figure 11 – Example Decision Making Matrix

The matrix, above, is an example of how one organization gauged its hazard control actions in relation to the risk of the hazard. The format is the main point in presenting this model; the content can be varied by the organization to meet its own needs.

Hazard Control or Mitigation

Once the Risk Assessment process is complete, SMS activities move into Mitigation or Control of the Hazard. Now the Operator systematically allocates resources to minimize losses by applying controls to the hazard. Hazard controls are something we have a lot of experience with as aviation has grown hundreds on hundreds of controls in the guise of Flight Manuals, Aircraft Handbooks, Incident Response Teams, Command/Leadership/Resource programs and all the gizmos that populate our aircraft.

Hazard Mitigations / Controls

When a company develops and applies hazard controls there are some things to consider. One concern is whether or not the control(s) have anything to do with the hazard. Another is whether or not the mitigating action(s) create other problems. For instance, announcing a new reporting system probably doesn't do much to mitigate a hazard even though it may project a good "image." An example of Controls creating problems is the multiple warning devices that were placed in transport aircraft cockpits in the 1970s – there were so many bells, whoops, chimes, chirps, voices, lights, etc. that they began to interfere with pilots getting the information they needed. That had to be fixed, so Human Factors improvements in information transfer were put into cockpit designs of the 80s and 90s.

System Safety Order of Precedence

When companies take action to control hazards, they need to follow a standard order of precedence for the controls used. In simplest terms the most desirable way to control a hazard is to design it out. The least effective way to control a hazard is to post a warning placard or put up a safety poster. Below, we list the full order of precedence that controls are measured against.

Level 1 – design the hazard out - modify the system
Level 2 - physical guards or barriers - prevent the risk from occurring
Level 3 - a warning or alert signal when the hazard will occur
Level 4 - procedural and/or training changes
Level 5 - advise people (placards, notices, etc.)

The idea is to build safety in and minimize relying on human input or intervention. Realize that putting in warnings or alerts adds complexity and maybe even generates

other hazards. In corrections 3 – 5, human performance is the basis for the hazard control, and human performance is the least reliable sort of "solution" to depend upon.

Verification

There are two parts to "closing the loop" in Risk Management. One is Hazard Information Systems, discussed below. The other is management verifying that hazard controls actually are put in place as intended. Especially in a large company, you can't assume that directing a hazard control / mediation to be put into effect means that it actually is put into effect, that it is implemented when intended, or that it is implemented in the way that was intended. The simple principle is to, "Verify. Verify."

Once controls are put in place, a company needs to "close the loop" by setting up tracking systems for the hazard and its controls. This serves several purposes, all aimed at keeping the company efficient and preserving resources. All this is not for simple "make work." You may find you have to modify the operation or process as time passes and the effects of mitigations change or the operating environment changes.

Figure 12 – Risk Management is a "Closed Loop"

Chapter 5 - Hazard Information Systems

There are several reasons that an SMS program must include hazard information systems:

- Foremost, information systems bring undetected hazards to the attention of the company
- Information systems serve as the means to see whether hazard controls have the desired effect, an opposite effect, or any effect at all. This is a "tracking system"
- Information systems give the company a way to actively involve employees in the safety program – assuming that employees who submit reports get positive feedback for their participation
- Information systems can provide analytic data that aid in assessing Risk for severity and frequency

Requirements

This will depend on the size and organization of the company as well as whether or not there are reporting systems outside the company that serve the purpose. While outside reporting systems, such as the NASA administered Aviation Safety Reporting System (ASRS) may meet some company needs, it's likely that companies will want to tailor internal reports to internal circumstances.

In any case, when reports involve employee input and/or self-disclosure, it's vital that employees be given impunity for submitting reports. Without that key feature, reporting inputs are inhibited and the company will not get the information it needs to keep itself operating efficiently and safely. Also, as a practical matter, if a company fails to extend impunity for employee reports it sends a message that employee participation is not valued. It's a choice between motivating positive behavior that enhances the company versus aggravating the people that have all the field information and who operate all the company's equipment.

Resources

For the people who are organizing an SMS program, Information Systems are a natural starting point. Due to the nature of aviation operations and the history of safety efforts in aviation, many reporting systems already exist. The immediate task for planners is to identify what is in place. Once that's done, planners can address the means of getting the information rerouted to places it needs to be and to analyzing the information.

Certainly, new information systems may need to be developed, but first take advantage of what you already have. Programs such as FOQA, ASAP, and SDRs come immediately to mind because many air carriers already are using the information from these programs. They do an excellent job of showing what the "real world" of a company's operations looks like.

Remember that gaining information on incidents or occurrences that are sub-accident level is important because any of them could have been an accident if circumstances were a little different. There may be an iceberg beneath what your reports indicate.

Also, SMS planners need to be certain there is a good quality mishap investigation and reporting system in place. The point of mishap investigation is not merely to produce a report, but to learn what's needed to prevent the mishap recurring. Mishap reports need to lead to Risk Management. Mishap reports are part of "closing the loop."

Notes:

Chapter 6 - Conclusion

Now that you've seen the basics of what makes up SMS, you can see that two things are all important:

- Management commitment to involvement and support
- How well the SMS Plan is put together

"Top – Down" Change

SMS at an airline is a "top down" process when it's in use. From the top downward, the Accountable Executive puts the Plan and its growth into motion. Before that happens, a lot of preparatory work needs to be done.

A company's SMS Policy needs to fit its organization and the goals it wants to achieve, so someone needs to think out what sort of Policy the company needs and what the roles of the various parts of the company are. Identifying the roles depends on communicating within the entire company structure. All this must accurately fit within an accurate understanding of the company's environment. Geography, climate, personnel and education, the regulator, the customer base, and more need to be considered when understanding the environment. Each aspect of the environment represents needs or requirements for the company. All of the aspects effect the company's safe operation.

"Bottom – Up" Change

Some of the first work in putting an SMS program into place is fairly easy. This "bottom – up" effort is to see *what already exists at the airline* which can and should be pulled into the SMS Plan.

Today, most airlines have some internal safety reporting systems and information systems devoted to quality assurance, maintenance recording, and equipment failures. Likewise information exists outside the company with industry parties and the regulator. In some cases there may already be non-punitive safety reporting systems in place. The thing to remember is that SMS doesn't mean re-inventing the wheel; SMS is all about tying the company's parts together efficiently.

1. First learn what you have.
2. Second, learn what you need.
3. Third, fill in the gaps between "have" and "need."

In this manual, we've described what SMS is and how it has evolved. SMS is the natural development of all the safety efforts before it.

Safety Case – Business Case

SMS represents the best way to boost the efficiency and effectiveness of airlines. It promotes internal coordination of resources. Its comprehensive nature improves the airline's interface with regulators. SMS enhances the company's business plan. The safety case is the business case.

When an SMS program is put into place, line management becomes the principle actor in safety achievement, and that's where safety efforts are most effective. In this way, safety becomes an integral part of a company's processes instead of something pasted on for observation but not use. SMS moves safety from the periphery into the core of the business – keeping the company efficient through loss control and best use of resources. Safety is part of the business plan. SMS is good business.

SMS effectively works in the mode of ALPA's safety philosophy:

- Identify hazards - actions, conditions, system failures or procedural failures that may result in an accident, incident or hazardous event;
- Analyze risk of the identified hazards; and
- Implement Human Centered Design of systems, systems components and procedures to establish and maintain an acceptable level of risk.

For airlines, SMS fulfills the ALPA motto:

"Schedule with Safety."

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Modern Safety Management - Det Norske Veritas
Normal Accidents - Charles Perrow
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Responsible Care - American Chemistry Council

Regulator Sources

Introduction to Safety Management Systems – Transport Canada
Safety Management Systems for Flight Operations and Aircraft Maintenance Organizations – a Guide to Implementation – Transport Canada
Risk Management and Decision-Making in Civil Aviation – Transport Canada
Aviation Safety Management - Civil Aviation Authority, Australia

Where to Find SMS Information

Source	Contact	Resources
Air Line Pilots Association	SMS Group Engineering & Air Safety Department 535 Herndon Parkway Herndon, VA 20171 USA 703-689-4369/4198 Steve Corrie / Bill Edmunds	• SMS Information packet, • Executive and Basic SMS Introduction presentations, • Two-day SMS training session, • Half-day Safety Risk Assessment training session, • Combined two and a half day SMS / SRA training

Transport Canada	Information: Jacqueline Booth-Bourdeau Chief, Technical and National Programs 330 Sparks Street, floor 2 (AARPF) Ottawa, ON K1A 0N8 Tel: 613-952-7974 E-mail: boothbj@tc.gc.ca Texts: Transport Canada Civil Aviation Communications Centre (AARC) Place de Ville, Tower C Ottawa ON K1A 0N8 (ph) 800-305-2059 (fax) 613-957-4208 http://www.tc.gc.ca/aviation/applications/publications/results.asp	SMS texts: • *Introduction to Safety Management Systems* – TP 13739 E (04/2001) • *Safety Management Systems for Flight Operations and Aircraft Maintenance Organizations* – TP 13881 E (03/2002) • *Risk Management and Decision Making in Civil Aviation* – TP 13095 (03/2001)
System Safety Society	P. O. Box 70 Unionville, VA 22567-0070 USA 540-854-8630 http://www.system-safety.org	Products and Services: • *System Safety Analysis Handbook*, • *Proceedings* of the International System Safety Conferences, • *Journal of System Safety* • List of "links" to System Safety sources
Federal Aviation Administration	Office of System Safety (ASY-100) 800 Independence Ave., SW Washington, DC 20591 202-267-7011	
Useful Texts	*System Safety Engineering and Management – 2nd Edition*	Harold E. Roland and Brian Moriarty; John Wiley & Sons, Inc.; New York, 1990

Appendix 1 – The SMS Grid

This Grid or Matrix presents the various elements of an SMS Program inclusive of all three players in the program – the Operator, Employees and the Regulator.

SMS Activity	Client Group		
	Operators (airline, airport, etc.)	Employees (ALPA, etc.)	Regulatory groups (FAA, Transport Canada, etc.)
I. *O*rganization			
II. *R*isk Management Activities	*	**	
III. *I*nformation Systems on Hazards			

Figure 13 – The Basic SMS Grid

* The vertical columns are devoted to each player or actor in the SMS relationship. Read down the columns to progress from **O**rganizational activities, through **R**isk Management, to **I**nformation activities.

** Follow across the Grid, horizontally. See that each player has similar and related activities in each part of the SMS relationship. Each player's actions reinforce and relate to the other players' actions.

Specific SMS Elements Grid

SMS Activity	Client Group		
	Operator (airline)	Employee (ALPA)	Regulator (FAA, TC, etc.)
I. Organization	**- Documented SMS Program** Specific, documented program organization SMS integration with Business Plan Systematic and continuous activities for managing safety risks **- Management Role** Accountable Executive – designated and documented Formal responsibility for "loss control" at each level of management Formal and regular management oversight of hazard / loss control activity assisted by safety trained personnel Cadre of safety trained personnel (Cont'd)	**- Documented SMS Program** Formal involvement in the operator's SMS program **- Employee Role** Participate in developing SMS Participate in regular oversight of SMS program effectiveness Safety trained personnel / topic experts in liaison with management equivalents. (Cont'd)	**- Promote SMS programs** Specific, advisory material **- Management Role** Interface with Operators' SMS programs Regular management oversight of industry hazard / loss control activities Provide safety trained personnel Conduct gov't. / Industry workshops in SMS modes, techniques and uses (Cont'd)

	- Documented Policies (Cover entire company) Risk Acceptance policies	**- Documented Policies** Contract/LOA/MOU documentation of SMS participation actions/ responsibilities	**- Documented Policies** Recommended standards for Operator SMS programs Framework for review of Operator SMS activities: ATOS, CSET, etc.
	- Employee Role Develop full participation of employees Effectively use employee expertise based on line level experience of hazard occurrences and with hazard controls	**- Employee Role** Develop and provide topic experts specialists to participate in company hazard analysis and control activities	**- Employee Role** Prepare line level personnel to live in and foster an SMS environment

SMS Activity	Client Group		
	Operator (airline)	Employee (ALPA)	Regulator (FAA, TC, etc.)
II. Risk Management Activities	**- Hazard Detection Systems**	**- Hazard Detection systems**	**- Hazard Detection Systems** Surveillance, e.g., ATOS Internal evaluations of operator and industry information
	- Hazard Analysis Systems Intra company study groups (cross silos) to take advantage of varied expertise and skills	**- Hazard Analysis systems** Participate in Hazard Analysis activities	**- Hazard Analysis Systems** Internal intra-regulator (cross silo) groups External industry analysis groups
	- Risk Assessment Systems	**- Risk Assessment systems**	**- Risk Assessment Systems**
	- Hazard Control Systems Develop and implement appropriate hazard controls Modify controls as field experience indicates	**- Hazard Control Systems** Participate in control development Assist operator in control implementation	**- Hazard Control Systems** Regulations, publications, standards, TSOs, ACs Oversight of operator by SMS review teams
	(Cont'd)	(Cont'd)	(Cont'd)

	- Hazard control tracking systems Verify that hazard controls are in place Verify the effects of hazard controls	**- Hazard control tracking systems** Participate in feedback on hazards and hazard controls Provide reports on hazard status	**- Hazard control tracking systems** Verify Regulator, Industry, and Operator hazard controls are in place, e.g. oversight and required reporting programs Evaluate the effect of the controls

SMS Activity	Client Group		
	Operator (airline)	Employee (ALPA)	Regulator (FAA, TC, etc.)
III. Information Systems on Hazards	**- Internal hazard information systems** For detection, analysis and program improvement Non-punitive reporting systems for employees Feedback and sharing of information Integrate full range of operator information (cross silo) **- Use of external hazard information systems** e.g., regulator, manufacturer, industry group, international, etc.	**-Hazard reporting systems** For detection, analysis and program improvement Participate in employer non-punitive operator safety reporting systems Participate in industry non-punitive safety reporting systems Internal safety reporting systems **- Use of external hazard information systems** e.g., regulator, manufacturer, industry group, international, etc	**- Industry wide safety information systems:** Develop/maintain systems (FOQA, ASAP, ASRS, SDR, etc.) - mandatory systems - voluntary systems Develop / encourage Industry wide and operator non-punitive safety reporting systems Provide model NPSRS for operator use to achieve commonality Institute industry wide NPSRS to permit overall hazard detection and analysis by Regulator

SMS

Appendix 2 – The Safety Risk Assessment (*SRA*) Process

Overview

Safety Risk Assessment (*SRA*) is a core part of the Safety Management System (SMS). *SRA* is aimed at eliminating hazards or reducing them to acceptable levels. *SRA* is a "closed loop" process that consists of learning, acting and adapting. This recognizes that situations change, we learn new things, our plans don't work as designed, etc. In other words, *SRA* is a "real world" process rather than an "ivory tower" exercise. *SRA* is integral with Risk Management, so the table, below, ties *SRA* to Risk Management in the "closed loop." In an overall view, the *SRA* process consists of Organizing, Assessing and Managing Risk.

Process Stage	Process Actions

Organize	• **Identify** the problem/program and appropriate Risk decision maker(s)
	• **Form** a Working Group, Steering Committee, ExCom
	• **Define** the problem/program
	  ○ People
	  ○ Equipment
	  ○ Environment
	  ○ Interfaces
	• **Define** terminology
	  ○ the hazard(s)
	  ○ terms of severity
	  ○ terms of probability

Notes:

Process Stage	Process Actions

Assess Risk	• **First Look**
	  ○ Preliminary Hazard List
	  ○ Preliminary Hazard Assessment
	• **Agree** on Hazards for SRA focus
	• **Assess** Risk of "focus hazards"
	  ○ FTA, FMEA, OSA, STEP, etc.
	• **Identify** Unknowns
	• **Provide** analysis to Risk Decision Maker(s)

Notes:

Process Stage	Process Actions

Manage Risk	• **Evaluate** Risk Assessment and identified Unknowns
	  ○ Does this require further analysis?
	  ○ Are the Unknowns acceptable?
	  ▪ Is Action required?
	  • If "No" then document why.
	  • If "Yes" then Implement Hazard Controls/Mitigations
	• **Monitor/Measure** Performance
	  ○ Employee/industry safety reports
	  ○ Incident and accident reports
	  ○ Testing
	  ○ Violations
	  ○ Audits
	  ○ Etc.
	• **Refer** "lessons learned" back to Risk Assessment Working Group
	• **Modify** Hazard Control Actions as indicated by performance measuring

Notes:

Five Steps to a Safety Risk Assessment

SRA is an activity that you can use both for EASC Projects and E&AS Activities. It is based on System Safety techniques (U.S. MIL STD 882 and Canada's CSA Q-850). ***SRA*** is a well-defined and structured process that gives you the advantage of an accurate look at your problem. When you use ***SRA***, you may even have a better look at the problem than other interested parties might have.

Step One – Plan

It's about organizing ALPA's effort in the project.

Questions:

1. What is the scope of the project and its objectives?
2. Is the system and/or subsystems on which the project is based clearly defined?
3. Are the system/subsystem requirements clearly documented?
4. Will the system/subsystem interact with other systems and how?
5. What safety issues are readily apparent in the new project?
6. What other ALPA projects could be affected by this new project?
7. Is it a project that is narrowly focused are does it have broad, system-wide impact?
8. Who are the customers of the project's benefits?
9. What ALPA resources will be required?
10. Does the project require an ALPA multidisciplinary team?
11. Who are the stakeholders involved in the project?
12. How effective do the government/industry chairmen appear to be in handling the project and team?
13. Is the chair/co-chairs easily influenced by stakeholders?
14. What methods are being proposed to address the safety issues involved?
15. What tools will be used in the methodology to assist in analyzing the safety issues?
16. How much confidence can be placed in the methodology and the tools that will be used?
17. What mechanism(s) will be put in place to verify implementation, to monitor, and to measure the effectiveness of the project results once they are implemented?
18. Will the project team accept a safety risk assessment approach to addressing the safety issues?
19. Who else might be affected or be the target of the SRA outside the project team?

Actions:

1. Attempt to answer these and other related questions important to the project.
2. Ensure that the system(s) involved in the project are clearly defined.
3. Define the goals that ALPA wants to achieve through the project.
4. Define the products that are expected to result.
5. Ensure that the needed resources are available for the project.
6. Identify any potential shortcomings in resources.
7. Identify the expected costs involved and the expected length of time to complete the project.
8. If a SRA will be performed:
   a. Ensure that the scope of the SRA is consistent with the system(s) involved.
   b. Determine the best method of performing the SRA.
   c. Determine what data sources and information will be needed to accomplish the SRA.
   d. Review the adequacy of the plan.
   e. Develop the terms of reference for the team:
      i. Include the list and definition of terms used in the SRA
      ii. Obtain a consensus in defining the risk limitations, i.e. what is and is not acceptable risk (Ref. Risk Matrix development).
      iii. Identify the subject matter experts (domain experts) that will be required in the SRA process.
      iv. Decide how the SRA will be documented and included in the team report.
9. If the project team is not in favor of performing a SRA, find out what can be done to change their minds – who can be influenced?
10. If a SRA will not be performed, apply the method as best you can through your individual participation to identify the shortcomings in the other method(s) chosen and make these known to the team and ensure that it is documented in the written work of the project.
11. Ensure these shortcomings are reported to ALPA management.

Step Two – Hazard Identification and Analysis

It's about "Murphy's Law" - What can go wrong will go wrong!

Definition

A "hazard" is an event, condition or circumstance that can lead to a loss.

Identification

1. Hazards may be *actual* or they may be *potential.*
2. Hazards can be identified by observation, using data and the knowledge of others that can help describe how a particular activity, process or system functions or is supposed to function. This information can indicate where and what problems could or are occurring so that effective corrective actions can be formulated and implemented.
3. Effective hazard identification depends on:
   - the experience and knowledge of the analysis group,
   - the proper choice of analytical methods, and
   - the availability of accurate safety data resources.

Historical Data

Historical data can provide insights into the hazards associated with a previous or current activity or system, which can be used to direct attention to identifying new hazards in the identification process. Historical data can also provide guidance for formulating future corrective actions. Previous "Lessons Learned" can define "past mistakes" with the hope that these same mistakes will not be repeated in future activities and systems. "Lessons Learned" can also highlight the things that were done right for future reference.

"Safety data" essentially has four primary uses by the safety practitioner in the course of safety activities:

1. In the design process;
2. In hazard analyses;
3. In safety risk assessment activities; and
4. In validating and monitoring execution of SRA results and its effectiveness

Some Means for identifying hazards

1. Review available data and program/system requirements
2. Conduct observations, audits, safety surveys, investigations, research
3. Conduct factual briefings from subject matter (domain) experts, project team members, frontline personnel

4. Apply relevant analysis tools - flow charts, event trees, fault trees, failure mode and effects (and criticality) analyses, software programs, mathematical & statistical modeling, simulations

5. Brainstorm within the team

Hazard Identification and Analysis

Identification - Preliminary Hazard List (PHL)

This is the first step in the *Hazard Identification and Analysis* process. It's the first document prepared in the SRA. A hazard is the potential for harm. It could be a physical condition called an unsafe condition, i.e. inappropriate function, failure, or it could be an inappropriate human act, i.e. an unsafe act, human error in a design, or procedure. The objective is to develop a list of these initial hazards. It can be based largely on anecdotal and historical information, but includes data and information from the previously mentioned sources. For example:

> **Inputs**: Safety data from similar systems, hazard logs, incident or accident reports, safety lessons learned, program safety requirements, expert opinion, etc.
>
> **Outputs**: A list of actual or potential hazards for follow-on hazard analysis and identification of additional safety design requirements.

Normally, the PHL is started in the conceptual phase of a program or project. It provides management with initial information on inherent hazards that may be associated with the concept in a design. The idea is to develop a list of all possibilities, without regard to the likelihood of the event actually occurring. Again, the typical way of developing the PHL is by brainstorming within a group. It can also be developed from checklist (the least effective), generic requirements reviews, informal conferencing, and research.

PHL Process

The first objective is to acquire as much information about the concept design as possible. It is very appropriate to invite the subject matter (domain) experts to participate in the PHL development. The process steps are:

1. Establish a team to develop the PHL. Team members should be from appropriate areas involved in the concept/system design.
2. Provide training to the team in system safety concepts and how to develop a PHL.
3. Identify the method of conducting the PHL.
4. Identify the document format.
5. Team members will need to enhance or acquire concept/system knowledge.

6. Review prior system safety related data, if available
7. Acquire knowledge of previous related occurrences.
8. Consider all life cycle phases of the design.
9. Consider all system and activity elements; human, hardware, software and environment interactions
10. Identify energy sources (where's the thrust of the harm?)
11. Consider generic hazards as a start (see table, below)
12. Start to develop the PHL.

Analysis – Preliminary Hazard Analysis (PHA)

Once initial hazards are listed, it is possible for changes to be made early in the concept design stage so that these hazards can either be eliminated early or controlled later in the process. The PHL also provides the bases for a more detailed analysis called **Preliminary Hazard Analysis (PHA)**.

The primary intent of a PHA is to ensure that all relevant hazards are identified. It also is intended to identify the cause(s) and effect(s) of the hazard(s), to define its characteristics, and to prioritize it or to ignore it if it is not worthy of further analysis. *Cause(s)* is the underlying reason why a hazard exists. The *effect(s)* is the possible consequence(s) resulting from allowing the hazard to exist. Each hazard can have a number of potential causes and consequences.

Primary Hazard - *A hazard that leads to or is responsible for other hazards existing in the system.* It's the driver behind other hazards.

System Deficiency – A *condition or circumstance that permits hazards of a like nature to exist within a system.* Similar hazards may be present in a similar activity or system and attempts should be made to identify them as well.

From a generic hazard classification, hazard(s) characteristics can be further defined by formulating a **Hazard Statement**. Some examples are:

- The IFR separation is 1 mile
- The airport's painted signs are weathered
- Pilots receive no simulator training
- Taxiway "E" meets runway 32 at 140°

A useful method to help analyze the hazard potential is to develop scenarios that explore the various ways that harm can be manifested or revealed. These are called hazard **scenarios** and can be thought of as the, "***What ifs?***" Take the time to identify any Primary Hazards and System Deficiencies.

Input:

- Using the results from the PHL, analyze the hazards by determining the cause(s) and consequence(s) of the hazard(s)
- Rank these hazards in the order of importance as determined by the team.

Output: The PHA documents and organizes information on the potential hazard areas and on the ranking of hazards by consequences or severity.

The PHA is the basic system safety analysis for a program. It is a living document that requires *periodic updating* from feedback. From the identification process, the safety practitioner can then begin to identify the risks associated with the hazards.

Step Three – Risk Assessment

It's about the likelihood of the harm happening – what's your comfort level?

Definition

"Risk" is the consequence of a hazard. Risk is measured in terms of severity and probability.

In this step, further classify the *consequences* in terms of severity and add to it the *probability* (exposure) of the hazard(s) or potential for harm occurring. Ask the question, "If a particular hazard potential does occur, how often and how severe will it be?"

The kind of assessment method, whether *qualitative* or *quantitative*, will depend on availability of exposure data. Usually, the data you would like to have is not readily available. Generally, some combination of the two methods will be used.

Levels of Risk

Levels may be assigned quantitatively, qualitatively or both. Develop or use an existing Risk Matrix for documenting the assessment. (See attachment __). If there is an existing matrix, it may help facilitate the acceptance of your work and provide the decision-maker(s) with a result that is understood and compatible with what is already in use. Ensure that there is consensus on the classifications. If there are any changes to be made, make them before you begin the process.

From this exercise, risk statements can be formulated that combine in narrative form the product of the severity and likelihood of the hazard(s) potential for harm.

Acceptable Levels of Risk

Another important function is to determine what risks are acceptable. From a single organization standpoint, it may be fairly easy based on the organizations, goals, objectives, culture, etc. However, when several stakeholders are involved, the exercise could be difficult. Part of this exercise determines the scope and parameters of the Risk Matrix. What is the potential loss or degree of loss that the program/project is trying to avoid? Tthese potential losses can be considered individually or in tandem and severity and probability estimates assigned accordingly.

Finally, compare and rank the risks.

Hazard Control - Risk Mitigation

As a part of the Risk Assessment, you'll next turn your attention to how the loss can be prevented. This includes assessing existing hazard control or risk mitigation actions or developing new prevention actions, strategies, or "controls." These controls or mitigation actions are designed to either eliminate or lessen the potential for the hazard(s) to create harm. In this particular assessment exercise, it is possible to identify areas where further safety analyses are required.

Thoroughly review existing and corresponding regulatory standards, policies, procedures, best practices, equipment capabilities and reliabilities, human performance capabilities and limitations, and training. From this review, make a determination of the ability of these types of controls to either eliminate or control the hazard(s) to "acceptable" levels of risk. If they cannot adequately reduce risk to acceptable levels, then you must formulate new controls and mitigation actions. Use the following approach to mitigating Risk. In it you'll see the natural ranking from the most to least desirable ways to control Risk.

System Safety Order of Precedence – *A defined order of hazard control actions.*

1. Modify the system to design out the hazard
2. Add physical guards or barriers to prevent the risk from occurring
3. Add warning or alert signals
4. Develop procedural limits and training
5. Brief all pilots!

More Important Definitions

Consequential Risk – Additional risk that may be created while attempting to address the original hazard(s).

You should ask, "Will we create more problems if we try fixing the hazards, than if we leave things alone?" In other words, what impact will corrective actions have on producing additional hazards and therefore risks?

Residual Risk – The risk that may remain after the process has been completed.

Since all risk may not be mitigated, the residual risk must be identified so that it can be made known and further work can be accomplished.

The decision-making matrix discussed in Step Four, below, provides a guide for how to react to the risk you identify. Develop the decision-making matrix with agreement of the Risk Assessment group before doing the assessment. If there is an existing decision matrix within a program, project or organization, then try to use or adapt it.

In the example Decision-Making matrix of Step Four, below, there are five action levels based on the risk assessed. For example, from the matrix one could decide that risk values over 20 are unacceptable and they will require action as detailed under that category. Undesirable risk could represent 15-19, while acceptable could be 10-14 with some action. Acceptable with monitoring could be 5-9 and acceptable, 0-4. These are not hard and fast rules for assigning action, but are meant only to be illustrative. The risk factors that will be assigned to the various levels are based on the goals, objectives, and values of the program, project and/or organization.

Step Four – Decide and Report

It's about revealing the hazards and associated risks involved in the program or project to decision-makers so that their conscience can be exercised.

Report Documentation

Once the team or group makes decisions relative to each risk, document the rationale for acceptance and confirmation of the corrective actions to be taken. Using the Decision Matrix will help in formulating follow-on actions.

Take program/project requirements, organizational values and subjective judgments into account. They are part of the decision-making process. Consider the importance of the assessed risk against shared values, the associated social, environmental and economic considerations and the potential cost of acting vs. not acting.

Recommendations

When the Risk Assessment Group has formulated the rationale and corrective actions to address the risks, the Group will have to make a decision on whether or not to make recommendations. Safety practitioners are accustomed to making safety recommendations, particularly after an assessment, as a part of a report. However, the *SRA* report could probably suffice without recommendations and be used effectively by decision-makers.

Some decision-makers may like and expect recommendations because those recommendations may provide a fresh solution and complete the work. Conversely, a decision-maker(s) could be put on the defensive and spend more time fighting the recommendations than they will spend fixing the problem. Recommendations may appear confrontational because the decision-maker(s) were not part of the solution and, as has happened numerous times, they may allow the responsible decision-maker(s) to avoid action.

It may be wise for the team or group to consider including recommendations within the *SRA* report. If recommendations are made, they should be formulated to allow the decision-maker(s) to determine the best way to implement the action. Even better would be the approach of working with the decision-makers to develop recommendations for change.

Step Five - Evaluation

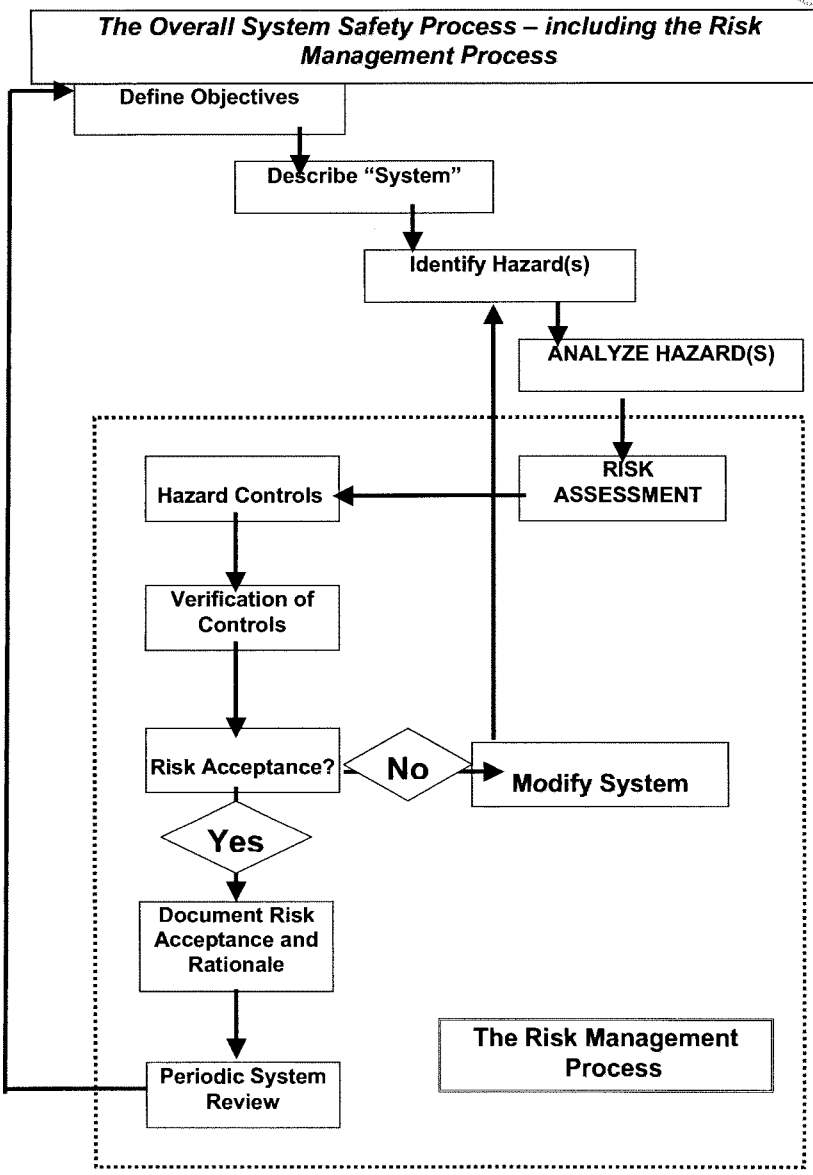
It's about executing the plan and how things are going – "closing the loop"

Validation, Monitoring and Feedback

In this step we want to ensure that the actions and results of the Risk Assessment Group's work are put to use. Somehow the Group needs to verify that the controls and mitigations have been put in place. Some effective means of alerting "line" personnel to the Risk control and acceptance decisions that have been made.

A tracking or monitoring system must be implemented as a part of the *SRA* process. This permits evaluating the performance of the corrective actions to ensure the activity or system is meeting expectations. Are the mitigations effective? Theoretically, monitoring is an activity that should be done in real time, but this may not be possible.

In addition to the performance of the activity or system, the values and beliefs used to develop and maintain the system need to be evaluated and understood. The *SRA* should be updated periodically to ensure it remains valid. These updates or follow-on actions are good for detecting any change from the original risk profile. Changes in the Risk situation may mean that new hazard controls or mitigation strategies need to be established. The "Feedback" of the Evaluation Step is vital and allows for measuring and maintaining the "safety" of the system.


The Overall System Safety Process – including the Risk Management Process
Define Objectives
Describe "System"
Identify Hazard(s)
ANALYZE HAZARD(S)
RISK ASSESSMENT
Hazard Controls
Verification of Controls
Risk Acceptance?
No
Modify System
Yes
Document Risk Acceptance and Rationale
Periodic System Review
The Risk Management Process

Generic Hazards and Categories

To get you started, you might consider these generic hazards or hazard categories:

• Collision	• Hazardous materials
• CFIT	• Radiation
• Weather	• Electrical
• Loss of systems	• Contamination
• Loss of capability	• Parts
• Human error	• Boundary handoff
• Emergency conditions	• Commercial software
• Software malfunction	• Commercial equipment
• Inappropriate communication	• Atmospheric conditions
• Demand	• Physiological
• Traffic flow	• Error in design
• Inadvertent operation	• Temperature
• Inappropriate data	• Explosion
• Inaccuracy	• Fixation
• Inappropriate calculation	• Fire
• Automation lockup	• Egress
• Situation awareness	• Acceleration
• Inadequate contingency	• Corrosion
• Open networks	• Impact
• Contractual systems	• Shock
• Inappropriate warning	• Pressure
• Lack of, or loss of warning	• Structural damage
• Jamming	• Toxicity
• Spoofing	• Vibration
• Taxi accident	• Noise
• Ground control	• Oversight and Omission
• Landing accident	
• Takeoff accident	

Design Considerations

Hazards can be hypothesized by considering design difficulties or deviations, consider the following:

• Adequacy of redundancy	• Status checking
• Accessibility for repair	• Human response
• Automation and human control considerations	• Reliability measurement
• Availability and Availability	• Logistics
• System tolerances	• Sneak paths
• Resource availability	• Test access
• System compatibility	• Analog designs
• System alignment	• New technology
• Response to environmental interaction	• Technology transfer
• System replacement	• Disposal considerations
• Human Factors	• Technological growth
• Ergonomics	• Weak links
• Assembly	• Bottlenecks
• Segregation of safety critical systems	• System refinements
• Verification and Validation	• Inappropriate functions
• Calibration	• Remote transfer of information
• Monitoring of safety systems	• System deadlock
• Open system designs	
• Command and Control access	
• Bypass of systems	
• Shutdown	
• Recovery	
• Memory	
• Storage	
• Unique coding	
• Reasonableness checks	

Simple Preliminary Hazard Analysis Worksheet

Hazard Analysis # ____ **Date:** _____

Location: _____

ORGANIZATION/DEPARTMENT: _____

System/Activity/Task: _____

Hazard	**Potential Cause(s)**	**Potential Effect(s)**	Hazard Category	Estimated Cost

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Detailed Hazard Analysis Worksheet

General Hazard Analysis No._____ **Page** ___ **of**___

Location/Dept. _____

Description (Task/Activity) _____

Prepared by _____ Date _____

Countermeasures _____

Cost/Impact _____

Task/Activity Elements	Hazard Elements **X = Exists; E = Eliminated; R = Reduced; I = Increased**			
	#1	**#2**	**#3**	**#4**
#				
#				
#				
Hazard Summary				

Note: First define and determine the Task/Activity elements to be examined and assign a number to each. Also identify the Hazard Elements and record in order of criticality, the #1 being the most critical. (See attached instructions)

Detailed Hazard Analysis Worksheet (cont.)

Instructions

1. The Hazard Analysis Worksheet is used to examine those hazards identified in the Preliminary Hazard List (PHL).

2. Pick a logical starting point in the sequence of events and observe the task(s) and activity (ies) in their entirety several times before doing the analysis.

3. Begin with the first task/activity and define the element(s) being performed.

   Note:
   - Do not select too large a task/activity element(s). This would block your ability to isolate each part of an element that may contain hazard(s)
   - Do not select a task/activity element(s) so small that one hazard element may be involved in many other tasks/activities elements. This would unnecessarily complicate the analysis.

4. Repeat step 2 for subsequent task/activity elements, ensuring that no task/activity is excluded or repeated (overlap).

5. Where options or simultaneous activities are required, analyze each separately and then combine them in a final listing.

6. List the task/activity elements on the form in the order in which they occur in the sequence. Ensure that the starting and ending points of each element are clearly defined.

7. Prepare a Detailed Hazard Analysis Worksheet for each countermeasure as well.

Sample Risk Assessment Matrix

Severity**	Probability*				
Catastrophic Loss of life Loss of aircraft	5	10	15	20	25
Critical Serious injury Substantial damage	4	8	12	16	20
Serious Aircraft damage Minor injury	3	6	9	12	15
Marginal Operational effect Loss of employee time	2	4	6	8	10
Negligible System disruption	1	2	3	4	5
	Improbable (10^{-9}) Not likely to ever occur	**Remote** (10^{-7}) Likely to occur once every twenty years	**Occasional** (10^{-5}) Likely to occur once a year	**Probable** (10^{-3}) Likely to occur twice a month	**Frequent** (1.0) Likely to occur once a week

See Severity and Probability Categories (below):

**Severity Categories

Catastrophic
This would equate to loss of life or the loss of an aircraft hull. In other areas of loss it could represent the loss of your job, a complete loss of customer confidence in the airline or financial failure.

Critical
Critical could represent serious injury or substantial aircraft damage in an accident or incident scenario. In other areas of potential loss you are trying to avoid, it could represent the loss of someone else's job, reduced customer confidence or loss of market share or significant negative financial impact on the company.

Serious
This could equate aircraft damage or minor injury. But, in other areas of potential loss it could represent some job losses, some loss of market share or financial impact.

Marginal
Marginal could be used for effects that may be undesirable but not earth shattering. It could suggest a need to make operational changes of result in reducing the productivity of staff.

Negligible
This is a minor severity loss and, probably one that you will decide to live with.

*Probability Categories

Frequent
For frequent you would want to establish the worst-case scenario. If the loss potentially could occur once a week, that is probably a good starting point. However, here may be other losses, such as loss of customer confidence that you may choose to assume will happen every day. That, then, would be the worst-case scenario. The matrix above shows a qualitative assessment (Frequent) along with a quantitative assessment (1.0)

Probable
The next category should reflect a linear progression from frequent, which you are going to use throughout the matrix. That is, the steps between each category should be linear one to the other. In our example we have shown the quantitative assessment for the subjective probable as 10^{-3} or the loss may occur once every 1,000 times for the operation. If I have 1,000 movements a month and I have experience one accident per month then my probability of having an accident is once every 1,000 movements or once a month.

Occasional
For occasional, we have shown a progression of the probability of loss to $1{:}10^{-5}$ or once in every 100,000 times for the particular operation.

Remote
Remote means, in our example, that you anticipate the risk of a loss you are trying to avoid once every 10,000,000 times for a particular operation.

Improbable
Quantitatively, this means a loss every 1,000,000,000 times for the operation

Once you have established categories, the organization should establish specific actions to be taken in light of different risk levels. These decisions should reflect shared values within the organization and should remain consistent. There should be no opportunity to modify the action on a particular risk assessment and this should only be done when the complete assessment process and performance of the process is reviewed in depth.

DECISION MAKING MATRIX

Assessment	Follow up	Level of Communication	Advice to Others
Unacceptable	Stop operation Detailed Quantitative Engineering & Operational Risk Assessment	Regulator Manufacturer Other Operators Management & Employees	Warn all
Undesirable	Restrict operation Detailed quantitative and/or qualitative engineering & operational risk assessment	Regulator Manufacturer Other operators Management & Employees	Warn all
Acceptable with action	Restrict operation as required Detailed action plan to resolve problem	Management & employees	Alert management and employees
Acceptable with monitoring	Establish monitoring parameters Set timelines for assessment	Management & employees	Alert management & employees
Acceptable	Risk profile monitoring	Management & employees	Advise management & employees

Appendix 3 - Guidelines for Developing a Safety Management System (SMS)

SMS Components

The components that make up a Safety Management System are:

Organization	Risk Management	Hazard Information
• Approach • Documentation • Training • Emergency Response Plan	• Safety Oversight • Hazard Risk Assessment • Quality Assurance • Emergency Response Plan	• Safety Oversight • Hazard Information reporting

I. ORGANIZATION

A. Approach – organizes comprehensive and systematic management of safety throughout the company under the control of the Accountable Executive.

Define the fundamental approach for managing safety in the company

- Mission Statement
- Philosophy
- Policy – a safety policy defining the philosophical approach to safety and performance goals.
- Non-punitive reporting policy
    - Encourage incident and hazard reporting
    - Discriminate between Errors and Willful Acts

Define roles and responsibilities

- Management accountability
    - Top management accountability for safety
    - Line management accountability for safety
- Practices
    - Proactive Leadership and Management
- Employee Involvement
    - Development of the SMS program
    - Implementation of the SMS program
    - On-going involvement in SMS administration and refinement

Designate functional area responsible for safety program oversight
Define and Document roles of all personnel

- Delineate all lines of authority
- Document specific safety responsibilities for each position and task
    - Accountable executive responsible for:
        - establishing and maintaining the SMS
        - Placing safety matters on meeting agendas at all levels
        - Providing resources necessary to attain strategic safety objectives
        - Allocating necessary resources, such as time and money to safety matters

Establish a requirement for a company-wide communication plan regarding the SMS program, SMS progress, and on-going SMS functions

Detail responsibility of managers for externally supplied services
Detail the line of responsibility for ensuring that staff are competent and trained for their duties

Safety office (dependent on size of the company)

- Lines of communication to:
    - The Accountable Executive,
    - Within line management
- Functions:
    - Safety expertise
    - Safety information systems
    - Audit functions (IEP, Quality Assurance, etc.)
    - Active involvement in safety activities and reviews at all locations
    - Receive and start action on employee safety reports
    - Promote safety topics in company publications
    - Mishap investigation and reporting – incorporating line management expertise and involvement

Document:

- The competencies required for each position
- Procedures
- Safety committee(s)
    - What level of company? e.g., Board of Directors, Divisions, Departments, Shops, etc.
    - Who participates
    - Frequency of meetings
- Required outputs:
    - Periodic reports
    - Mishap and Loss reports

    - Reports of progress in implementing and monitoring hazard controls
- Performance
    - Safety performance measuring
    - Safety reporting
    - Hazard control verification

Establish liaison with Regulator's airline representatives / inspectors regarding company move into an SMS program for safety management.

- Ensure Regulator rep(s) understand this will make interface with oversight program easier
- Obtain Regulator support of and participation in airline's FOQA and ASAP-like programs

B. Documentation

Identify applicable aviation and other safety regulations/requirements.

- Maintain documentation - current, applicable and effective

Consolidate documentation describing the components of the SMS into an SMS document

Implement changes to documents as required by:

- Changes to regulations, standards and exemptions
- Experience

C. Training

Document training requirements for each area of work

Provide appropriate information, skills and training to accomplish tasks for:

- Line management
- Line employees
- Safety staff
    - Accident investigation personnel

Train Line and Staff management in organizational factors and human factors.

- One time initial training
- Easily accessible training resource to be used after inevitable personnel changes

D. Emergency Response Plan

Policy

Company mobilization and agencies notification

Passenger and crew welfare (immediate)

Casualty and next of kin coordination

Accident investigation on behalf of the company

Employee crisis reaction counseling (follow on)

II. Risk Management

A. Safety Oversight

Pro-active

- Corrective action and risk reduction strategies:
  - Seek to identify potential hazards through the analysis of everyday activities or reports through the company's safety reporting system
  - Systems for reporting hazards, events or safety concerns
  - Methods for the collecting, storing and distributing data
  - Systems for analyzing data, safety reports and any other safety related information
- On-going system monitoring
- Tracking of hazard control/mitigation implementation
  - Confirmation of the effectiveness of corrective action

Reactive

- Respond to events that have occurred
  - Unexpected events (accidents, incidents, ASAP reports, etc.)
  - Indications that hazard controls are not having the desired effect.

General

- Establish means to share properly sanitized safety data with any other parties who potentially could benefit from access to the data

B. Hazard Risk Assessment

Establish a Risk Assessment methodology

Example:

Risk Evaluation Matrix

		1	2	3	4
		Impact			
		Negligible System disruption	**Marginal** Aircraft damage or minor injury or LOSS of Critical Aircraft System	**Critical** Serious personal injury/substantial aircraft damage	**Catastrophic** Loss of life or aircraft hull loss
5	**Frequent** Likely to occur once a week	5	10	15	20
4	**Probable** Likely to occur twice a month	4	8	12	16
3	**Occasional** Likely to occur once a year	3	6	9	12
2	**Remote** Likely to occur once every 20 years	2	4	6	8
1	**Improbable** Not likely ever to occur	1	2	3	4

Probability of Occurrence

Establish a Risk Management Decision scheme

Example:

Risk Assessment	ACTION	Company Follow Up	External Level of Communication	Internal Level of Communication
Intolerable	Immediate Measures Taken	Action Plan development and deployed within 48 hours & Progress Monitoring	Advise Authorities: FAA, etc.	Emergency Advisory
Unacceptable	Immediate Temporary Measured Deployed within 48 hours	Action Plan development and deployment within 7 days & Progress Monitoring	Advise Authorities: FAA, etc.	Immediate Advisory
Undesirable	Action Plan development and deployment within 14 days & More Data Capture and Risk Monitoring	Progress Monitoring	As Necessary	Notice
Acceptable	No Action	Continuous Risk Profile Monitoring	N/A	Advise

Establish cross discipline Risk Assessment/Management groups as appropriate based upon:

- Standing problem / hazard topics
- New or unexpected operational problem / hazard topics

C. Quality Assurance

Internal and external audits:

- Make use of scheduled internal audits to build cross company cooperation and trust.
- Use external audits on a periodic basis to validate company safety efforts and detect unexpected trends or hazards

Well-designed and documented procedures for product and process control

Inspection of testing methods

- Monitoring of equipment including calibration and measurement

Monitoring of corrective and preventive actions

- Use of appropriate statistical analysis when required

Measure overall company safety performance and the effectiveness of the SMS Program via a standing audit system overseen by an SMS oversight committee

SMS Oversight Committee:

- Establish process for communicating SMS program findings and corrective actions to the Accountable Executive on a regular basis
- Establish means for tracking the effectiveness of any implemented corrective actions (mitigations for identified hazards)

D. Emergency Response Plan

Periodically train and drill all or part of the company on:

- Company mobilization and agencies notification
- Passenger and crew welfare intervention (immediate)
- Casualty and next of kin coordination
- Employee crisis reaction counseling (follow on)
- Accident investigation on behalf of the company
  - Cross discipline investigation group
  - Coordination with U. S. or foreign government investigation agencies

III. Hazard Information

A. Safety Oversight

Establish means for the Safety Department to gather and access tracking data for the whole company such that trends and profiles can be developed and monitored.

Establish standard means of distributing safety achievement and hazard tracking information to all operating groups in the company.

B. Hazard Information Reporting

Establish whole company "non-punitive" safety and hazard reporting mechaniSMS

Establish Event Review Committees appropriate for review of FOQA and ASAP programs or like programs for non-pilot employee groups.

Establish meaningful feedback mechanism for persons who submit ASAP or ASAP like reports.

Maintain trend analysis of hazard information systems.

Utilize level of information automation appropriate to the complexity of the company. (Avoid collecting information purely for the sake of collecting information)

Appendix 4 – SMS in Canada

Canadian SMS Requirements

In the late 1990s, Transport Canada, the Canadian regulatory authority, decided to make an SMS program mandatory for aviation companies. Since then, regulations have been passed in June 2005 requiring CAR 705 (FAR 121 equivalent) air operators and aviation maintenance organizations (AMOs) to have approved SMS programs. In addition, draft regulations have been consulted with stakeholders for airports, flight training units and the air traffic services provider (NavCanada) and are now going through legal processing and are expected to come into force by the end of 2006. The SMS requirement eventually will move to smaller air operators under CAR 704 (Commuter) and CAR 703 (Air Taxi). The planned date for these regulations' implementation is also by the end of 2006.

The regulations make SMS mandatory. Transport Canada views this approach as a systematic, explicit and comprehensive process for managing risks to safety. The aim is to improve safety through proactive management. The regulations are aimed at:

- Increasing industry accountability by placing responsibility for "safety" with operational managers,
- Instilling a consistent and positive safety culture, and
- Improving the safety performance of aviation companies.

Transport Canada will be gradually changing its regulatory approach as SMS is implemented. Currently, Transport Canada is active at the operational level with audits and inspections of activities. The intent is to change the focus to the systems level. Inspectors will be assessing the effectiveness of safety management systems within organizations. However, Transport Canada states that their safety oversight program using risk-threat analysis will adjust priorities and resources as required to protect the travelling public.

Transport Canada's SMS implementation plan allows for CAR 705 air operators and AMOs to implement SMS in four phases over a three year period ending on September 30, 2008 whereby these organizations will have to fully comply with all elements of the SMS regulation. Documentation and training are required for all of the phases. The requirements of each phase are as follows:

Phase 1

- Compliance document, gap analysis and project plan;

Phase 2

- Safety Management Plan to include safety policy, non-punitive reporting policy, roles, responsibilities and employee involvement, communication, safety planning, objectives and goals, performance management, and management review;
- Safety oversight through development and implementation of reactive processes, investigation and analysis, and risk management;

Phase 3

- Safety oversight through implementation of proactive processes;

Phase 4

- Operational quality assurance; and
- Emergency preparedness and response.

Critique

General

What is good about the new SMS regulations is the increased safety reporting and increased system knowledge that should result. ALPA was instrumental in having the critical elements of non-punitive reporting and employee involvement incorporated into the SMS regulations.

Heads of operating organizations will have clear responsibility and accountability for safety performance just as they now have for financial performance. We have already seen, in airlines that have started to implement SMS, improved relations between management and pilots, improved financial performance and improved relations with the regulator. Of continuing concern is that the specifics of how SMS is implemented are left to the operator as Transport Canada has adopted a performance-based, non-prescriptive approach to regulation. This is one of the reasons that ALPA has committed funds and time to training ALPA represented Canadian pilot groups on SMS so they are prepared to work effectively with company management and the regulator as each SMS program is developed on a property.

At the same time that Transport Canada is starting to apply SMS to industry, the regulatory agency is striving to establish a consistent approach to regulating under SMS by training its inspectors and producing an inspection guide for its staff. Additional guidance material is being produced to provide better information to operators on the development of an effective SMS program. The latest information on SMS in Canada can be obtained on Transport Canada's website at:

http://www.tc.gc.ca/CivilAviation/SMS/menu.htm.

Transport Canada and Enforcement

One benefit that already has resulted from the introduction of SMS is the new Transport Canada policy on enforcement. The policy came about as a result of work by ALPA pilot volunteers and staff. This new policy has already been used effectively for ALPA pilots and carriers in Canada and the United States. The innovative policy allows a company to conduct an internal safety investigation, when advised that a possible violation has occurred. This also is allowed if a pilot is informed of a possible violation. If the involved pilot and the company agree to the safety investigation process, Transport Canada will delay enforcement action until the safety investigation is complete and a report of follow up action received by Transport Canada. Based on the safety investigation, the company will take corrective action. If Transport Canada considers the company action satisfactory in responding to the event, then the regulatory file will be closed without punishment to the pilot or the company. The objective is to make meaningful, not cosmetic, safety improvements.

Problems

The effectiveness of inspector training to overcome the current, traditional regulatory mindset is an unknown at this point. This is a matter of concern, since the change in regulatory oversight approach and the ensuing benefits to industry are critical to the success of the overall program. Another critical component to improving safety is the sharing of safety information. As of yet, there has been no formal intent expressed by Transport Canada to require sharing of safety information between companies.

Testimony of

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Before the

House Committee on Transportation and Infrastructure

Subcommittee on Aviation

March 22, 2007

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Good morning Chairman Costello, and Members of the Subcommittee. I am pleased to be here today to discuss air traffic controller training, the Federal Aviation Administration's (FAA) Collegiate Training Initiative (CTI), and suggestions for increasing the number of qualified air traffic controllers (ATC). As you are probably aware, there is a looming crisis in the nation's control towers as the cohort of controllers hired in the wake of the 1981 strike reach retirement age. Not only do these controllers need to be replaced, but there is also a growing need to provide air traffic control services for the new transportation systems of very light jets (VLJ). Government experts predict that by 2025 there will be three times the number of planes in the skies as today.[1] Numerous General Accounting Office (GAO) report s have been warning for years about the need to better prepare for controller attrition[2,3,4], and the FAA's own projections indicate that approximately 72 percent of the current air traffic controller workforce will be eligible to retire in the next ten years.[5] Clearly there is a need to attract and train new air traffic controllers and use all available resources to provide the exacting, technical training they require.

Controller Hiring Sources

There are three sources of air traffic controllers:

- **Previous controllers** – Includes former Department of Defense (DOD) and FAA controllers;
- **Collegiate Training Initiative** -- Graduates of an aviation-related course of study from a school in the FAA's CTI program; and
- **General Public** – Applicants responding to an FAA vacancy announcement.

The percentage of controllers supplied by the CTI program varies, but was 33 percent of the total as of November 2005[6], and 25 percent at the end of Fiscal Year 2006 (September 2006).

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[1] "Flying the Crowded Skies: Challenges for Aviation," *New York Times*, January 15, 2007.

[2] *Air Traffic Control: FAA Needs to Better Prepare for Impending Wave of Controller Attrition*, GAO 02-591, June 2002.

[3] *Federal Aviation Administration: Plan Still Needed to Meet Challenges to Effectively Managing Air Traffic Controller Workforce*, GAO 04-887T, June 15, 2004.

[4] *Air Traffic Control: Status of the Current Modernization Program and Planning for the Next Generation System*, GAO 06-738T, May 4, 2006.

[5] *A Plon for the Future 2007-2016: The Federol Aviation Administration's 10-Year Strategy for the Air Traffic Control Workforce*, FAA, March 2007.

[6] *A Plan for the Future 2006-2015: The Federal Aviation Administration's 10-Year Strategy for the Air Traffic Control Workforce*, FAA, June 2006.

Controller Hiring Sources[5]
(As of the end of FY 2006)

	Number of Controllers	% of Total
Previous Controllers		
Veterans Readjustment Appointment	1,865	54%
Retired Military Controllers	255	7%
Former PATCO Controllers	492	14%
Collegiate Training Initiative	867	25%
TOTAL	**3,479**	

These figures do not, however, reflect the true value of CTI graduates who require less time to be certified after the mandatory on-the-job, facility-specific training for all controllers. Only controllers who have transferred from another FAA facility require less time to certify at their new facility.

Time to Certify Air Traffic Controllers[7]

Source of ATC Hire	Average Number of Years to Certify
Transfers from other facilities	1.6
Collegiate Training Initiative Graduates/FAA Roster	2.5
Department of Defense Controllers	3
Reinstatements (former PATCO controllers)	3.9

[7] *Opportunities to Improve FAA's Pracess for Placing and Training Air Traffic Controllers in Light of Pending Retirements*, FAA Rpt. No. AV-2004-060, June 2, 2004.

It is clear that the training and education that controllers receive at the colleges and universities in CTI prepares them to join the air traffic controller workforce with minimal cost and additional training from the FAA.

The Collegiate Training Initiative (CTI)

CTI was started 1989 when Congress established the Mid-America Aviation Resource Consortium (MARC) to provide ATC training in Minnesota.[8] Hampton University was shortly thereafter awarded FAA funds for ATC training in 1990. Interest in the program led the FAA to add three more schools in 1991 – Community College of Beaver County, University of North Dakota, and the University of Alaska.[9] Nine more schools were admitted to the CTI program in 1997.[10] MARC was disbanded as a consortium when funding was discontinued, but Minneapolis Community & Technical College was added to CTI. There have been no new schools added to CTI since 1997 and there is no process at the FAA to become a CTI school, although there is strong interest in joining by well-qualified schools.[11]

Graduates of CTI schools earn either an associate (2-year) or bachelors (4-year) degree in aviation administration or management that incorporates basic training courses for air traffic controllers. Air traffic controllers need to have an associates degree. Those who wish to go into management need a bachelors degree. CTI graduates can complete the requirements for a bachelors degree, if they desire, while working as controllers. The cost of earning a degree varies widely among the CTI schools, from a low of about $4,000 for an associate's degree from a public school, to a high of almost $100,000 for a bachelor's degree from a private university.

This cost is borne by the student, who comes to the FAA ready for the on-the-job training that is necessary to be certified. Appendix A contains the detailed process that CTI graduates must go through to get a training slot at the FAA Academy in Oklahoma City. Once in Oklahoma, they undergo further training before going to the FAA facility where they will have on-the-job training that is specific to each facility (control tower or en route center). Only after successfully completing this training are the "developmental" controllers certified and able to begin working as air traffic controllers.

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[8] *Aviation Safety: Opportunities Exist for FAA to Refine the Controller Staffing Process*, GAO/RCED-97-84, April 1997.

[9] *A Formative Evaluation of the Collegiate Training Initiative – Air Traffic Control Specialist (CTI-ATCS) Program*, FAA, DOT/FAA/AM-96/6, February 1996.

[10] Purdue University, Embry-Riddle University, Dowling College, Mt. San Antonio College, Middle Tennessee State University, College of Aeronautics (now Vaughn College), Miami-Dade Community College (now Miami-Dade College), Inter American University of Puerto Rico, and Daniel Webster College.

[11] Arizona State University and Florida Community College at Jacksonville have both tried to be admitted to the CTI program.

What CTI Designation Means

Being designated as a CTI school is very important for a college or university that wants to offer ATC training. Only graduates from a CTI school's program can have their names added to the Air Traffic Collegiate Training Initiative (AT-CTI) database maintained by the FAA. It is from this database that individuals are chosen for further training and employment. The FAA currently has no process to admit new schools to the CTI program. Well-qualified schools -- that offer other FAA-certified aviation training -- have indicated an interest in becoming CTI schools and were rebuffed.

The FAA needs to open CTI to schools that are able to meet FAA standards for air traffic controller training. If the FAA can certify training for pilots and aircraft mechanics, there should be no reason why they cannot also certify air traffic controller training programs and degrees at colleges and universities.

Benefits of Opening CTI to the FAA

- Increase the number of qualified applicants for the large number of air traffic controller jobs that are opening due to the increase in air traffic and the retirement of the cohort of controllers hired in the early 1980's.
- Increase the number of qualified applicants at little to no cost to the FAA. CTI graduates bear the cost of attaining their associates or bachelors degree in an aviation-related program.
- Increase the number of pre-screened, low attrition applicants for ATC positions.
- Increase the applicant pool by offering basic ATC education and training where demand exists.
- Take advantage of the flexibility of public community colleges and universities -- experts in meeting workforce education and training needs – in designing ATC training programs which can be offered at a fraction of the cost to what private schools charge.

Mr. Chairman, this concludes my remarks, and I hope I have convinced you of the need to open up the FAA's Collegiate Training Initiative. Air traffic control specialists have high-skill, high-wage jobs and the demand for these special individuals is only going to increase. I can tell you that Florida Community College at Jacksonville is currently providing FAA certified training in aviation maintenance and pilot instruction, and is ready and able to assist in meeting the training requirements of our nation's future air traffic controllers as they direct flight operations in our air traffic control centers, terminal radar facilities, and control towers.

I would be pleased to answer any questions you may have.

Appendix A

Qualification Process for Air Traffic Collegiate Training Initiative (AT-CTI) Graduates

(from the FAA Web site)

1. AT-CTI schools submit names of students enrolled in their AT-CTI program to FAA, Aviation Careers, AMH-300. Names are maintained in the AT-CTI database for tracking purposes until graduation and recommendation.

2. The FAA authorized pre-employment test is given just after enrollment in an AT-CTI program. The purpose of the test is to determine whether an individual has the aptitude to become an air traffic control specialist. **Prior to testing, individuals complete and submit a citizenship paper stating that he/she is a United States citizen. Individuals who are not United States citizens will NOT be allowed to test**. After achieving a qualifying score on the FAA authorized pre-employment test, individuals are notified of their results. If an individual achieves a qualifying score, he/she is asked to complete several forms, which include geographic preference sheet and self identify veterans' preference sheet.

3. Upon successful completion of a FAA approved AT-CTI program, individuals who receive school recommendation and who meet basic qualification requirements, including age limit and achieving a qualifying score on the FAA authorized pre-employment test, are made eligible in the AT-CTI database from which he/she may receive employment consideration. Candidates who do not receive recommendation will not be considered under this program and their name removed from the AT-CTI database. Recommendations, by school officials, may only be obtained once through the AT-CTI program.

4. When it has been determined that Air Traffic Control Specialist (ATCS) vacancies can be filled from the AT-CTI database, a region contacts the Aviation Careers Division for a list of eligible graduates for that geographic location.

5. Referral lists are issued based on the graduates' PRIMARY geographic preference and graduates are referred by GPA with veterans' preference rules applied. Note that secondary and third geographic preferences are ONLY utilized if there is a shortage in that location.

6. Candidates, who are being considered for employment by the hiring region, will begin the pre-employment process, i.e., suitability, medical, and security clearances. If selected by the agency, employees will attend the FAA Academy in Oklahoma City for training.

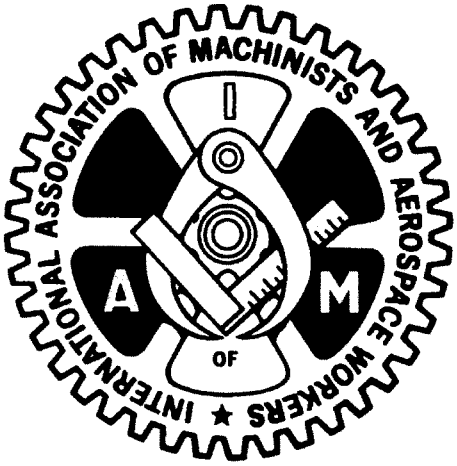
7. Candidates, who were referred but not selected, are returned to the AT-CTI database for future referral unless the candidates' eligibility expires, candidate reaches age 31, candidate declines a position, or the candidate is selected, whichever comes first.

8. Eligibility under this program is good for 2 years from the candidate's graduation date, candidate reaches age 31, candidate declines a position, or the candidate is selected, whichever comes first.

9. Individuals may not reapply through this program if removed for failure to meet any qualification requirements or failure to receive recommendation from authorized school officials.

U.S. House of Representatives
The Committee on Transportation and Infrastructure

"A Review of Federal Aviation Administration Operational and Safety Programs"
March 22, 2007



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Testimony of
Robert Roach, Jr.
General Vice President
International Association of Machinists & Aerospace Workers
Before the House Transportation & Infrastructure Committee

"A Review of Federal Aviation Administration
Operational and Safety Programs"
March 22, 2007

Thank you, Mr. Chairman, and members of this Committee for the opportunity to speak to you today. My name is Robert Roach, Jr., General Vice President of Transportation for the International Association of Machinists and Aerospace Workers (IAM). I am appearing at the request of International President R. Thomas Buffenbarger. The Machinists Union is the largest airline union in North America. We represent more than 100,000 U.S. airline workers in almost every classification, including Flight Attendants, Ramp Service workers, Mechanics and Public Contact employees. On behalf of the workers who ensure the United States has a safe, secure and reliable air transportation system, I am presenting to you today some of the concerns they hope will be addressed in the FAA reauthorization bill.

A major issue affecting airport workers that must be addressed is the National Mediation Board (NMB) and National Labor Relations Board (NLRB) playing political games with their livelihoods. The Railway Labor Act (NLRA) vests the NMB with the responsibility to investigate and conduct airline and railroad union representation elections. The NLRB has the same responsibility in virtually all other private sector industries.

Recently, however, the NMB has asserted jurisdiction over companies that are neither airlines nor railroads, and whose employees have worked and negotiated contracts under the jurisdiction of the NLRB for decades. The misapplication of the Railway Labor Act has left many workers without a union or a contract.

One of the most recent examples involves a unit of 120 employees located in Minneapolis, Minnesota. The IAM had represented these airport fuelers under the National Labor Relations Act since June 6, 1973. Although the employer had changed hands a few times over the years, the successor always recognized the union and bargained with us, including the current owner, Aircraft Services International Group (ASIG). However, when our contract expired on October 1, 2006, ASIG advised us that they would no longer bargain with us or recognize the IAM as the representative of these 120 employees because the NMB had taken the position that ASIG was covered by the Railway Labor Act. As a result, these 120 employees immediately lost a grievance procedure and the right to double time, which the IAM had negotiated for them, and all of their holidays, sick leave and vacation leave were lumped into something the company called "personal days." Also, at the time, the union had a number of outstanding grievances which had not yet been resolved including some terminations and some for lost pay. The NMB's improper action denied these workers their rights.

Additionally, in 1996 legislation was passed directly aimed at thwarting workers' ability to conduct local organizing drives. The term "express carrier" under the Railway Labor Act was inserted in the FAA reauthorization bill. This allows an entire package delivery company's workforce to come under the jurisdiction of the RLA regardless of

their relation to air transportation. This created a disparity that the resulted in the weakening of workers' opportunity to bargain for better wages, benefits and workplace improvements.

Many of these package delivery services may seem similar at first; however, there is growing disparity among the way these workers are treated among the largest delivery companies. Some provide their full and part-time workers with good wages, full benefits (including medical and dental plans), and paid vacation time. Others find ways to take the low road in the way they treat and classify their employees, including the growing use of independent contractors and staging anti-union campaigns. One reason for the disparity is the way the government classifies employers and thus their employees. When looking at the largest delivery companies each has workers doing virtually identical work, but some companies, like UPS, have workers who are governed under the National Labor Relations Act while workers at another company, like FedEx, are all under the Railway Labor Act. What is the difference? Under the National Labor Relations Act workers can act locally in seeking to organize and collectively bargain, whereas under the Railway Labor Act workers must organize nationally, an enormous challenge in the environment workers find themselves in today.

The "express carrier" language in the Railway Labor Act needs to be modified to provide consistency in the industry. Those seeking to deny workers the ability to organize should not be permitted to use the "express carrier" provision of the Railway Labor Act to do so. It would be consistent to allow those workers who are directly involved with the air cargo portion of the company to be treated like

their counterparts in the passenger air transport business, and therefore under the jurisdiction of the Railway Labor Act. The remaining portion of the workforce would then fall under the jurisdiction of the National Labor Relations Act with their peers in the rest of the industry. This would level the playing field by putting fairness and consistency into the law. Workers can decide for themselves whether they want to collectively bargain or not. We should at least give them the opportunity to decide.

There are many other examples, but the issues are the same - the NMB and NLRB denying workers their legal right to unionize. The Railway Labor Act applies to airline and railroad workers only. Congress must stop the collusion between the NMB and NLRB that is denying workers their rights.

A major safety issue for flight attendants is fatigue. Currently, the FAA mandates flight attendants receive only 9 hours rest on layovers, or as little as 8 hours if there are irregular operations. Although well intentioned, this regulation does little to ensure public safety because the rest period includes time when flight attendants are required to perform other job-related duties.

For example, during the mandated crew rest flight attendants must wait for a shuttle to take them to their hotel, and then travel to their hotel, which in many cities is more than a 30 minute drive. Similarly, checking out of the hotel, being transported back to the airport and going through security all occur <u>during</u> the mandated rest period.

To prevent flight attendant fatigue, the mandatory rest period should be changed to require a period of rest EXCLUSIVE of any other job responsibilities or hotel transfer time. Flight attendants cannot ensure the safety of their passengers if they are fatigued. Rest means rest – period. While most Americans strive for an 8-hour work day and 16 hours free from work, flight attendants work 16-hour days with only 8 hours off.

The IAM's flight attendant collective bargaining agreements exceed the FAA's mandatory rest minimum, but not all flight attendants have the security of a collective bargaining agreement. Furthermore, the carriers can violate the collective bargaining agreement and reduce crew rest. Flight attendants can file grievances and receive a remedy at a later date, but that doesn't prevent them from being fatigued at the time the contract is violated. Flight attendant fatigue is a safety issue that needs to be better addressed by the Federal Air Regulations.

Another flight attendant issue is self-defense training. After 9-11, flight attendants and passengers, indeed the entire country, demanded better aircraft security. There are guns in the cockpit, but the flight attendants who are charged with guarding the other side of the cockpit door do not receive the proper training. The Machinists fought for mandatory flight attendant self-defense training, but the regulations called only for the Transportation Security Administration (TSA) to provide voluntary training. Ensuring cabin security cannot be voluntary. Flight attendant self-defense and terrorism training must be mandated by Congress and the time spent in training must be paid for by the airlines. You can't put a price on the safety of our skies, and making such an important program voluntary leaves flight attendants and passengers vulnerable.

Similarly, the lack of health and safety regulations for flight attendants at work is dangerous. Flight attendants are one of the few work groups in the country not protected by the Occupational Safety and Health Administration (OSHA). In 1975, the FAA claimed jurisdiction over workplace safety and health of flight crew members. The FAA, however, has done nothing to enforce safety and health standards for flight attendants. After complaints from the Machinists and other unions, the FAA and OSHA in August 2000 signed a Memorandum of Understanding to explore extending OSHA jurisdiction to cover seven flight attendant health and safety issues: whistle blower protections; recordkeeping; blood borne pathogens; noise; sanitation; hazard communication; anti-discrimination and access to employee exposure/medical records. In 2001, however, the new Bush Administration abruptly stopped their progress, leaving flight attendants the only airline workers without workplace safety and health protections.

Flight attendants must deal with old and poorly-maintained galley equipment, exposure to contaminants, poor ventilation, cuts and burns while preparing food, slick galley floors, heavy carry-on bags and are required to provide emergency medical treatment. Flight attendants have long been recognized as safety sensitive professionals, yet they are denied their own health and safety regulations. Extending OSHA coverage to flight attendants is long overdue.

Although in-flight safety and security is a paramount concern we all share, the integrity of the aircraft itself has been compromised by the rampant use of overseas maintenance repair facilities.

The number of certified foreign repair stations has increased more than 300 percent since federal regulations were significantly loosened in 1988. A July 2003 Inspector General Report highlighted the weak oversight of aircraft maintenance performed overseas by third-party contractors. In response to that report, Congress directed the FAA to submit a plan by March 12, 2004 to ensure that foreign repair stations working on U.S. aircraft are subject to the same level of safety and oversight as required here at home.

In November 2005, the Aviation Subcommittee of the Senate Commerce, Science and Transportation Committee held a hearing about maintenance outsourcing, and at that hearing I testified that the FAA had not yet submitted a plan as Congress directed. It is now 2007 and, Mr. Chairman, we are still waiting for the FAA to submit a viable plan. More than three years have passed since Congress' deadline, and the American public is still waiting for the FAA to develop a plan to ensure the proper maintenance of our aircraft at overseas facilities.

While we are waiting for the FAA to develop a plan, FAA field inspectors are as frustrated as I am. Our mechanics have found aircraft that return from overseas flights departed with obvious mechanical problems. When they tell FAA inspectors, the inspectors complain that their hands are tied. Budget constraints limit their ability to inspect overseas maintenance operations, and when they do they have to give advance notice of the inspections, making them worthless. The FAA inspectors complain to us, and I am bringing their, and our, concerns to you.

Furthermore, having U.S. aircraft repaired overseas opens up this country to a great security risk. It is not hard to imagine how certified foreign aircraft repair stations working on U.S. aircraft could provide terrorists with an opportunity to sabotage U.S. aircraft or components that will eventually re-enter the U.S. for domestic service. These stations should be immediately closed down until security audits of those stations can be conducted and security vulnerabilities addressed.

There should be one standard for safety, security and FAA oversight at all aircraft repair facilities working on U.S. aircraft, regardless of where they are located. This must include equivalent standards for criminal background checks, drug and alcohol testing of workers as well as tightening the security of repair facilities.

The FAA does not have sufficient funding to hire an adequate number of inspectors to ensure aviation maintenance safety, at home or abroad. Even the recent hiring of 100 FAA inspectors does little to improve oversight. An immediate increase in FAA inspectors, along with the resources they need, is necessary to safeguard the U.S. aviation industry.

As we strive to protect our aircraft, we cannot forget the safety of airport ground workers. Airports are inherently dangerous places to work, and airlines' pressure to cut costs has degraded safety even more in recent years. Releasing aircraft brakes before the aircraft and surrounding areas are secure is a problem, as are the hazardous conditions of some airport's deicing procedures. Improper training of ground workers has led to ground accidents, some resulting in death. Airport ramp areas are unforgiving environments to work in. Worker safety cannot be compromised by on-time goals or budget constraints. I

know this is an issue important to this Committee's Aviation Sub Committee. The Machinists Union is working with the General Accountability Office to investigate airport ramp safety issues, and I thank you for the opportunity.

Finally, I want to address two related issues, foreign ownership and control of U.S. airlines, and allowing foreign airlines to fly point-point between U.S. cities, known as cabatoge. Either would lead to massive job loss.

The U.S. aviation industry is critical to our nation's economy and any move that subjects it to unfair foreign competition should be rejected. Indeed, U.S. airlines directly employ almost 700,000 workers and the overall commercial aviation industry contributes about $250 billion to the U.S. GDP. When employment in aviation related firms such as airports, aircraft manufacturing, and suppliers are added to jobs in sectors which indirectly benefit from commercial aviation, such as hotel, car rentals, and tourism, the workforce impact of commercial aviation totals more than 11 million Americans. This means that every airline worker translates into an additional 16 jobs in our economy.

Despite the damage a policy change could have on the U.S. airline industry, the Bush Administration continues to raise the subject. At a time when our economy - and particularly the U.S. airline industry - is struggling to recover, our government should not take action that threatens American companies and their workers. Similarly, increased foreign investment in, and control of, U.S. airlines must not be allowed. Congress last

year soundly rejected the Bush Administration's plan to allow for foreign control, and that position should not change.

Since 9-11, airline workers have sacrificed their wages, pensions, work rules and, for far too many, their jobs in order to rescue the airline industry. Industry conditions have imposed great burdens on workers as carriers compete to reduce costs. Such an extraordinary focus on the bottom line demands greater, not less, government oversight, and proper FAA funding is a must. No group is more interested in airline safety than IAM members. Congress must ensure that an FAA bill is good for workers, passengers and the entire aviation system. The Machinists Union urges the Committee to take appropriate action to protect our skies, and we stand willing to work with the Committee to reach that goal.

Thank you for the opportunity to speak here today. I look forward to your questions.

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SUBCOMMITTEE ON AVIATION
COMMITTEE ON TRANSPORTATION
AND INFRASTRUCTURE**

TESTIMONY OF

STEVEN M. SLIWA, PHD

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BEFORE THE UNITED STATES

SUBCOMMITTEE ON AVIATION

COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE

MARCH 22, 2007

**FOR OFFICIAL USE ONLY
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SUBCOMMITTEE ON AVIATION
COMMITTEE ON TRANSPORTATION
AND INFRASTRUCTURE**

Steven M. Sliwa

Chief Executive Officer and President of Insitu, Incorporated

Chairman Costello, Congressman Petri, and Members of the Subcommittee:

Good morning. It is my pleasure to be here today in support of your Review of FAA Operational and Safety Programs in our nation's air traffic system. The Federal Aviation Administration is addressing the challenges presented by the introduction of new types of aircraft, including unmanned aircraft (UA) like those my company develops and manufactures. There are some significant partnering opportunities, which if taken, can foster and advance commercial applications of unmanned aircraft system (UAS) activity without compromising the safety and established operating procedures of the National Airspace System (NAS).

In September 2006, Mr. Nicholas Sabatini, Associate Administrator for Aviation Safety, testified before the Senate Subcommittee on Aviation that UAs are a part of the future of aviation. Insitu and the unmanned aircraft we build not only characterize the future but also exemplify the here and now. In 1994, a couple of pioneering scientists with a vision and a passion for aviation built the foundations of our company and in 1998 achieved a long-sought milestone: the first ever trans-Atlantic crossing by an unmanned aircraft -- on only a gallon and a half of fuel.

In 2001, in response to a compelling safety case, we were poised to replace the manned helicopters used by the worldwide tuna fishing fleet with unmanned aircraft. But then we all experienced the tragedy of 9/11 and our company turned its energies toward meeting the rapidly evolving surveillance needs of our Navy and Marine Corps men and women deployed in the Global War on Terrorism (GWOT). Today, I'm proud to report to you that our product, distributed by Boeing as the ScanEagle, has over 32,000 combat support flight hours (without a

single serious personnel injury or damage to property) and over 475 successful launches and recoveries from more than 11 United States Navy and Allied warships of all sizes.

Even though the commercial off-the-shelf (COTS)-derived ScanEagle weighs only 40 pounds and is not yet a program of record with the Department of Defense, based upon flight hours, it is the third most utilized UAS system in the war. Maturing this system wasn't simple or straightforward. It was the aggregate result of our dedicated team's efforts including over 200 professional aviators, engineers and scientists who continue to deliver unmatched support to our customer -- the marine, sailor, airman, and soldier -- with a common vision – a vision that is helping define the future of aviation.

Today, even though Insitu is located in a rural HUBZone, it is one of the fastest growing companies in the United States. We are number #34 on the Inc. Magazine list of the 500 fastest growing companies. We are also ranked number one on the list of fastest growing technology companies in the Pacific Northwest by Deloitte. Our aviation-centric team boasts an aggregate of over 75,000 flight hours—garnered from commercial, private, and military aviation flight experience. I think it's safe to say that we know, understand, and have a special connection with those who share our love of flight.

There are, in fact, well over 400 small companies in the United States who are involved in UAS development and components manufacturing at various levels of sophistication. The situation is similar to the 1930s and 1940s when many airplane companies built the legacy of aviation we all enjoy today. In fact, many predict that the 21st Century will be the "century of autonomous aircraft." The increasing number of conferences, exhibitions, and tradeshows dedicated to unmanned aircraft and related components testify to the phenomenal rapid growth of this market segment. The Association for Unmanned Vehicle Systems, enjoying its 35th anniversary this year, has experienced over 35% growth in conference and exhibition participants over the last five years.

In response to this growth the FAA has already commissioned a dedicated industry working group under RTCA, Special Committee 203, which just last month completed a compilation of "recommended best practices and guidance material," a useful foundation upon which the FAA can build policy and practical regulations.

However, the market's needs are outpacing the incremental processes which create procedural or regulatory guidance. Current market analyses assess that the UAS products and services markets will grow to be $15 billion in annual revenue within the next eight years. Indeed, the future is upon us...and we need your help to capture this global market...and with its capture, help assure U.S. leadership in aviation.

It is worthwhile to examine the benefits of unmanned aircraft. The Department of Defense refers to the missions of unmanned aircraft as those that are "dull, dirty, and dangerous." Consider the value of robotically finding survivors or lost persons in extreme, maritime, or wilderness conditions; or detecting, identifying and geolocating survivors of hurricanes, floods, and tsunamis; or of being able to fly in conditions or in areas where it is too dangerous for manned flight...such as the persistent aerial surveillance of a forest fire, an erupting volcano...or God forbid...sampling and mapping the plume resulting from a dirty bomb or other similar calamity.

For many applications, unmanned aircraft are an environmentally friendly alternative to large manned aircraft. The low fuel consumption rates of unmanned aircraft directly contribute to low noise and hydrocarbon emissions. The persistence of unmanned aircraft make it affordable to aerially detect, classify, and monitor wildlife—as well as the protected environments in which they live or through which they migrate. And furthermore, as we demonstrated with the US Forestry Service last summer, unmanned aircraft can safely and persistently monitor forest fires to provide the real-time data firefighters need to effectively respond to hot spots, protect themselves, and combat the propagation of the fire.

Mission parameters and UAS economies allow for more comprehensive monitoring of critical infrastructure: gas/oil platforms, pipelines, nuclear power plants, water supplies, and the like. Miniature electronic sensors now permit the remote robotic exploration of natural resources and the persistent surveillance and resultant protection of marine mammals, ice floes, and national borders for homeland security.

The foremost challenge in achieving growth in this dynamic market is the safe, sustained access to airspace. Without access to airspace, the development and pre-delivery testing of aircraft dedicated to GWOT and commercial users, the training of safe and skilled operators, and the execution of the many governmental and commercial missions are effectively

stymied. Although Insitu has civil commercial contracts, potentially worth tens of millions of dollars for ISR services in or operating out of US domestic airspace, these contracts cannot be executed because of restrictive and conservatively interpreted federal policies. The unfortunate result is that for the foreseeable future, only those unmanned aircraft applications which originate and terminate outside of US territory can be profitably conducted at this time. However, this need not be the case.

Returning to Mr. Sabatini's testimony of last September, the FAA established an unmanned aircraft program office to develop guidance and regulations for the certification and integration of UAs into the NAS. We in the industry applaud this first step and are endeavoring to proactively collaborate with this program office, with other FAA offices, and with industry working groups and trade associations.

However, this is a significant multi-faceted challenge. Unmanned aircraft come in all shapes and sizes — from a few ounces to a those larger than a 737; they fly at varying altitudes, have a variety of endurance capabilities; and they embrace a variety of commercial business models—operations in high-density air traffic/densely populated areas and those operating in unpopulated, very low-density airspace, like Insitu UAs. Mr. Sabatini rightly points out that each different type of UA must be evaluated individually with each aircraft's unique characteristics carefully considered.

The UA market needs are rapidly evolving, exacerbating the need for practical public policy and sensible regulations. Technology is rapidly maturing and making possible even more approaches to mitigating unmanned aircraft risk and failure modes than are possible for supporting manned flight. The simple rote application of the current regulations is unlikely to be effective or successful. Neither will one succinct set of policies and regulations definitively address the breath and depth of the issues affecting unmanned flight.

Today's legacy FAA policies and regulations have changed little from its heritage of early aviation-era technologies. For example, the oft-touted "see and avoid" manned aviation paradigm is based on human visual acuity and the pilot's honed discipline to rapidly shift attention from pilotage to completing a thorough search of the forward flight environment. Although the human eye (and those regulations based on dated knowledge) are not adequate to handle the complex rapid changes (nor the acute differences in aircraft vehicle design,

application, and operation) of today's modern aviation environment, technologies are evolving which can yield higher levels of safety and make possible manned-unmanned flight interoperability.

Effective rulemaking deserves ample time and consideration. Aviation experimentation is methodical but fast-paced and its needs are not addressed by simply denying access to airspace indefinitely. That approach to regulation sounds the death knell of the U.S. unmanned aircraft industry and it undermines the industry's willingness to embrace the pioneering spirit of early aviation visionaries. There are several reasons for this.

Let's consider the details of access to U.S. airspace. The FAA currently allows the UA industry only two ways to obtain permission to operate safely in our National Air Space: (1) via a public agency-sponsored Certificate of Authorization to operate or (2) after first obtaining an FAA Experimental Airworthiness Certificate. In both cases, this approach to granting access to the NAS neither encourages research & development, nor does it encourage the advancement of commercial applications that result in a self-sustaining revenue stream.

A close examination of the paradox posed by the FAA's proposed use of Experimental Airworthiness Certification from manned aircraft for UAS applications reveals this approach:

- applies only to a <u>single</u> aircraft – not to a product line
- does not apply to volume aircraft production processes
- does not establish any acceptance standards…and has insufficient provision for engineering evaluators within the government
- does not establish standards for ground stations, launchers, retrieval systems, or data links that are integral components of UAS operations
- has no concept of using network connectivity, ground-based radar, or ADS-B type solutions to augment the separation of manned air traffic from UAs
- relies on human observers…defeating the purpose of unmanned solutions and rendering many UA markets infeasible or unsafe.
- has not defined "equivalent level of safety" to assess which operations might have "de minimus" risks that are acceptable to aircraft and/or property, for example

similar to ultra-light unmanned aircraft (FAA's regulations known as Title 14 Part 103)

I can tell the committee that, due to the small size and weight of our UAVs in conjunction with the predictability of our trajectories, a mix of several UAs and some manned aircraft in a given volume of airspace is inherently safer than the same total number of only manned aircraft attempting to perform the same mission. We have demonstrated this in Iraq and elsewhere and believe this to be the case with some of the commercial missions we have been commissioned to perform.

The recent February promulgation of FAA policy guidance in the Federal Register is viewed by our industry as an attempt to create regulations by policy inference -- of defining industry performance parameters without first encouraging the industry to demonstrate its level of performance. This is comparable to the classic "Catch 22" paradox.

In short, we can't achieve progress rapidly or confidently on the current path. The United States UA industry sometimes casts an envious glance at the regulatory practices of U.S. allies and trading partners (like Australia and Canada) which encourage UA experimentation with a flexible risk assessment, continuous data collection, and continuous improvement.

The process of evolving cogent and practical regulation from a foundation of sound public policy can be improved. I would like to share five suggestions that will be helpful to industry, to the FAA, and to our nation.

1. Provide the FAA with sufficient personnel and financial resources for Unmanned aircraft System (UAS) policy exploration and development.
2. Encourage the FAA to rapidly field a mechanism to conduct experiments, collaborate with industry, and collect data. The compilation of utilization, safety, training, and business-model data from both Civilian and Military operators of unmanned aircraft is essential for sound policy and rulemaking.
3. Re-introduce the use of **civil** Certificates of Authorization (COAs), which can be issued to commercial companies with appropriate FAA safety case reviews and monitoring. This is needed for infrastructure support of government customers

for experimentation, production testing, and training. However, this mechanism must also include the capacity for the operator to fly for hire, else a self-sustaining business model is not possible for the industry within the US.

4. Encourage the FAA to embrace that a variety of approaches will be needed to address huge variations in unmanned aircraft types and risk factors. Specifically, ultra-light UA operations in low-density flight regimes are inherently different than large UAs interoperating near crowded airways over congested cities.
5. Discourage the current regressive practice of regulating via policy promulgation and instead ensure regulatory activity in consonance with the rule of law

In conclusion, although our unmanned aircraft system industry is small, it is exciting with a huge potential to benefit mankind. UAS technology and business applications may seem unlimited in the US, but are in reality severely restricted by their need to access airspace and operate with proven practices akin to those of our general aviation counterparts.

Safe access to the airspace will continue to be a challenge of technology, policy and regulation: it will require judicious and reasonable experimentation. U.S. allies and trading partners are offering increasingly attractive development environments and threaten to draw domestic product development and manufacturing off our shores.

We encourage Congress to increase FAA funding applied to the UAS applications and provide public support for this technology. This funding will equip the FAA with the tools and incentive to encourage military and civil experimentation. That will equip us all to wisely invest in our future.

We also ask that this committee support the FAA to provide sound policy that guides safe development and production while the necessary rules and regulations are developed based upon knowledge of distinct UAS classes, current technology, and industry needs.

We will continue to work closely with our industry colleagues, the FAA, and, of course, with our Members of Congress. Mr. Chairman, this concludes my testimony. I would be happy to answer any questions you or members of the Committee may have.

AFSCME®

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STATEMENT OF J. TOM WATERS
PRESIDENT, LOCAL 3290

AMERICAN FEDERATION OF STATE, COUNTY AND MUNICIPAL EMPLOYEES (AFSCME)

BEFORE
THE

COMMITTEE ON
TRANSPORTATION AND INFRASTRUCTURE

SUBCOMMITTEE ON AVIATION

MARCH 22, 2007

STATEMENT OF J. TOM WATERS, PRESIDENT, LOCAL 3290
AMERICAN FEDERATION OF STATE, COUNTY AND MUNICIPAL EMPLOYEES
(AFSCME) BEFORE THE COMMITTEE ON TRANSPORTATION AND
INFRASTRUCTURE SUBCOMMITTEE ON AVIATION
MARCH 22, 2007

INTRODUCTION

Good Morning, Mr. Chairman and members of the Aviation Subcommittee, I am Tom Waters, President of AFSCME Local 3290. AFSCME is a labor organization that represents over 1.4 million workers, predominantly in the public sector. We represent approximately two thousand employees of the Federal Aviation Administration (FAA) who work in a variety of professional positions at the FAA Headquarters in Washington, D.C. I appreciate the opportunity to appear before you this morning.

For the past seven years I have had the honor to serve and represent the attorneys and administrative staff within the FAA's Office of Chief Counsel. Today, I am especially pleased to also represent, in my testimony, the AFSCME members within the other three FAA headquarters locals at the request of their presidents, my colleagues and friends, who are here today.

Similar to what you will be hearing from the representatives of the other unions here today, our story deals with the FAA's conduct in contract negotiations, but rather than repeat the often cited history of personnel reform and related statutes, I want to amplify the cost in human terms of the FAA's labor and employee relations practices under personnel reform. I have seen firsthand how quickly and nearly irreversibly a workforce can become distracted, demoralized, and angry by the belief that its employer has dealt with them in an unjust and high-handed manner. After all, the issues at stake for the employee in the employer/employee relationship are no less than the employee's career, livelihood, and the ability to keep his or her family healthy, safe, and secure.

PAY FOR PERFORMANCE AND UNIONIZATION

The road to our contract dispute began with FAA's goal of pay for performance for employees and I begin my testimony today by emphasizing that the employees within the Office of Chief Counsel, and I believe throughout headquarters, initially had little apprehension about the *concept* of pay for performance, called "core compensation" at the FAA. In fact, I told former Administrator Jane Garvey in 2000 that we would be leading the charge for performance-based pay if we thought management was capable of following employee performance guidelines and giving fair, accurate, and timely appraisals. As background, under the former FAA Performance Management System (PMS), devised pursuant to the Merit System principles and statutes, supervisors often, if not most of the time, failed to give employees timely performance appraisals - if they provided annual appraisals at all. Some employees have had

their managers ask them to back date evaluations to make them look timely. Another example of management's failure to abide by the PMS was an attorney who left the Agency but had not received an evaluation for three years and had to write her own and then insist that her manager sign it so that she could use it in her job application to another agency.

Supervisors also ignored initial and mid-term counseling under the Agency's PMS. Not surprisingly, under FAA's brand of personnel reform, the agency implemented a *pass/fail* system of evaluation instead of a meaningful and substantive evaluation system.

The working conditions at FAA, as well as FAA's failure to be forthright with the employees engendered workforce angst, mistrust, and antipathy and ultimately led employees within the Office of Chief Counsel to unionize with AFSCME. Other headquarters employees followed and formed three more AFSCME locals. The union movement engendered an *esprit de corps* and solidarity that crossed all disciplines and divisions in a way previously unknown.

In general, white collar headquarters employees and lawyers specifically are not the type of workers given to labor organizing. I, along with the other founding members and officers of Local 3290, are generally conservative in our political beliefs and never thought we would be part of a union. As pay for performance spreads across the federal government, I believe it is important to mention to this Subcommittee that our backgrounds as professionals contrasted with our actions as union organizers and led me to the unshakable conclusion that politics doesn't make unions, employers do.

I remain confident that we took the right action in organizing with AFSCME as having an advocate during these particularly difficult times with FAA has been reassuring.

BACKGROUND ON CONTRACT NEGOTIATIONS AND DEMORALIZING DISPUTE

From the summer of 2000 through February 2001, a 25-member negotiating team comprised of members of all FAA/AFSCME headquarters locals negotiated a 75-article contract with a management negotiating team comprised of management representatives from all affected lines of business. Our agreement and practice was that upon resolution of its terms, the chief negotiators of each bargaining team would initial each article signifying completion of and agreement to the article. After this initialing procedure, reopening the article was not allowed. To this day, the numerous procedures, policies and productivity and efficiency gains in the contract stand as a guide to organizational effectiveness. As a noteworthy aside, management representatives acknowledged to us at the bargaining table that the AFSCME negotiating team developed a better performance-based pay system than the Agency. Moreover, productivity gains offset any pay raises.

The four AFSCME locals overwhelmingly ratified the agreement on February 21, 2001 by a vote of approximately 1000 to 30. FAA employees covered by the contract were pleased and relieved. They were delighted in the belief that they had played a role in helping to establish a model workplace. They were reinvigorated by their stake in the FAA's mission and eager to focus on the work of the taxpayers and aviation community. Again, the *esprit de corps* among FAA workers was noteworthy.

However, this elation was short-lived when Administrator Garvey submitted the agreement to the Office of Management and Budget (OMB) for approval and then ultimately refused to sign and execute the contract maintaining that OMB disapproved. You may be aware that OMB approval of an agency's collective bargaining agreement with the bargaining units' exclusive representative is not a requirement under federal labor law, nor did the Union ever acquiesce in OMB review or approval. That action was the genesis for the rock-bottom morale that now exists at FAA. To negotiate a contract, agree to the terms, sign off on the contract and then refuse to implement the contract is untenable.

As a result of this bad-faith bargaining action, on March 20, 2001, AFSCME filed an unfair labor practice charge with the Federal Labor Relations Authority's (FLRA) Regional Office alleging that the FAA's failure to execute the agreement violated sections 7114(b)(5) and 7116(a)(1) and (5) of the Federal Service Labor-Management Relations Statute. Between Congress, the FLRA, and the United States Court of Appeals for the District of Columbia Circuit, the history of that protracted litigation, which the Union lost, is a matter of substantial record and not repeated here. Worth recounting here, however, is that under the initial litigation, documents surfaced which refuted the Agency's representations with regard to approval authority. One document presented at trial showed that the FAA actually asked OMB to change draft language in a letter in response to a congressional inquiry. OMB's letter had made it abundantly clear that FAA management held the final decision on signing, not OMB, and FAA requested that OMB remove this language for wording that stressed that OMB did not concur, thus bolstering FAA's claim that it was not the agency that backed out but that they were barred from executing the contract due to OMB's disapproval. The Agency's attempt to revise the OMB letter is perhaps as telling as the substance of the revision.

Even if it preferred OMB approval, by refusing to execute the agreement, the FAA shot itself in the foot. Initially, the headquarters workforce was satisfied that it had smoothed the sharp edges of a unilateral FAA pay for performance system in favor a well-planned, bilaterally agreed upon, pay for performance system. Employees were ready and eager to put behind them their fears and concerns about a new pay system and their suspicions about management's intentions. Instead of the agreed upon pay for performance system, however, what the employees have now is a near exact replica of the old General Schedule pay system. Without the pay for performance system that we negotiated and the other terms agreed upon, we are stuck with often pointless performance reviews, no meaningful grievance procedure and litigation as the only recourse for dispute resolution - when third party resolution is what is desired. Instead of a uniform system for determining changes in working conditions, all changes must now be resolved on a piece-meal basis through impact and implementation bargaining.

As I said, for the past seven years, I have had the honor of serving with many dedicated colleagues, including the other AFSCME presidents here today, their predecessors, and my own local's executive board members. Together, we and our members have continued to call for fairness and accountability despite the agency's intransigence and the lack of a contract. Nobody likes to be at odds with their employer, but we are determined to complete our task of delivering a satisfactory contract to our colleagues and members.

AFSCME has tried every means available to resolve this long and protracted contract dispute with the FAA. We requested assistance from Congress and twice had report language inserted in appropriations measures directing the Agency to implement the contract. The FAA ignored the directives. Considering the fact that AFSCME has exhausted all means to resolve this matter and the FAA has used all means to thwart our efforts and those of the other unions who are in the same unfortunate position, it is time for Congress to consider a legislative approach to resolving FAA's failure to live up to its congressionally mandated task of *legitimate* personnel reform. The FY 96 appropriations language that granted the FAA unfettered discretion in personnel reform must be repealed. It has led to massive labor unrest and poor employee morale. Employees need to believe in the integrity of their employer and that they will receive a fair shake when it comes to bargaining with their employer. I urge the Subcommittee to act to eliminate the flawed and unfair bargaining process that currently exists at FAA in order to avoid any further misuse by the agency of its bargaining authority.

I thank you for the opportunity to present this statement, and I would be pleased to answer any questions you may have.

STATEMENT OF THE ASSOCIATON OF AIR MEDICAL SERVICES

SUBMITTED IN WRITING TO THE
COMMITTEE ON TRANSPORTATION INFRASTRUCTURE
SUBCOMMITTEE ON AVIATION

U.S. HOUSE OF REPRESENTATIVES

March 22, 2007

Written Statement of the Association of Air Medical Services
Submitted April 11, 2007

The Association of Air Medical Services (AAMS) would like to thank the Subcommittee for the opportunity to provide more information on the air medical community and our continuing safety efforts. AAMS, in coordination with the Federal Aviation Administration (FAA), the National Transportation Safety Board (NTSB), other aviation organizations, and the many dedicated individuals in this community, are committed to improving our safety record beyond a decrease in the number of accidents to, ultimately, the elimination of accidents in air medical aviation.

The Government Accountability Office (GAO) recently released a detailed report on the status of air medical services. The GAO made two recommendations highlighting the need for improved data collection and improved oversight of carriers providing air medical services by the Federal Aviation Administration (FAA). AAMS believes that these recommendations are in the best interest of the air medical community, the FAA, and the public served by both groups.

This testimony would be incomplete, however, without some background as to the use of air medical services as part of both the healthcare system and the aviation community in order to understand the importance of this unique kind of medical transport.

Air medical services consist of two types of aircraft: fixed wing aircraft that provide long range, sometimes international transport, and helicopter aircraft that provide very fast transport over comparatively shorter distances than fixed wing aircraft but much longer distances than ground ambulances. Fixed wing aircraft move patients from airport to airport, often utilizing rural and remote airports to transport patients from those areas to more specialized medical facilities. Helicopter, or rotor wing aircraft, transport patients from accident scenes to hospitals or from hospitals to other hospitals that are better equipped to handle that patient's medical needs. Helicopter air medical services transport patients in emergency situations in which time and level of medical care are critical factors. Because helicopter air medical services were the focus of the Government Accountability Office (GAO) Report, much of this testimony will also focus on that segment of the air medical community.

Historically, helicopter air medical service programs developed as components of hospital trauma programs and were owned and operated by these early trauma centers. Many AMS providers focused their services on transports between hospitals of severely ill and injured patients and often across state and even national borders. While earlier focus was on the unique ability of aircraft to provide rapid transport, current practice is centered on the added ability to deliver a very high level of medical care to an injured or ill patient -- whether in a community hospital, at an accident scene, or during transport. Critical injury remains a daunting challenge with recent data from the Agency for Healthcare Research and Quality (AHRQ) identifying trauma as the nation's costliest medical problem. Over the last three decades of EMS system development, the

availability of helicopter EMS (HEMS) has grown to meet this challenge and has become an expectation in the delivery of contemporary trauma system care.

It is estimated that a dedicated medical aircraft, staffed by a highly trained critical care team, equipped as a mobile intensive care unit, takes off every 60 seconds in the United States to serve a critically ill or injured person. Civilian air medical operations, of which over 90% are non-government providers, are a significant component in assuring access to specialty care for much of our population.

The number of air medical services in this country has grown significantly in the past twenty years. Currently, according to the Atlas and Database of Air Medical Services, or ADAMS, there are over 800 helicopters and more than 200 fixed wing air ambulances currently operating in the United States. The rapid growth in the number of air medical providers is largely due to expansive and systematic changes in the healthcare system. The closure of many emergency departments, the transition of full service rural medical centers to Critical Access Hospitals, and the loss of specialty services such as neurosurgical and pediatric medicine in many hospitals, requires that the critically ill and injured move longer distances at greater speeds than ground transport can provide in order to meet the patient's medical needs. Combined with the lack of specialist physician on-call coverage especially at night, and new changes in time critical medical therapies such as primary cardiac surgical intervention for heart attack patients, there remains significant gaps in healthcare coverage at various times and locations. Helicopter and fixed wing air ambulances have essentially filled these widening gaps between patients and the medical facilities and specialty types of healthcare they require.

The GAO study also noted that the implementation of the Medicare Ambulance Fee schedule, which helped to stabilize the reimbursement rates for air medical transport, was a major driver for both increasing the number of providers and transitioning to non-hospital corporate ownership. The implementation of this payment schedule made it possible to create a business model rather than rely on other types of funding, such as hospital sources. This allows for more air medical services to function as stand-alone, independent operators outside of the hospital structure. While the growth of the air medical community has largely been among these types of independent business models, there is still a very large component of hospital-based air medical services.

In addition to structural changes in healthcare and the national fee schedule, there are two other significant factors in the growth of air medical transport. The negotiated rule making process that created the ambulance fee schedule also transitioned all ambulance providers to Part B status rather than bundled billing by hospitals under Part A. Furthermore, some hospital systems have realigned their core priorities, shifting the capital and considerable operating costs of aircraft operations and replacement to direct hospital costs. This realignment is partly due to the availability of independent providers who can still provide the air medical service to the public. While this creates the proliferation of aircraft among independent providers, there is again a very sizable contingent of hospital-based aircraft.

The public relies on these services and expansion in its availability. A recently published academic paper, "Access to trauma centers in the United States" published in the *Journal of the American Medical Association,* noted that medical helicopters are essential in providing access to 81.4 million Americans who would otherwise not be able to reach specialist care in the "golden hour." The paper further notes that, despite the growth in the air medical system, 46.7 million Americans still cannot reach a Level 1 or 2 Trauma Center within an hour of critical illness or injury.

Not surprisingly, air medical services have played a key role in disaster response and emergency preparedness, transporting patients from the Pentagon following the 9/11 disaster, and more recently responding to Hurricanes Katrina and Rita in 2005. As noted in the US House of Representatives Final Report of the Select Bipartisan Committee to Investigate the Preparation for and Response to Hurricane Katrina, entitled *A Failure of Initiative*, air medical services were instrumental in much of the most critical hospital evacuations, especially in instances where hospitals were inaccessible by ground EMS providers. Over 60 civilian air medical helicopters transported thousands of affected citizens after Hurricane Katrina, despite the fact that there was a lack of communication and federal coordination of civilian aviation assets.

Air medicine has become a critical part of this nation's healthcare and emergency medical service system, providing a vital service in the public interest. Because of this commitment to public service, aviation safety as well as patient and medical safety is the highest priority in air medicine. The fundamental premise of medicine is "do no harm," an ideal that is reflected in all aspects of the commitment to both the patient and the air medical crews who provide care and transport.

The air medical community is cognizant of and dedicated to the need for more thorough data collection, and in response helped create and supports participation in the Atlas and Database of Air Medical Services (ADAMS), a voluntary database of air medical locations and other information referenced numerous times in the GAO's report. Support for ADAMS is provided by the US Department of Transportation (through the Federal Highway Administration and the National Highway Traffic Safety Administration). Through the voluntary reporting efforts of AAMS members, the database now represents the only accurate source for the locations, capabilities, and service areas for air medical programs and bases. This service is also being used by numerous government agencies, including the Department of Homeland Security for use in disaster situations and public health emergencies.

AAMS, with the cooperation of the National Emergency Medical Services Operators Executive Forum, also initiated the newly-created Flight Operations Database for Air Medical Services (FODAMS), a collection of data on flight hours and other aviation-related data voluntarily reported by air ambulance operators. This program is still in its infancy, so the data could not be used for the purposes of the GAO report. However, it is important to note that the air medical community has long recognized the importance of quality flight operations data, and has undertaken, through numerous efforts, the collection of this information voluntarily.

AAMS and its members are firmly committed to assuring the public of access to this essential medical service while maintaining the highest level of safety in the delivery of patient care. To meet that commitment, AAMS and its members work extensively and collaboratively with the Federal Aviation Administration (FAA) Helicopter Emergency Medical Services (HEMS) Task Force and other regulatory entities in a continuing effort to foster an environment that promotes a safe and effective air medical system. For example, AAMS representatives serve on the RTCA committee studying the application of new standards for terrain avoidance warning systems, or TAWS, for use in helicopter operations. We firmly believe that this cooperative effort, combined with numerous safety initiatives of the air medical community, has led to a dramatic decrease in the number of HEMS accidents in 2006.

This is not to say, however, that there is any acceptable number of accidents in the air medical community. To that end, AAMS has instituted a number of safety-focused initiatives since 2000 as a way for our community to voluntarily address these issues.

AAMS launched its Vision Zero initiative in March of 2005 (www.aams.visionzero.org). Vision Zero signifies zero accidents of consequence; it is our community's program designed to promote safety awareness by reaching the community with timely information and educational opportunities. Since its inception, Vision Zero has greatly increased safety awareness by creating a culture of intolerance to the loss of life and the suffering caused by the consequences of poor decision-making. It is a message that is carried through every conference, committee meeting, education session, and program activity carried out by the air medical community. We only hope to enhance the visibility and effectiveness of this program in the future.

AAMS has also joined the International Helicopter Safety Team(www.ihst.org), led by the American Helicopter Society (AHS), the Helicopter Association International (HAI), the FAA, and Transport Canada, to reduce helicopter accidents. Based on the CAST model implemented by the nation's major air carriers, the IHST efforts are premised on the model that providers must work collaboratively with regulators to identify and accelerate the implementation of best practice standards, and they are both very closely coordinated with the work done by the FAA's HEMS Safety Task Force.

AAMS represented the air medical community during the Part 135 Aviation Rulemaking Committee (ARC), the FAA's effort to engage the aviation industry during a re-write of Part 135 of the Federal Aviation Regulations (FAR's). The AAMS representatives sat on the steering committee and chaired the air medical subcommittee. The recommendations made by this group to the ARC included making all segments of a flight fall under the Part 135 regulations for rest and duty time and weather minima. It was also recommended to the ARC at that time to revise the existing Part 135 regulations to allow flights flying under Instrument Flight Rules (IFR) to off airport destinations without NWS approved weather stations. This change in the regulation would eliminate the need for any segment of a HEMS flight to operate under Part 91 as the current exemption

requires. At present, the Part 135 ARC recommendations are being considered within the FAA for possible incorporation into regulatory changes

AAMS believes these examples, as well as our ongoing education and research initiatives, provide a faster, more flexible, and a more comprehensive means to improving safety. In an era in which both providers and regulators are working in increasingly resource-constrained environments, a collaborative, data driven strategy is essential. AAMS welcomes efforts to track these efforts and report on their efficacy.

Improving the safety of medicine and medical transportation is a complex undertaking and cannot be studied in isolation. Air medicine must be seen as both a portion of the aviation community and as a necessary part of our medical system. Significant gaps in available data resources are evident and are a detriment to research efforts both from a medical and an aviation perspective. AAMS would like to support the GAO's recommendations in order to help the air medical community fill those gaps. Given the unique nature of and diverse models for the delivery of air medical transport in our country today, we recommend that any data collection effort involve all service providers – hospital-based services, independent services and government-operated services – in order to present a balanced and comprehensive picture of the community.

Well-respected researchers from within the AAMS membership as well as independent researchers regularly conduct peer-reviewed research projects, often with funding from the non-profit Foundation for Air Medical Research and Education (FARE). Some of these research initiatives endeavor to determine which safety tools would be most effective in the air ambulance environment. We firmly believe that the GAO's recommendations will only help bolster the existing research and data-collection efforts and help provide the air medical community with the most valuable tools to improve and maintain safe operations.

AAMS and the air medical community are committed to improving the safety of medicine and aviation; keeping those goals in mind, we also must continue to care for critically ill and injured patients every day. In our efforts to improve, we must not put more lives at risk by decreasing access to care. Commercial air medical helicopters provide over 90% of the medical airlift capacity in our country, and are thus uniquely designed and equipped to address not only national emergencies, but also everyday situations involving very sick and critically injured patients. In short, the air medical community provides a critical public service that is vital in today's healthcare system and as part of the response mechanism for homeland preparedness.

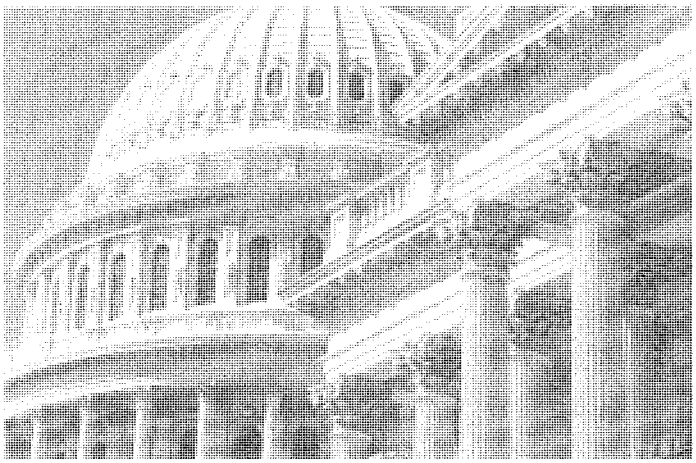
As AAMS noted in its response to the GAO report, transport medicine is among the most complex arenas of medicine, characterized by a dichotomy in which access to time sensitive care for critically ill and injured patients must be immediately available, often with limited planning time conducted in hostile environmental conditions. Recognizing that risk cannot be completely eliminated, it is essential both for the public we serve, and the pilots, nurses, paramedics, physicians, and other health care providers who deliver

care, that the practice environment be as safe as practically possible. AAMS and the air medical community remain committed to this ideal.

AAMS would again like to thank the subcommittee for the opportunity to submit these comments. We would also like to offer our assistance and support in the ongoing efforts of the FAA, the NTSB, this committee, and the medical and aviation communities in improving upon the safe operation of this vital service to the public.

ATA TESTIMONY

Aviation Safety and Other Priorities



Statement of the
Air Transport Association of America, Inc.
before the
Aviation Subcommittee
of the
House Transportation and Infrastructure Committee

March 22, 2007

AIR TRANSPORT ASSOCIATION

INTRODUCTION

The Air Transport Association of America, Inc. (ATA), the trade association of the principal U.S. passenger and cargo airlines,[1] appreciates the opportunity to submit these comments for the record on the state of aviation safety in the U.S. airline industry. ATA member airlines have a combined fleet of more than 4,000 airplanes and account for more than 90 percent of domestic passenger and cargo traffic carried annually by U.S. airlines.

ATA was founded in 1936 by fledgling U.S. airlines for two fundamental reasons: to improve and promote safety within the industry, and to advocate for a legal and regulatory environment that would allow the U.S. commercial airline industry to grow and prosper. What was true then is true today; safety is the foundation of this industry. U.S. airlines will thrive only if the industry *in fact* is safe and only if the public recognizes and *believes* it is safe. For this reason, our members take their safety responsibilities very seriously. "Safety first" is more than just a catch-phrase – it is the core principle of this industry.

AIRLINES FUEL OUR NATION'S ECONOMY

The U.S. airline industry is not simply an important sector of the national economy; its services fuel our entire economy. Air transportation is an indispensable element of America's infrastructure and our nation's economic well-being. Individuals, businesses and communities depend on the national air transportation system. U.S. airlines transport more than two million passengers on a typical day and directly employ 550,000 persons to do so; they provide just-in-time cargo services; they are the backbone of the travel and tourism industry; and airlines link communities throughout our nation and to the world.

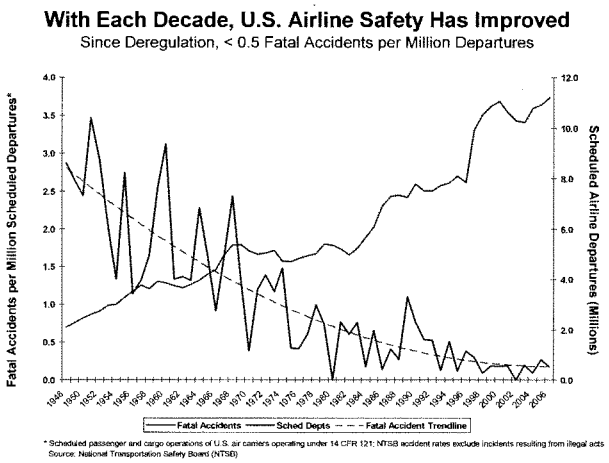
[1] ABX Air, Inc.; Alaska Airlines; Aloha Airlines; American Airlines; ASTAR Air Cargo; Atlas Air; Continental Airlines; Delta Air Lines; Evergreen International Airlines; Federal Express Corp.; Hawaiian Airlines; JetBlue Airways; Midwest Airlines; Northwest Airlines; Southwest Airlines; United Airlines; UPS Airlines and US Airways.

Moreover, the airline industry is the foundation of the commercial aviation sector, which is comprised of airlines, airports, manufacturers and associated vendors. U.S. commercial aviation ultimately drives $1.2 trillion in U.S. economic activity and 11.4 million U.S. jobs. By any measure, the U.S. airline industry is a valuable national asset and its continued economic health should be a matter of national concern.

SAFETY ABOVE ALL ELSE

The plight of the U.S. airline industry since 9/11 is well known. In the period from 2001 to 2005, the industry lost $35 billion and shed roughly 130,000 jobs. From an economic viewpoint, 2006 was a much-improved year for the U.S. airline industry. Including the all-cargo sector, the Air Transport Association estimates that the industry will report earnings ranging from $2 billion to $3 billion. On the heels of huge losses, any full-year profit comes as welcome relief.

While conditions have improved and the overall financial outlook is guardedly optimistic, debt levels remain high, leaving the airlines vulnerable to fuel spikes, recession or exogenous shocks (e.g., terrorism, pandemics, natural disasters), let alone ill-advised public policy decisions. The challenge we face is to achieve meaningful and sustainable profits, and to improve credit ratings to the point where airlines can weather normal economic turbulence while simultaneously investing in the future.



Notwithstanding these financial challenges, airline safety has remained rock solid. NTSB figures show fewer accidents in 2006 compared to 2005 for all segments of civil aviation, with Part 121 carriers continuing to have the lowest accident rates. In 2006, Part 121 carriers transported 750 million passengers more than eight billion miles and logged 19 million flight hours on 11.4 million flights. Tragically, there were two fatal accidents in 2006 which claimed 50 lives. This yields an accident rate of 0.18 per 1,000,000 departures, down 30% from 2005. For comparison, the average rate for the five-year period of 2002-2006 was 0.36, and the five years prior to that saw a rate of 0.45 accidents per 1,000,000 departures. The trend continues in 2007, and without question scheduled air service is incredibly safe, and working hard to be even safer.

A Performance-Based, Data-Driven Approach

While there are many reasons for the industry's excellent safety record, in our opinion two key developments stand out as having a significant positive impact. First, we have

progressed from a prescriptive, conduct-based regulatory philosophy that focuses on what to do and how to do it, to one that looks to set performance standards first and the manner of achieving the desired performance second. This has shifted the focus to where it should be – the safety objective, allowing carriers and the Federal Aviation Administration (FAA) to better define and implement appropriate procedures and requirements. Second, instead of being reactive and establishing safety goals based on the most recent accident or incident, the industry has learned to use the wealth of hard data accumulated by all stakeholders – FAA, NTSB and air carriers – to drive the safety agenda so that the most serious risks are identified and solutions developed in an orderly, efficient and effective manner. This data-driven, risk-assessment approach to safety has paid tremendous dividends already. It is the key to future safety improvements and continued accident prevention. ATA airlines consider accident prevention the top safety priority.

VOLUNTARY PROGRAMS ARE RAISING THE BAR

FAA and airline safety programs reflect and implement the regulatory philosophy and data-driven approach to safety previously described. In particular, the development of *voluntary* programs that encourage the reporting of operational data that would otherwise be lost has expanded the data set and enhanced the value of the analytical products. Working with the FAA and other stakeholders, U.S. airlines have developed flight operational quality-assurance programs – known as FOQA programs[2], aviation safety action programs[3] and line operations safety audit programs[4]. These programs have provided valuable data that have yielded insights into the precursors of accidents. FAA and the airlines have used this information to identify and effectively mitigate risks that might otherwise have resulted in accidents.

In addition to data-driven programs, aviation safety can be viewed as the cumulative outcome of numerous other activities by the FAA, NTSB, airlines and their employees,

[2] FOQA programs involve the collection and analysis of data recorded in flight to improve the safety of flight operations, air traffic control procedures, and airport and aircraft design and maintenance.
[3] ASAP involves collection and analysis of safety concerns reported by employees.
[4] LOSA involves the collection of safety data through in-flight observations of flight crews by specialists.

and airframe and engine manufacturers. The most obvious of these is the approval and surveillance by the FAA of air carrier training programs. Training programs for flight and cabin crews are critical to safe operations. Because of the large number of qualified pilots and flight attendants available, airlines continue to be highly selective in their hiring of crew members. Airlines employ a rigorous selection and training process that includes comprehensive initial and recurrent training. Most major airlines today utilize the Advanced Qualification Program, which enables each airline to tailor its curriculum to its unique operating environment and thereby maximize crew-member proficiency. We believe these and other similar programs will produce further improvements in aviation safety. A snapshot of member airline participation in these voluntary programs is summarized in the below.

ATA Member Airline Participation in Voluntary Safety Programs

ATA Member Carriers	ASAP	FOQA	AQP	LOSA
ABX Air	X	X		
Alaska Airlines	X	X	X	X
Aloha Airlines	X	X	X	X
American Airlines	X	X	X	X
ASTAR Air Cargo	X		X	
Continental Airlines	X	X	X	X
Delta Air Lines	X	X	X	X
Evergreen International Airlines	X	X		
Federal Express Corporation	X	X	X	
Hawaiian Airlines	X	X	X	
JetBlue Airways	X	X	X	X
Midwest Airlines	X	X		X
Northwest Airlines	X	X	X	
Southwest Airlines	X	X		X
United Airlines	X	X	X	X
UPS Airlines	X	X	X	X
US Airways	X	X	X	X

Note:		
	X	Currently participate
	X	Planning to participate in the near future

One of the most important programs affecting safety has been the joint industry-government Commercial Aviation Safety Team (CAST). CAST was established in 1997

to develop a comprehensive strategy to identify and prioritize risks and then develop solutions to reduce commercial aviation fatalities in the United States. Using a data-driven process, the CAST initiative identifies accident precursors and contributing factors to ensure that resources are applied to improve safety where needed most and where most effective. Over time, CAST has successfully addressed several types of accidents, such as controlled flight into terrain, approach and landing accidents, runway incursions, maintenance management, icing and uncontained engine failures. As of February 2007, 39 different safety enhancements had been accomplished, and 26 were underway. Through these 65 enhancements, the industry is approaching its goal of reducing the fatality risk by 80 percent.

But CAST doesn't stop there. While the original CAST approach looked back at accidents to better understand them and prevent future accidents, the next generation of CAST efforts will look forward to future risks. Compiling a wide range of safety indicators, CAST will identify risks to aviation safety before they result in accidents. The key to our success will be our ability to confidentially aggregate sensitive, industry-wide safety data and mine it for trends. We will continue to support FAA's Aviation Safety Information Analysis and Sharing (ASIAS) system[5] and look forward to the benefits it offers.

As noted, the CAST strategy is first and foremost data driven. It relies on comprehensive analysis of past accidents/incidents to identify accident precursors and then develop specific safety enhancements to address those precursors and related contributing factors. But the CAST process does not stop there. It is a fully integrated process that includes airlines, manufacturers, maintenance providers, commercial pilots, National Aeronautics and Space Administration (NASA) and other stakeholders, so that once the solutions have been identified, the affected parties implement the safety enhancements and track

[5] Federal Aviation Administration (FAA) developed the Aviation Safety Information Analysis and Sharing (ASIAS) system to enable users to perform integrated queries across multiple databases, search an extensive warehouse of safety data, and display pertinent elements in an array of useful formats.

their implementation for effectiveness. Ultimately, the knowledge gained is used to continually improve not only the U.S. aviation system, but aviation safety worldwide. Canadian and European authorities also participate in CAST.

CURRENT AND EMERGING SAFETY ISSUES

Current safety issues being addressed by our industry include runway incursions, contract maintenance, wildlife strikes, pilot age limits and FAA staffing, as well as the safety of our flight and ground crews.

Runway Incursions Several high-profile events in 2006 drew attention to the issue of runway incursions, but runway safety has always been a high priority for the industry. For decades, airlines have recognized the challenges they face on the airport surface and invest significant resources to ensure the safety of their passengers and crews. Unfortunately, there is no silver bullet when it comes to eliminating runway incursions. The solution is a layered one that integrates technological advances, robust procedures and a better understanding of human factors and performance. ADS-B, a fundamental component of NextGen, will ultimately enable better situational awareness for flight crews, allowing them to see all traffic around them whether in the air or on the ground. Combining this real-time, highly accurate positional information with moving map displays will yield real safety benefits. In the interim, we are pleased that FAA is deploying several new systems designed to reduce the risk of runway incursions at our busiest airports. Enhanced automated surveillance tools like AMASS and ASDE-X, runway status lights, perimeter taxiways, and EMAS, combined with heightened flight-crew awareness, will help to reduce collision risk. We look forward to working with the FAA and airports to implementing these new safety improvements.

Contract Maintenance Contract maintenance continues to be scrutinized with critics alleging that the practice is unsafe, yet the industry's safety record tells a different story. Effective and efficient maintenance programs play a central role in making air travel safe. Maintenance is a 24-7 function that requires careful organization, tight control, diligent

oversight and robust quality assurance. Airlines have developed comprehensive oversight systems to ensure that aircraft are maintained properly in accordance with FAA regulations and manufacturers' standards. These systems ensure that aircraft perform safely and reliably, regardless of where the maintenance is performed. Repair stations (third-party maintenance providers certificated under Part 145) have and will continue to play a vital role in air carrier operations and enable U.S. airlines to compete effectively worldwide.

Bird Strikes Conservation efforts continue to increase bird populations, but more birds combined with an increase in traffic equates to more bird strikes. While the sky may seem limitless, birds are competing with other users for airspace. Changes put in place since the 1970s have resulted in explosive growth in bird populations, particularly near airports. Wildlife strike damage to commercial aircraft worldwide is estimated to cost $1.2 billion annually, with over $550 million in damage for U.S. civil aviation alone. Ninety-five percent of all wildlife strikes are bird strikes. In fact, the number of bird strikes has tripled since 1990[6].

Air carriers continue to play an active role in efforts to reduce the frequency of bird strikes. Working with the U.S. Department of Agriculture's Wildlife Services Division and the Smithsonian Institute, ATA member airlines deployed specimen collection kits to enable more accurate species identification. A better understanding of the types of birds involved enables airports to tailor their wildlife management plans to reduce the risk of strikes. ATA has also developed detailed guidance material for the industry that will highlight available risk mitigation tools.

Pilot Age Limits The issue of pilot age limits has surfaced again as a result of a change to the international standard. In late 2006, the International Civil Aviation Organization adopted a new standard that raises the maximum age limit for pilots from 60 to 65 years of age. An Aviation Rulemaking Committee (ARC) was convened to review the effects of adopting the new ICAO standard and produced a detailed report outlining a wide range

[6] Dr. Richard Dolbeer, United States Department of Agriculture.

of issues. The debate over the safety implications of a change involves balancing the benefits of experience against degradation in cognitive abilities.

FAA Staffing Appropriate staffing levels are essential to FAA fulfilling their mission. FAA Inspectors work where 'the rubber meets the road' and are the central component of FAA's safety oversight system. They enforce regulations and standards concerning civil aviation safety, including the airworthiness of aircraft, the competence of personnel, and safety aspects of aviation facilities, equipment and procedures. The way in which they fulfill their mission continues to evolve with changes in oversight philosophy. FAA's Air Transport Oversight System (ATOS) leverages air carriers' internal oversight programs and advanced data-collection tools to create customized surveillance plans. Instead of searching randomly for deficiencies, FAA can efficiently identify and target potential areas of risk and work with the carrier to mitigate that risk. As ATOS matures, the FAA should reassess its staffing model to reflect the safety inspector's new role. It is reasonable to expect that the transition to ATOS may require more Safety Inspectors. However, FAA should see productivity increases that enable better surveillance over an expanding universe of corporate, business and commercial operators without significant increases in personnel.

Similarly, air traffic controllers make today's world-class aviation system work. They continue to move growing numbers of aircraft through our nation's airspace without the benefits of state-of-the-art technologies, but that is about to change. Forecasted demand from a broad range of users will exceed the capability of our system despite the best efforts of our skilled controller staff. Unfortunately, today's system is not scalable – adding more towers, TRACONs, or centers full of controllers will not work. We must provide today's controllers with tools that enable them to safely increase the number of aircraft that they manage at a given time.

Employee Safety Airlines continuously strive to make the work environment safer and more comfortable for employees, regardless of whether that environment is on the ground or in the air. Flight crews as well as passengers benefit from advancements in technology,

such as the hospital-grade HEPA air filters and ozone converters now installed on most long-range aircraft, which improve cabin air quality. Better data about cosmic radiation provided by the FAA's CARI-6 computer program allows flight crews to monitor their cumulative exposure to radiation and make changes where necessary to protect their health. A close partnership with the Centers for Disease Control and Prevention (CDC) has ensured that airlines can pass along to employees up-to-the-minute information on disease outbreaks and precautionary measures, such as last year's measles epidemic in Europe which coincided with the World Cup and the associated high travel demand.

Ramp employees face a myriad of threats as they load, service and move aircraft. ATA members collect and analyze detailed data related to employee injuries, as well as aircraft and equipment damage. This data-based approach enables carriers to identify risks and take specific actions to mitigate those risks. ATA collaborates with other key stakeholders to lead industry-wide changes, such as publishing safety guidelines/best practices, redesigning ground support equipment to make them more user friendly, and establishing safety protocols for ramp personnel.

Looking ahead, we see the possibility of new risks emerging. We urge the FAA to be mindful of these emerging issues and their potential impact on commercial aviation safety. We discuss two such issues here. The first is the imminent introduction of high-performance lightweight jets for personal use and air taxi operations. These jets, commonly referred to as Very Light Jets (VLJs) or microjets, will operate in the same airspace as large commercial jets, but at a slower speed. Today, 2500 VLJs reportedly are on order, and the FAA estimates that 5000 VLJs will be operating by 2017. Others estimate even greater numbers of these aircraft. Honeywell, for example, forecasts 8,000 units by 2018. The emergence of these aircraft raises a number of questions that must be addressed:

- How will the FAA ensure that VLJ pilots, particularly private pilots operating their own (or jointly owned) microjets, obtain and maintain the skills needed to operate safely in complex, high-density airspace?

- Are current pilot certification standards appropriate for this new generation of aircraft?
- Are current maintenance standards for privately owned aircraft appropriate for this new generation of aircraft?
- Will FAA maintenance surveillance programs ensure the safety of these aircraft if owned and operated privately as well as by air taxi operators?

These are just a few of the questions that must be resolved to ensure VLJs do not have an adverse impact on safety[7].

The second emerging issue, somewhat related to the first, concerns the introduction of Unmanned Aerial Systems (UAS). UAS can be vehicles that range from a 12-ounce hand-launched model to the size of a Boeing 737 aircraft. They also encompass a broad span of altitude and endurance capabilities that enable them to operate in airspace used by commercial aircraft. Each UAS has to be evaluated separately, with each aircraft's unique characteristics being considered before it can be safely integrated into the National Airspace System (NAS).

In addition to these basic safety issues, there is the question of funding safety oversight of these sectors. The scheduled airline industry contributes 94 percent of the Airport and Airway Trust Fund (AATF) yet accounts for only 69 percent of activity. Congress must ensure the VLJ and UAV sectors pay their fair share into the AATF not only in relation to their use of the air traffic control system, but also to cover related safety oversight. The airlines should not subsidize the safety oversight of other sectors.

Reducing Noise and Emissions

While safety must always remain the top priority, airlines have also been working to reduce the impact of their operations on the environment. Since 2001, airlines have

[7] Closely related is the question of security. What systems and programs will be put in place to ensure that these aircraft operate with the same level of security as large transport category aircraft? Air taxi operations, in particular, should be subject to the same level of security as all other commercial operations.

increased their fuel efficiency by 34 percent (measured by revenue passenger miles), with a corresponding reduction in emissions of most greenhouse gases. At the same time, ATA members continue to comply with voluntary noise-abatement measures where consistent with the safe and efficient operation of aircraft. Adherence to these measures, designed to reduce noise impacts on communities throughout the United States, is facilitated by improvements in navigation technology.

The reductions in fuel consumption and emissions have come about through a combination of technological improvements, higher passenger loads and operational measures. For example, the use of "winglets" - wing tip extensions that reduce drag – have been credited with reducing emissions as well as the noise footprint of a Boeing 737. Optimizing flight planning for minimum fuel-burn routes and altitudes through the use of sophisticated software is another way that U.S. airlines are saving fuel and reducing emissions. Some operational procedures, such as continuous descent approaches at certain airports, offer the potential for significant reductions in both noise and emissions.

Through collaboration with industry, agency and intergovernmental partners, ATA is actively seeking new approaches to address the environmental issues associated with aviation. In addition to serving on the Advisory Board for the Partnership for Air Transportation Noise and Emissions Reduction (PARTNER), a research center sponsored by the FAA, NASA and Transport Canada, ATA represents its members on the Environmental Integrated Product Team (IPT) of the Joint Planning and Development office and is actively participating in the ICAO Committee on Aviation Environmental Protection. At the same time, ATA, in coordination with our industry and government partners, is beginning to seriously explore the possibility of alternative fuels that could provide environmental benefits.

SECURITY - ASSESSING RISKS AND SETTING PRIORITIES

The post-September 11 environment is fraught with competing security priorities and threats. Aviation safety, of course, remains paramount and uncompromised. Everyday officials with the Department of Homeland Security (DHS), Transportation Security Administration (TSA), and other government agencies charged with protecting our national security make extremely difficult decisions about how to allocate resources in the most productive, most rational manner. In matters of aviation security, the government must consider the best threat intelligence available, an array of security measures, potential consequences of both action and inaction, and – significantly – the cost-effective use of valuable, limited resources.

The 9/11 Commission stated in its Final Report: "Hard choices must be made in alloeating limited resources. The U.S. government should identify and evaluate the transportation assets that need to be protected, set risk-based priorities for defending them, select the most practical and cost-effective ways of doing so, and then develop a plan, budget, and funding to implement the effort." [8]

Consistent with this recommendation, Congress and tbe administration have instructed federal agencies – specifically DHS – to implement risk-based approaches for assessing security priorities in various contexts. Tbe Homeland Security Act of 2002 requires DHS to perform a rigorous assessment of risks related to critical infrastructure and key resources.[9] The Intelligence Reform and Terrorism Prevention Act of 2004 directs DHS to prepare and implement a "National Strategy for Transportation Security" that identifies assets and vulnerabilities, and includes the "development of risk-based priorities across all transportation modes".[10] In the 2007 DHS Appropriations Act, DHS is directed to implement risk-based analysis in assessing security needs at chemical facilities and

[8] Final Report of the National Commission on Terrorist Attacks Upon the United States, p. 391 (July 22, 2004).
[9] 6 U.S.C. 2019d)(1), (2).
[10] Public Law 108-458, Sec. 4001.

emergency management system development.[11] In Homeland Security Presidential Directive 7, federal agencies are required to develop an integrated plan for Critical Infrastructure Identification, Prioritization and Protection. To comply with this directive, DHS and other federal agencies prepared the National Infrastructure Protection Plan that contains a risk-management framework as its cornerstone.[12] Agencies are required to work with each other and with stakeholders to set security goals, assess risks, establish priorities, implement appropriate programs and measure program effectiveness. Similarly, the "National Strategy for Aviation Security" prepared in response to Homeland Security Presidential Directive 16, includes a "risk-based, cross-discipline, and global approach to aviation security…". [13]

Consistent utilization of risk-based analysis is understandably difficult, but critically necessary. A recent report by the Government Accountability Office indicates that although DHS and TSA have made progress in implementing a risk-based approach to resource allocation, more progress is needed.[14] The report finds, "TSA has not yet completed its methodology for determining how the results of threat, vulnerability, and criticality…assessments will be used to identify and prioritize risks..".[15] It also notes that DHS continues to face challenges "in making comparisons across assets and infrastructure within the transportation sector and in setting relative priorities." [16]

The airline industry fully endorses risk analysis/risk-based decision-making for allocating security resources and will continue to work cooperatively with DHS, TSA and other agencies to implement this approach. With too many potential threats, and too few government and industry resources to respond to every conceivable threat, objective prioritization is absolutely essential. If not, our ability to defend against the most serious threats will be diminished.

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[11] Public Law 109-295, Secs. 550 and 508.
[12] *National Infrastructure Protection Plan*, p. 29; see also pp. 30-50 and 91-97 (June 30, 2006).
[13] *National Strategy for Aviation Security*, pp. 11, 23, 24 (March 26, 2007).
[14] *Homeland Security, Applying Risk Management Principles to Guide Federal Investments*," GAO-07-386T (February 7, 2007).
[15] GAO-07-386T, p. 5.
[16] GAO-07-386T, p. 31.

A disciplined, risk-based approach to aviation security results in an effective, comprehensive, multi-layered system that ensures the highest level of security. A good example are measures in place to prevent the hijacking of an aircraft: Watch List and Computer-Assisted Passenger Prescreening of all passengers, screening of all passengers and accessible property by Transportation Security Administration screeners, hardened cockpit doors, the presence of Federal Air Marshals, armed pilots under the Federal Flight Deck Officer program, enhanced crew security training, available self-defense training for crewmembers, and a new response to in-flight security situations – get the plane on the ground immediately.

Another area in which a risk-based, multi-layered approach ensures the requisite security is the screening of air cargo on passenger aircraft. Today, a combination of screening procedures and technologies are in place. To supplement this already robust system, the airlines, airports and other key cargo supply-chain participants - manufacturers and shippers of goods, air freight forwarders, passenger and cargo airlines, and the U.S. business community – support a framework that identifies and prioritizes risks; applies effective, practical security programs; and makes optimal use of federal and industry resources. Key elements include threat assessment and targeting, strengthened supply-chain security practices, increased deployment of canine teams, utilization of additional explosive trace detection, increased inspections for elevated-risk cargo, and accelerated research and development. Requiring blast-resistant cargo containers or 100 percent physical screening of all cargo is completely inconsistent with a risk-based approach to air cargo security.

Unfortunately, at times the risk-based approach has been abandoned and the allocation of resources seems to be dictated by the latest vendor-driven initiative. A very telling example is current DHS funding to develop Counter-Man-Portable Air Defense Systems - Counter MANPADS. While the MANPADS threat is real and must be taken seriously, the risk of other similar assaults against aircraft may be greater. To date, DHS has spent more than $120 million researching counter-MANPADS technologies with no consideration of the risks presented by MANPADS as opposed to other similar threats,

for example, direct-fire weapons such as rocket-propelled grenades. The resources required to implement these technologies – assuming they are ever refined to the extent necessary to be used in commercial operations – is astronomical. A 2005 Rand study estimates a cost of $11 billion just to install a system on the commercial U.S. aircraft fleet. The report indicates that the operating costs are purely dependent upon system reliability, which to date is well below the DHS identified standard. Last week DHS announced that it is also studying the use of high-altitude, unmanned aerial vehicles as airborne platforms to counter-MANPADS attacks. We urge the government to take a step back and conduct a thorough, comparative risk assessment, and then decide where to allocate the available, but limited, dollars.

In addition to the consistent implementation of risk-based analysis and resource allocation, the airlines urge the federal government to:

- **Fully fund aviation security** Under the Aviation Transportation and Security Act, Congress directed the federal government to provide for and fund aviation security. In 2006, the airlines contributed more than $3 billion – in mandatory security fees and unfunded security mandates – toward aviation security. The federal government should assume its rightful role and responsibility in ensuring our nation's security.
- **Consolidate U.S. government passenger data collection requirements** Government agencies – TSA, CBP, CDC and other agencies – must agree, to the extent possible, on a single, government-wide standard for airline passenger data collected; a single collection point to reduce duplication and inconsistent technical requirements; and an integrated, secure, efficient, accurate passenger prescreening process.

CREATING ROOM TO GROW...OR NOT

A satellite-based air traffic control system will provide the means to reduce delays and congestion that otherwise will occur. The benefits of a technologically up-to-date ATC system that is equitably funded will be extensive and will be widely distributed throughout the user community.

ATC service providers in other nations have recognized the need to replace antiquated ground-based systems. They have taken steps to transform those systems to satellite-based, digital air traffic management systems that ensure safety, generate added efficiency and produce additional airspace and airport capacity. Large and small countries have done so. For example, Fiji introduced a GPS-based air navigation system over a decade ago. Australia, Canada, China, France, Germany, India, Switzerland and the United Kingdom are implementing next-generation ATC systems.

The Alaska Capstone Program, Required Navigation Performance (RNP) terminal arrival and departure routings at Atlanta and Dallas/Ft. Worth, and RNP instrument approach procedures at airports that have challenging approaches, such as Juneau, Palm Springs and Reagan National in Washington, have given us a preview of what more extensive application of new technologies can deliver for system users in this country. A broadly modernized air traffic control system will enable all types of aircraft to take full advantage of Area Navigation Procedures (RNAV), RNP and Automatic Dependent Surveillance-Broadcast (ADS-B). This will make flying safer and far more efficient.

Increases in system capacity are understandably cited in discussions about the benefits of ATC system modernization. Improvements in safety, however, are what should first and foremost command our attention. Some of those improvements have already been accomplished; others are plainly attainable. A sharp drop in aircraft accidents in Alaska has occurred since the Capstone Program, which relies on ADS-B, was introduced earlier in this decade. Widespread use of ADS-B in the future will enable aircraft locations to be more precisely identified. This will be very helpful while aircraft are airborne but will also be useful in ongoing efforts to reduce runway incursions while on the ground.

Capacity improvement is another core reason for ATC system modernization. New technology will enable aircraft to be unshackled from the ground-based, point-to-point navigation systems and associated analog communications systems under which they have operated for over three-quarters of a century. New technology will also enable the more precise spacing of aircraft. The ability to fly outside of existing point-to-point airways and improved precision will enable aircraft to operate more efficiently in airspace, whether it is en route or terminal area. That new-found efficiency will translate into added capacity. It also means, as noted above, the ability to use satellite-based instrument approach procedures at some runways that today have limited or no availability in instrument meteorological conditions – another important capacity enhancement.

The wider use of digital communications, which will be an integral element of the modernization effort, will relieve congested voice communications channels, increasing the capacity to transmit quickly and accurately air traffic control information. This will mean a more orderly transmission of critical information, which will benefit both pilots and controllers, especially during peak workload periods. Furthermore, wider use of digital communications will diminish the possible blocking of voice communications between pilots and controllers in high-volume situations that can occur today, which is an increasing safety concern.

In addition, routing efficiency improvements will yield significant environmental benefits. Experts estimate that modernization of U.S. airspace management could result in 12 to 15 percent improved environmental performance. We have already seen such benefits. For example, the introduction of more precise RNP arrival and departure procedures in the Atlanta terminal area is projected to eliminate 483 million tons of CO_2 annually.

The consequences of failing to provide sufficient capacity to meet growing demand can already be seen at some of our nation's most constrained airports. Caps on the number of flights, which were put in place as at a handful of airports as a "temporary measure" in the late '60s, have become permanent fixtures at New York LaGuardia and Washington

Reagan National airports. These operating limits have given rise to a complex and burdensome set of regulations that continue to generate controversy and are at odds with the congressional directive to place maximum reliance on competitive market forces.

At other airports facing increased congestion there are calls for market-based "demand management," using charging schemes designed to shift demand from peak periods to less busy times of day or to other airports or modes of travel. Market-based demand management relies on pricing some users out of the national aviation system at certain times or locations – the end result is that some people will be unable to travel when and where they choose at a fare they are willing to pay. This is fundamentally inconsistent with the underlying principle of our national aviation system, which assumes that airports receiving federal funding will be available for *all* users.

At best, demand management is a short-term fix; at worst it is a short-sighted refusal to grapple with the real challenges facing our national aviation system. It should not be confused with a solution to the problems of insufficient runway capacity or inefficient airspace use, and should not be allowed to mask the underlying need for airspace and airport capacity improvements.

CONCLUSION

Notwithstanding extreme economic pressure, the U.S. airline industry has experienced one of the safest, if not the safest, period in its history. While hearings like this allow us to proudly reflect on this accomplishment, we understand that we cannot become complacent and rest on our accomplishments. Aviation safety demands constant vigilance, review and improvement. For this reason, we will continue to work with the FAA, the NTSB and the many parties with a stake in the continued safety of our industry. "Safety first" will continue to be our core principle.

HEARING ON THE FEDERAL AVIATION ADMINISTRATION'S AIRPORT IMPROVEMENT PROGRAM

Wednesday, March 28, 2007

HOUSE OF REPRESENTATIVES
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE,
SUBCOMMITTEE ON AVIATION,
Washington, DC.

The Subcommittee met, pursuant to call, at 10:00 a.m., in Room 2167, Rayburn House Office Building, the Honorable Jerry F. Costello [Chairman of the Subcommittee] presiding.

Mr. COSTELLO. The Subcommittee will come to order. The Chair will ask that all Members, staff, and everyone in the room turn off electronic devices or put them on vibrate.

The Subcommittee is meeting today to hear testimony on a review of the FAA's Airport Improvement Program. As we all can see, we have three panels of witnesses, I think a total of 15 witnesses to hear from today, so I would ask Members to take that into consideration and consider placing their opening statements in the record so that we can get to our witnesses.

I will give an opening statement and then recognize the Ranking Member, Mr. Petri, for his opening statement or remarks, and then hopefully go directly to the witnesses.

I want to welcome everyone to the fourth of our hearings on the FAA reauthorization. This hearing focuses on the FAA's Airport Improvement Program.

The FAA estimates that during the next five years there will be $41.2 billion of AIP-eligible infrastructure development, an average of about $8.2 billion a year. The Airport Council International-North America believes that total airport capital development costs, including the cost of non-AIP-eligible projects, to be about $17.5 billion per year from 2007 through 2011.

While the FAA acknowledges that airport capital needs are up, the FAA's new three-year proposal provides approximately $1.5 billion less for the AIP program than what the FAA requested for the first three years of its last reauthorization proposal, the Centennial of Flight Aviation Authorization Act. I want to repeat that. While the FAA acknowledges that capital needs are up, the FAA's new three-year proposal provides $1.5 billion less for the AIP program than they requested for the first three years in the last reauthorization.

I believe that we will need a more robust program than what the FAA has suggested. I am concerned about the impact of these cuts on smaller airports. AIP grants are generally a larger source of capital funding for smaller airports. The GAO will testify today that 64 percent of the capital funding for smaller airports comes from the AIP program.

The FAA is proposing a number of interesting changes to the AIP program that the FAA believes would help target more active smaller airports. However, even with the FAA's programmatic

changes, there would be less total funding for programs traditionally and specifically associated with small airports when compared with the current structure and funding levels.

Further, under the FAA's proposal, there may be some winners and losers when it comes to small airports. For example, while the busier smaller airports would receive larger non-primary entitlement grants than they now receive, the FAA estimates that several airports that are eligible to receive non-primary entitlement grants would no longer be eligible. I look forward to hearing from our witness today from the FAA as to why the FAA believes these airports should no longer be deserving of AIP eligibility.

The FAA believes that cuts to the AIP program would be offset by raising the current $4.50 cap on the PFCs, raising it to $6.00. The PFC cap has not been raised since 2000, and many in the airport community believe that inflation and construction cost increases have eroded the PFC's value.

The FAA believes that an increase in the PFC cap to $6.00 would generate an additional $1.5 billion for airport capital development. I believe the PFC has been an important tool in improving and expanding our airports, and I agree that we should increase the cap of $4.50. There is no question that there has been a loss of purchasing power, and we must increase the cap to adjust for inflation.

In addition, the FAA proposes to greatly expand the PFC eligibility for airport capital projects. More specifically, the FAA's proposal would expand the PFC eligibility to encompass any airport capital project that is eligible to be funded with airport revenue, provided that the project is not anti-competitive. I have concerns with expanding the eligibility beyond its current scope.

Some have argued that the PFC is essentially local money and, therefore, there should be more local control over how PFCs can be spent. Since a significant portion of PFC revenue comes from interstate passengers, I believe that PFC revenue should be used to promote national policies and goals, such as increased capacity, safety, and competition, within an integrated system.

With that, I again welcome our witnesses here to testify before the Committee. Before I recognize the Ranking Member, Mr. Petri, for his opening statement, I would ask unanimous consent to allow two weeks for all Members to revise and extend their remarks and to permit the submission of additional statements and materials by Members and witnesses. Without objection, so ordered.

At this time I would call on and recognize the Ranking Member, Mr. Petri, for his opening statement or any remarks.

Mr. PETRI. Thank you very much, Mr. Chairman. I would like to thank our many witnesses this morning for coming and sharing their viewpoints on the important topic before us this morning, airport improvement funding and airport noise issues.

The FAA proposal regarding funding of airport infrastructure raises several important issues which I look forward to hearing about today. A major portion of the proposal worthy of discussion is the proposed increase of the passenger facility charge and the impact of inflation and construction costs on the purchasing power of that charge over time. The expanded PFC project eligibility and streamlining of project approval processes are also obviously of interest to this Subcommittee.

To many of the small airports in my district and around the Country, the airport improvement program is a significant source of funding for capital projects. For the past few years, Congress has authorized between $3.5 billion and $3.7 billion for that program, which has helped our small hub and non-hub airports grow and therefore provide more capacity within the national airspace system.

That level of investment has also greatly benefitted our reliever in general aviation airports. Therefore, I would like to hear about the Administration's explanation as to how the lower AIP levels fit into their overall airport infrastructure financing proposal.

I am also interested in the impact of the AIP formula changes on airports of all sizes.

Part of that proposal is the new tiered non-primary entitlement program. I think it is an interesting idea, responsive to need, and look forward to hearing more about the specifics of that particular proposal.

The link that currently exists between airports turning back AIP money to the FAA and the receipts of PFC money by those airports is an interesting topic. It is particularly true given the way it links small airport financial interests to those of large airports. The agency's proposal seems to de-link the financial interests, which raises questions as to what the impact on airports, both large and small, will be. Is it a necessary link?

Also, the Administration's proposal sunsets a number of 9/11-related provisions or programs from Vision 100. The agency states that it does this because, by and large, airports have recovered from 9/11. I look forward to hearing about this aspect of the proposal and of the state of airports in our Country.

Once again, I would like to thank this panel and the other panels that we will be hearing from for coming today and look forward to your testimony, and yield back the balance of my time.

Mr. COSTELLO. I thank the Ranking Member.

The Chair would now introduce our first panel of witnesses. First, Mr. D. Kirk Shaffer, Associate Administrator for Airports at the Federal Aviation Administration; Dr. Gerald Dillingham, Director of Physical Infrastructure Issues with the U.S. Government Accountability Office, who has been in this room as many times as I have been in the last two weeks, but we welcome you back as always; Mr. Charles Barclay, President of the American Association of Airport Executives; and Mr. Greg Principato, President of the Airports Council International-North America.

The Chair would recognize Mr. Shaffer under the five minute rule.

I mentioned earlier to Members and to witnesses we have three panels. We are attempting to hear from all of the stakeholders and everyone who, of course, has an interest in the reauthorization bills. We are trying to be as inclusive as possible, and that is why we have 15 witnesses today. So I would ask you to take that into consideration and try and, with the exception of the GAO, who has, I think, a slide presentation that will go a little bit longer than five minutes, I would ask you to summarize your statements in five minutes, if that is possible. And if you go a little bit over that, I will remind you and let you know.

So, at this time, the Chair recognizes Mr. Shaffer under the five minute rule.

TESTIMONY OF D. KIRK SHAFFER, ASSOCIATE ADMINISTRATOR FOR AIRPORTS, FEDERAL AVIATION ADMINISTRATION; DR. GERALD DILLINGHAM, DIRECTOR, PHYSICAL INFRASTRUCTURE ISSUES, U.S. GOVERNMENT ACCOUNTABILITY OFFICE; CHARLES BARCLAY, PRESIDENT, AMERICAN ASSOCIATION OF AIRPORT EXECUTIVES; AND GREG PRINCIPATO, PRESIDENT, AIRPORTS COUNCIL INTERNATIONAL-NORTH AMERICA

Mr. SHAFFER. Good morning, Chairman Costello and Representative Petri, Members of the Subcommittee. This is my first appearance before the Subcommittee since joining the FAA, and I look forward to working very closely with the Subcommittee in the months ahead as you consider the Administration's airport financing reform proposal.

While my written testimony provides many details of our proposal, I would like to take my time this morning to highlight some of the changes that we propose for the Airport Improvement Program affecting small airports and also address our proposals for PFC reform. I know that our proposal has generated a number of questions and concerns with our stakeholders and with the Members of this Subcommittee, and I look forward to addressing those issues with you today.

Before I get into specifics, let me give you a little background of how we developed this proposal and the data that supports it.

During the past two years, we reached out to all of our stakeholders, to the airports, the consultant community, to the airlines and others, to find out the state of the industry. We also contacted the financial community because, as you know, AIP pays for only 25 airport to 35 percent of airport capital development needs nationally. We reviewed engineering and planning data, and we reviewed airport financial data as well.

Our review showed that capital needs are up. Our latest published report on airport needs, known as the NPIAS, is up about 4 percent over the prior NPIAS. Even that figure is low since it did not account for the jump in construction costs and fuel surges in the summer of 2006.

Airports have recovered financially from the financial shocks of 9/11. Passenger and traffic operations are up at many locations, approaching pre-9/11 levels. Across all sizes of airports, net operating results—that is revenue minus expenses—are up. Large airports have returned to profitability. In contrast, while small airports have recovered financially, many operated at a deficit before 9/11 and continue to do so. In other words, small airports continue to depend on Federal AIP dollars to meet their capital needs.

The municipal bond market and rating agencies told us that airports remain much better financial risks than their airline tenants. For this reason, airports that have developed strong revenue streams independent of the airlines are especially favored. PFCs are viewed as just such a revenue stream because they depend on the underlying demographics of the markets that the airports serve, not on the health of the individual air carriers. However,

PFCs would be even more effective financial tools if airports had more flexibility in the kind of capital projects they could finance with PFCs.

Finally, current developments in air transportation, the transition to the NextGen air traffic control system, the introduction of very light jets, the growth of fractional ownership and point-to-point air traffic services, and continuing congestion at large airports mean that secondary and reliever airports, as well as other high activity general aviation airports, will face increasing investment needs.

Based on these findings, our proposal is designed to do the following: assure a stable source of AIP funding for small commercial and GA airports; assure sufficient AIP funds available for the FAA to distribute and for the States to meet critical safety capacity and security priorities; convert the non-primary entitlement into a strategic investment tool that will help secondary and reliever airports, as well as other high activity GA airports, meet the new demands that will be put on them; and enhance PFCs as a local airport financing tool through an increased maximum PFC, broaden PFC eligibility and administrative streamlining.

With regard to the non-primary entitlements and State apportionments, there is no doubt that the non-primary program enacted as part of Vision 100 helped a number of smaller GA airports upgrade and maintain their facilities, do comprehensive master planning, and construct revenue-producing facilities that help them become more self-sufficient.

We fully support continuation of the NPE program, but with modifications that make sense for the entire spectrum of airports. Beginning in the summer of 2005, we looked at each and every GA airport in the system. We looked at the smallest and the largest. We looked at the types of aircraft that use these airports and what kind of infrastructure airports need to serve them safely and efficiently. We looked at it from an engineering perspective and a planning perspective. The data confirmed what common sense tells you: not all GA airports are created equal. Airports with more activity or with higher performance aircraft require more elaborate airfield infrastructure.

When we then look at the GA community of airports, we see two major themes: different roles and different needs. In that context, we are proposing a four-tiered system of non-primary entitlements. The busiest, largest non-primary airports would be granted $400,000 per year. This category includes commercial service and reliever airports. The smallest GA airports, those with less than 10 based aircraft, would not receive an annual entitlement. But let me be absolutely clear. We are not saying that these airports have no capital needs or that AIP should not support those needs. These airports will continue to qualify for State apportionments and discretionary funds. Also, we propose to preserve the 95 percent Federal share for these airports. All we are saying is that these airports' capital requirements are intermittent, they do not require annual infusions of cash to sustain their infrastructure.

We are proposing that about 750 airports would end up in this lowest tier under our proposal. We have heard people say that these 750 airports are going to lose money. That figure is simply,

plainly wrong. We went into our grants database to look at what has been happening at these airports, and we had to focus on the airports that are not located in block grant States. We can't track the grants in the block grant States. But in the 42 States that do not have block grants, nearly half the airports in the lowest tier either did not receive a non-primary entitlement or did not spend the non-primary entitlement money they got by taking a grant in the last four years. So the number of airports that will actually lose guaranteed annual money is a far more modest figure, around 300 locations.

Let me please address one other aspect of our AIP proposals affect small airports. We have heard people characterize our proposal on the Federal share for small airports as FAA cutting the Federal sharing from 95 percent down to 90 percent. That assertion also is plain wrong. Vision 100 sets the expiration date for the 95 percent Federal share as September the 30th. All the FAA is proposing is that we let that entitlement expire as Congress intended it to.

Let me briefly address the PFC program, Mr. Chairman. PFCs do remain fundamentally a local revenue, and after 17 years a very good track record has been amassed in the imposition and the application of PFCs. We are proposing, as you have noted in your opening comments, three principle changes to the PFC program: we want to raise the cap to $6.00 in recognition of the increased construction costs and the impacts of inflation over time since the last adjustment; we want to broaden the eligibility so that airports can use this revenue for more projects and produce even more revenue; and, finally, we want to administratively streamline the PFC process by essentially eliminating all the bureaucratic paperwork, with the exception of an annual report that looks a year back and a year forward.

That having been said, Mr. Chairman, I know that these are some substantial changes that we are proposing. Change is never easy, particularly change of the magnitude that we are suggesting. The undeniable fact is that we face a billion passengers coming through the system by 2015, and we have got to begin to prepare now to meet that challenge.

This concludes my prepared statement. I would be happy to take your questions.

Mr. COSTELLO. We thank you.

The Chair now recognizes Dr. Dillingham.

Mr. DILLINGHAM. Thank you, Mr. Chairman, and thank you for your consideration, Mr. Petri, Mr. Duncan, Mr. DeFazio, and Members of the Subcommittee.

You asked GAO to examine four issues related to the reauthorization of the AIP program. The first issue focused on the nature and scope of airport capital needs. To address this issue, we compared estimates of capital development needs that were prepared by FAA and Airports Council International organization. Our analysis showed that ACI's estimate of developmental costs is considerably higher than FAA's.

This graphic shows that for 2007 through 2011 FAA has estimated that annual development costs, in 2006 dollars, that is, will be a little bit over $8 billion. For the same period, ACI estimated that development costs would be slightly more than $15.5 billion.

This is a difference of about $7.5 billion annually. The primary reason for the difference between the estimates is that FAA's estimate only includes projects that are eligible for AIP grants, while AIC includes both eligible and ineligible projects.

When we compared only AIP eligible projects in both estimates, ACI's estimate still exceeded FAA's by about $1.5 billion annually. The difference between the two estimates was accounted for because of differences in the definition, measurement, and timing of the projects.

The second issue we addressed was how much money have airports received for capital development and where is that money coming from. This graphic shows that between 2001 and 2005 airports received an average of about $13 billion a year for capital development from a variety of sources. Overall, the primary source of airport funding was municipal bond proceeds, which is shown here in green. Bonds accounted for about half the total funds, followed by AIP at 28 percent, shown in yellow, and PFC, which is shown in orange and which accounted for about 17 percent of the total. State and local funds accounted for the remaining 5 percent.

As you can see, smaller airports depend much more on AIP grants than larger airports. This graph shows that larger airports obtained only 14 percent of their funds from AIP grants, compared to 64 percent for smaller airports.

A third issue that we examined was the extent to which current funding levels would be sufficient to meet capital development needs between 2007 and 2011. The bar on the left side shows that FAA has received about $13 billion for capital development in each of the last five years. The bar on the right shows that if airports continue to receive a similar amount of money over the next five years, it would cover all the projects in FAA's capital development plan.

To get a more complete picture of the potential demand on capital, we combined FAA's planned development cost and the cost of ACI's ineligibility projects. As you can see, the bar on the right shows that the combined development costs for the next five years exceeds historical funding levels by about $1 billion annually.

A more detailed analysis of this issue shows that the differences between past funding levels and future development costs is different for larger and smaller airports. For the 67 larger airports, the shortfall would be about $600 million annually, and for all other airports, including general aviation airports, the shortfall would be about $400 million annually.

The last issue we examined was the potential effect of the Administration's reauthorization proposal for airports. We concluded that the Administration's proposal to increase the PFC ceiling from $4.00 to $6.00 will enhance funding for larger airports despite an overall reduction in AIP funding. However, the impact on smaller airports is more uncertain because these airports depend much more on AIP. The proposal would also reduce AIP by $750 million, or more than 20 percent of its current level. The proposal would also increase the amount that airports can collect from PFCs, potentially by as much as $1.1 billion annually. For smaller airports, which have far less capacity to collect PFCs, increasing the PFC ceiling may not compensate for the overall reduction in AIP funds.

As a separate issue, our analysis raises questions as to whether the new fuel taxes that have been proposed to fund AIP will be as much as anticipated and whether additional sources of revenue may have to be found. This would certainly be the case if Congress appropriated more than $2.75 billion for AIP.

In conclusion, Mr. Chairman, we expect that the demand for air travel will continue to increase and airports will need to make capital improvements to meet the capacity challenges in today's system, as well as those of the NextGen. AIP will continue to play an important role in meeting those challenges and some elements of the Administration's proposal are to be commended, such as simplifying the funding formula and giving FAA more discretion to fund high priority projects. However, other parts of the proposal raise concerns about its impact on smaller airports.

Thank you, Mr. Chairman.

Mr. COSTELLO. Thank you, Dr. Dillingham.

The Chair recognizes now Mr. Barclay.

Mr. BARCLAY. Thank you, Mr. Chairman and Members of the Committee. It is always a privilege to testify before the T&I Committee.

I would just like to make several points in addition to our written testimony. The first is that airport executives are very concerned about their ability to meet the demand that is coming at this system with adequate airport capacity. We have the particular challenge, as you know, that it takes 7 to 10 years, sometimes more, for any major capital development at airports, so we need to be starting right now for things we want in this system and operating in the middle of the next decade.

But regardless of any challenges we face, we know we are going to add one-third the number of passengers that we currently have to the system in the future, almost half, as a matter of fact. It is the equivalent of adding the population of the United States to the airport system that we currently have. Any of you that travel at busy times in the system know we don't have the capacity at the present time to meet that kind of coming demand. And it is not just the issue of constraining an airport system. As this Committee also well knows that not meeting demand for air travel has broad ramifications for the economy in general. So we are here asking for the Committee's help for our Members to be able to meet those demands that are coming at the system.

Second point is that the existing elements of financing for capital development of airports have been absolutely ravaged by construction inflation. This is not your 2.7 percent CPI increase that the public understands. The latest figures are that in the last three years, in the 30 major markets, construction inflation has been just under 25 percent. It has been a huge increase in our projects and, as a result, we are recommending to the Committee much higher funding levels than are in the Administration's plan, specifically, $3.8 billion with annual increases for AIP and a $7.50 cap on the passenger facility charge with indexing for future inflation, rather than today's $4.50 or the $6.00 recommended by the Administration. We do appreciate their recognizing the need for an increase.

In all candor, Mr. Chairman, I know people on the Committee have said, well, gee, a $3.00 jump is kind of a long reach that the

airports are recommending. Let me, with all respect, remind the Committee that in 1999, eight years ago, the Committee voted for a $6.00 PFC overwhelming. The House of Representatives voted for a $6.00 PFC at that time, and it was only in negotiations with the Senate that it was cut back to $4.50. If you went back and took that $6.00 PFC and added inflation to it, you would be well over $8.00. The very first PFC was a $3.00 PFC that went up from zero to $3.00. This Committee recommended $3.00 to $6.00. So we think that both the history of this program makes a $3.00 increase reasonable by what has been past practice and, more importantly, the needs make it a reasonable increase.

The Administration proposal on AIP is one that we have great respect for the professionals in Kirk's office. They have done their best, were given too low a level by OMB for AIP, in our opinion. We start from current law, frankly, as the test as to whether a change in AIP would be good or bad. This Committee has, for 37 years, been balancing out the needs of different categories of airports in the system and where money needs to flow, and that is a high hurdle to overcome for any new ideas in the system. We are certainly open to those, but we find a lot of merit in making sure that we continue the benefits of the current system and the balances that you have made in law in the past, but that we make sure we increase for all categories of airports the capital needs, because they have all been met with these challenges of construction inflation.

We would also recommend that the Committee continue to keep in mind, as it always has in the past, that the Trust Fund was developed to do capital development first, operations second. To some extent, I think the Administration is trying to switch that priority.

A final brief comment. We would like to work with the Committee on small community air service provisions. We think they need to be strengthened over what is in the Administration's program.

I would be glad to answer any questions, Mr. Chairman.

Mr. COSTELLO. The Chair thanks the gentleman and recognizes Mr. Principato.

Mr. PRINCIPATO. Chairman Costello, Congressman Petri, Chairman Oberstar, Members of the Subcommittee, thank you for this invitation to testify.

As President of Airports Council International-North America, I am testifying on behalf of the local, regional, and State authorities that own and operate commercial service airports. Our members enplane more than 95 percent of the passenger and cargo traffic in this Country, domestic passenger and cargo traffic, and nearly all of the international passenger and cargo traffic. Nearly 400 aviation-related businesses are also members of ACI-North America.

Passenger growth has returned and the stakes are high. As airports prepare their capital development strategies to meet these needs, they employ a variety of tools, including bond financing, PFCs, AIP, and airport-generated revenue. For a variety of reasons—ranging from the impact of construction cost inflation, to an outdated PFC cap, to unfavorable tax treatment for airport bonds, to the annual fight over proposals to cut AIP—it increasingly difficult for airports to meet increasing needs. Simply put, if Congress

does not act to address these issues in reauthorization, airports will be left without the tools and financial resources needed to play their role in developing and maintaining a strong national air transportation system.

To put this into context, as the Chairman said before, ACI-North America's latest capital needs survey estimates over $17.5 billion in capital needs each year over the next five years. Given that the current Federal annual appropriation to meet those needs is $3.5 billion, the reliance of the airport industry on locally generated funds, including PFCs and revenue bond financing that is often backed by PFCs, is obvious.

The industry needs the full array of tools to finance the capital development necessary to support a growing, competitive air transportation system. For this reason, the airport community is advocating policy changes to permit greater airport access to capital, combined with the continuing and strong Federal investment in airport development.

Based on construction cost inflation alone, we believe the PFC ceiling should be raised to $7.50, an index to return purchasing power. This change would simply allow airports to account for construction cost inflation and nothing more. It would keep the PFC whole, in other words. We also support the FAA's proposal to streamline the program. PFCs have been in place for 17 years and are well recognized as a success.

Airports have utilized their PFC authority diligently and in a balanced way to promote important national aviation priorities such as additional capacity, the promotion of competition and choice, noise mitigation, and safety and security enhancements. It is also important to note that more than 95 percent of PFC-backed projects have been implemented without airline opposition, and because PFCs are an efficient and effective way to finance projects, they often have the effect of reducing overall airline costs while providing needed capacity.

I know there has been a great deal of discussion about how PFCs are used. Airports pursue a balance in their efforts to increase capacity. No airport would forego investing in potential air side capacity simply to build excess non-air side facilities. In Atlanta, 55 percent of the newly opened runway was built with PFCs, providing huge capacity benefits not just to that airport, but to the Nation as a whole. The new runway in St. Louis will be 59 percent built with PFC funds. Those are clearly capacity-enhancing projects.

Yesterday, I spoke with the director of the Sacramento California Airport. He told me he has far more air side capacity than he is currently using, and he would like to bring more service in, but that his terminal couldn't handle it. He needs to do a terminal project, which in this case I would argue is a capacity project.

I also spoke with the director of the Asheville North Carolina Airport. He does not have any big air side projects right now, but needs to do work on his terminal in order to provide price and service competition for his community. He can't do it without the combination of PFCs and AIP.

With regard to AIP, we believe that the funding needs to be increased and the program strengthened. Applying the same con-

struction cost inflation analysis to the AIP program, the authorized levels should rise to $3.8 billion, $4.0 billion, and $4.1 billion in the next three years. PFCs were meant to supplement, not supplant, AIP, and both need to be strong.

It should also be mentioned that we believe air traffic control modernization will have enormous capacity and environmental benefit, and we fully support efforts to achieve that goal.

Mr. Chairman, the members of ACI-North America and I thank you for this opportunity to testify, and we are at your disposal to work with you to promote the success and the expansion of the Nation's air transportation system. Thank you very much.

Mr. COSTELLO. The Chair thanks the gentleman and recognizes the distinguished Chairman of the Full Committee, Chairman Oberstar.

Mr. OBERSTAR. Thank you very much, Mr. Chairman. This is perhaps, of all the hearings we are holding, the most important on the future of aviation in the reauthorization. We have received—I spent a great deal of time last night and this morning reading through the testimony—some of the best documentation I have seen in many years, and I think that is because the stakes have been raised by the Administration's—I will be kind—proposal. I won't put an adjective on it.

Dr. Dillingham, as always, you provide us with very thorough, thoughtful, detailed, well supported documentation. Let me ask should AIP funding for terminal purposes be expanded? And for which purposes and what types of limits should be put on it? We have gone along for years saying AIP has all these limitations; one of them is terminals, one of them is activities that generate revenues. When I was in the position of Mr. Costello, chairing Aviation years ago, we sort of went along, just made assumptions and lived with those assumptions. Maybe we ought to reconsider. What do you think?

Mr. DILLINGHAM. Chairman Oberstar, I think that the rationale for the funding decisions that were made some time ago still are valid; however, I think we also should b e open to looking at new opportunities in terms of making changes.

Mr. OBERSTAR. And that means?

[Laughter.]

Mr. OBERSTAR. You don't want to just continue doing studies for us, you want to make some policy recommendations. This is your opportunity.

Mr. DILLINGHAM. Well, Mr. Oberstar, you know that the GAO is sort of prohibited from making policy recommendations. That is why I had to answer the way that I did.

Mr. OBERSTAR. Well, that is why, over the years, we have hired some of your people to come on the staff. They have the substantive knowledge and then they come with all those hidden agendas that they had for years that they were repressed.

Mr. DILLINGHAM. Yes, sir.

[Laughter.]

Mr. DILLINGHAM. That is very true, sir.

Mr. OBERSTAR. Well, I am not suggesting that we make a change, but I am saying we need to rethink a great deal of what we have ben doing in aviation. Mr. Barclay, who has a long history

of—goodness, gracious, he goes back to the Wright Brothers in aviation——

Mr. BARCLAY. Don't keep going, Mr. Oberstar.

[Laughter.]

Mr. OBERSTAR. Your documentation is just filled with specifics, but you get to the PFC and funding that—wait, I had this marked here. A $7.00 PFC the Administration proposes for up to 10 medium or large hub airports if they agree to operate and maintain terminal area navigation equipment such as ILS and approach lighting systems and so on. Where did that wacky idea come from? This is a big cost shift. They have stuffed their hand into the pockets of the airport and say, all right, you pay for the things that we have been paying for, you increase the cost on passengers, and then we are going to say we got a budget cut. That is what that smells to me like.

Mr. BARCLAY. I agree, Mr. Chairman. The notion—first of all, let me step back and say experimenting with ideas in general with pilot programs is something this Committee has done effectively over the years to find that balance you found over 37 years for an airport program, but one of the concerns that has always been there is if you start shifting nav aids into AIP, some future OMB is going to have a great incentive to start funding as much F&E as it can out of the AIP program, and you don't wind up having enough money then for construction costs at airports.

So we would agree with being very cautious about those ideas.

Mr. OBERSTAR. Doesn't this amount to double-charging of air travelers? They are paying out of the ticket tax for—of course, the FAA has this scheme of changing the whole financing structure, but if you keep it as it is and you shift it to PFC costs for a function that is an F&E account, you are already paying for the F&E, now we are going to pay again for the F&E account for airport lighting.

Mr. BARCLAY. In fairness to the Administration, there have been some airports in the past that have wanted to use AIP when they couldn't get on the list for an ILS.

Mr. OBERSTAR. Oh, yes, I know. Time and again they have bought other equipment because they couldn't get it through the F&E account and they were trying to use AIP funds.

Mr. BARCLAY. But normally the airports turn the operations of those facilities over to the FAA to then operate out of its account. So we share the concern that is being expressed.

Mr. OBERSTAR. There are lots of these little treasure troves that are hidden deep inside that FAA budget proposal. You have, on the same page a little earlier, airports typically unable to refinance their debt take advantage of lower interest rates for 10 years. How did that come about? You were probably there when the original tax was done. You were probably over in the Senate staff when that was written.

Mr. BARCLAY. Tell me again what I am talking about here?

Mr. OBERSTAR. On page 12 of your testimony you make what seems to me a very reasonable proposal or request, to allow airports to refinance debt, take advantage of lower interest rates and have more revenues available.

Mr. BARCLAY. That is a Finance and Ways and Means——

Mr. OBERSTAR. Why was the 10 years put in the first place?

Mr. BARCLAY. I don't know, Mr. Chairman.

Mr. OBERSTAR. Why don't you find out and come back to us?

Mr. BARCLAY. We will get back to the Committee with that.

Mr. OBERSTAR. It may have just been 10 years because some staffer at OMB said 10 years or some staffer on the House or Senate Ways and Means Committee said 10 years. But if there is a rationale behind it, we ought to understand that so that we can make an appeal to the Ways and Means Committee on your behalf. I think this is a sensible idea.

Mr. BARCLAY. If I can add, Mr. Chairman, we are fundamentally asking for airport bonds to be treated the same way that highway bonds are treated.

Mr. OBERSTAR. Yes.

Mr. BARCLAY. We want identical treatment; nothing more, nothing less.

Mr. OBERSTAR. Why not? Why was this difference made?

In PFC-funded projects there is a creeping move, and it is sort of growing by increments, of airlines wanting to have a veto over PFC projects. What do you think?

Mr. BARCLAY. Bad idea. The airports have moved strongly since deregulation to get rid of mutual air—not mutual aid, but majority and interest clause agreements and things that give airlines the right to veto projects that competitors will want to come in and use. So we should keep independence for airports for those projects.

Mr. OBERSTAR. That was one of the six points I wrote down in my discussion from that chair with Secretary Skinner in 1990. I said they were not going to have veto. They should have a strong consultative role. FAA, DOT have an oversight role. Maybe we strengthen that role so some questionable projects could be filtered out or modified. And also the requirement for a competition plan by airports so that we ensure that, as we increase capacity, we also increase opportunities for competition.

Mr. BARCLAY. Well, in the history of the PFC program, there have only been two turned down, and only one of those was objected to formally by the airlines. So the rhetoric that this is a highly contentious program is really not met by the record that most of these projects are worked at. Airports should consult. The airline opinions are important, but they shouldn't have a veto over the programs.

Mr. OBERSTAR. I have just a couple more points, Mr. Chairman

Mr. Principato, 17 percent, for a very long time, of the PFC was going into capacity, the rest was going into other terminal needs and on-airport ground needs. If there is to be an increase in the PFC, would you agree to a requirement also that a higher percentage of the PFC go into capacity projects and runway, taxiway, parking apron improvements?

Mr. PRINCIPATO. Well, as I said in my testimony, we believe that certainly when you allocate the amount of PFC that has gone into interest, the number is much higher than 17 percent. I think we spoke the other day. It is really more like 30.

Mr. OBERSTAR. In the last two or three years it has gone into 40 plus percent.

Mr. PRINCIPATO. Right. And airports always seek a balance, as well. I used the Sacramento Airport example earlier, where they have the air side capacity they need, but they can't bring in the service they would like because their terminal can't handle it. So they need to use PFCs to do a terminal project to make the most of their air side capacity.

Mr. OBERSTAR. One of the reasons that I wrote that language into the PFC, because the airlines don't give a hoot how you get there or what you do when you get to the airport, they just say this is the time we are going to take off, and you are here or we leave without you. They don't care how you get there.

Mr. PRINCIPATO. And then you would have someplace to let the passengers out and pick them up.

Mr. OBERSTAR. So airports worry about that. You are the advocates for the public.

Mr. PRINCIPATO. Right. And the airlines need to have someplace to let the passengers off and pick them up and so forth.

I also think that those statistics may understate a little bit the capacity benefit. I used the Atlanta example before, which had capacity benefits throughout the entire Country, and 55 percent of their new runway was built with PFCs. So I think we are seeing, as you said yourself just a minute ago, a trend for more and more PFC financing for important projects like that.

Mr. OBERSTAR. By my estimate—it is my own horseback estimate of keeping track of canceled projects after September 11—airports diverted $3.4 billion, roughly $3.5 billion to security needs at airports. I have advocated that airports should be compensated for these through the AIP program or the Defense account or out of general revenues. Have you folks in the ACI done some discussions about those diversions of funds to security needs?

Mr. PRINCIPATO. We certainly agree with you that this is a national defense, national security priority and that it ought to be handled that way, but whether through Defense or Homeland Security or whatever, we generally agree with you on that.

Mr. OBERSTAR. Mr. Shaffer, does FAA have an opinion on expanding use of AIP funds or PFC funds for terminal requirements?

Mr. SHAFFER. The FAA is comfortable with the limitations that presently exist, Mr. Chairman, but, of course, as I have spoken about earlier this morning, we do believe that the eligibility for PFCs as a form of local revenue should be expanded.

Mr. OBERSTAR. Thank you. Appreciate it.

Thank you, Mr. Chairman.

Mr. COSTELLO. Thank you.

The Chair recognizes the ranking Member of the Subcommittee, Mr. Petri.

Mr. PETRI. Thank you very much, Mr. Chairman.

I wonder, Mr. Barclay, you referred briefly in your oral testimony to the small airport program, ideas that you might have for strengthening that program. Could you expand on that a bit?

Mr. BARCLAY. Well, it is fundamentally expanding, adding funding to the programs that the Committee has already established. We think there is a lot of merit in the current small airport fund, compared to the recommendation of the Administration to create a new discretionary account, because it ties together the interest of

large and small airports and the PFCs. Entitlements are given back; that money goes to smaller airports. Expanding that program as we expand the PFCs seems to us to be a good idea.

Smaller airports, as you noted in your opening statement, small airports are heavily reliant on a robust AIP program. If they are going to have capital development that is needed for the future, they get the majority of their funds from that kind of program, and we really need to have—airports shouldn't be looked at as individual facilities; airports are a network. Every passenger that takes off from a small airport, virtually everyone is bound for a large airport somewhere in the system. Many of the people that get on airplanes at large airports are bound for small airports. So we need to look at a network approach to the financing, which means PFCs for large airports, increases in those, and AIP increases for smaller airports. So we very much want to work with the Committee to expand the current programs and make sure small airport needs are met.

Mr. PETRI. This next question kind of follows up on that both for you and for Mr. Dillingham, and that is if you could talk a little bit about the Administration's proposal to expand the discretionary AIP program. When we look at it, we think, well, the appropriators will earmark it all, so what impact would this really have on the air industry if it is supposed to be a network and kind of balanced improvement, and is there some way to achieve that objective? Could you kind of discuss the merits of expanding that discretionary program?

Mr. DILLINGHAM. Mr. Petri, as I understand it, the Administration's proposal does not change the national priority system in terms of what discretionary monies would be spent for, that they would still be spent for safety and security and environment and capacity. I think that the larger airports receive a higher score for those same projects, and also that the larger airports would tend to have more of those projects. It is not clear to me that the smaller airports will benefit from that kind of change.

Mr. BARCLAY. Overall, in the Administration's program, they would cut the total funding for airports by that $765 million and $430 million of that would come out of the accounts that are aimed at smaller airports. So it is both an issue of allocation and are the programs the right ones to be shifting. I assume the Ranking Member is talking about the non-primary entitlements, where the tiering of non-primary airports has merit to look at that. But taking away the guaranteed entitlements from the smallest airports in the system is again something we would question unless it is replaced by a guaranteed discretionary pool or some other new idea that would get over the accounting problems that we think the Administration is legitimately trying to figure out, how can we not allocate lots of money to smaller airports that aren't going to draw on it. That has got merit, but so does guaranteeing these smaller airports that the money will be there when they need it.

Mr. PETRI. Thank you. We would like to work with you further in this area in particular. Thank you.

Mr. COSTELLO. Thank you, Mr. Petri.

The Chair recognizes the gentleman from Colorado, Mr. Salazar.

Mr. SALAZAR. Thank you, Mr. Chairman.

Mr. Dillingham, I was noticing the comparison here that you have compared to FAA and the comparison that talks about the planned development costs. Could you expand on that a little bit? And maybe Mr. Shaffer could also talk about that a little bit.

But, also, how do you define small airports? What is your definition of small airports?

Mr. DILLINGHAM. The analysis that we tried to present that show the difference between what ACI was estimating as planned capital development and what the FAA has in its national integrated plan for airports, the NPIAS, basically, FAA produces a document of airport needs that sort of is a bottoms-up approach from which they get the needs from the airport, and they move towards a national system of airports being concerned primarily with making sure that safety, security, capacity, standards, those things are met based on the forecast of traffic for the Nation's system. So that is what generates the amount from FAA. And it is all for projects that are eligible for funding by Federal grants, the AIP.

Whereas, ACI includes projects that are not eligible for funding by Federal grants, AIP, and oftentimes they are money-generating projects, as such, or projects that they would be able to fund with private sector money. So that is the difference that we were making, and that accounts for the difference in the planned development costs between the two.

Small airports, we are talking about small hubs and non-hub airports is what we define as small airports in our presentation.

Mr. SALAZAR. Mr. Shaffer?

Mr. SHAFFER. Mr. Salazar, further in regard to what Dr. Dillingham was just saying, the precise definition that you are requesting is for a small hub, that is an airport that enplanes from one-quarter of one percent down to five one-hundreds of a percent of the total national enplanements on an annual basis. A non-hub is one that enplanes less than five one-hundreds percent of the national total, but more than 10,000 per year. And then you drop below that even to the non-primary commercial service airports. Those are, as I say, non-primary airports; they have between 2,500 and 10,000 enplanements per year.

Mr. SALAZAR. Thank you.

Mr. Dillingham, in your estimate or your analysis, I think Mr. Barclay referred to the inflationary costs or construction inflation of 25 percent. I think that is the figure that he used. Did you take into account that inflationary cost?

Mr. DILLINGHAM. No, we did not. That clearly would raise the cost, and I am not sure that the FAA took that into account in their development of their numbers as well.

Mr. SALAZAR. So, Mr. Barclay, would you say that the Administration's proposal is the correct way to follow, or should we try another angle?

Mr. BARCLAY. No, sir, the Administration's proposal doesn't have enough money in its to build the capacity we need to meet the demand that is coming at the system, so that is why we say we sort of start from the wisdom of current law that has been worked out over many years, and we need to move up from there.

Mr. SALAZAR. Thank you, Mr. Chairman. I yield back.

Mr. COSTELLO. The Chair at this time recognizes the gentleman from Tennessee, Mr. Duncan.

Mr. DUNCAN. Thank you, Mr. Chairman.

Mr. Shaffer, at one point we were losing general aviation airports at a rate of one per week. Is that trend continuing? And how important do you consider the more active general aviation airports to the entire national aviation system?

Mr. SHAFFER. Congressman Duncan, I don't have the exact figures on the tip of my tongue. There are a couple of airports out west that I am aware of that the local community is presently debating keeping open or not, and some of the advocacy groups in the Country are working very diligently to keep those open.

Honestly, in regard to the second part of your question, general aviation airports, that is where my heart is. That is where I grew up, on an airport with grass runways. So that is part of my focus. But, of course, I have to put that cinnamon aside and do exactly what I think you are suggesting, and that is look at the system as a whole and evaluate each airport in that system as a part of that integrated whole.

Indeed, general aviation airports, particularly with the advent of very light jets, more point-to-point air taxis, more fractional ownership of aircraft will become more and more important to the national system, and that is one of the primary motivations of the Administration's proposal to free up more money so that we can focus that money on the small airports and the general aviation airports, to help them prepare for the advent of more traffic and congestion.

Mr. DUNCAN. All right. Thank you.

Dr. Dillingham, you mentioned in your report that the FAA wants to expand the privatization program for airports, and, of course, they have done that in other countries to a much greater extent than we have here. You know, there has been very little activity so far in the five airport pilot program that we authorized. Do you think it can be expanded quite a bit by removing this airline veto and the other proposals that they are making?

Mr. DILLINGHAM. Mr. Duncan, just as you said, the pilot has been around for a number of years and there hasn't been very much interest in it. As we go around the Country, we don't hear a clamor for airport privatization.

Mr. DUNCAN. Okay.

Mr. Barclay and Mr. Principato, let me ask you this. The FAA estimates that we are going to have 300 million more passengers in the next seven or eight years. How far behind are we and are we reaching a crisis point at some of these airports? Also, in your studies, have you taken into consideration the tremendous growth areas? And what I am talking about, for instance, the Knoxville metropolitan area, for instance, is growing by leaps and bounds. There are places in the northeast and other parts of the Country that are losing population or just barely staying the same. How much have you taken that into consideration, that the needs might be growing faster in certain areas than others?

Mr. PRINCIPATO. Well, you mention Knoxville. Bill Marston, who runs the Knoxville Airport, is on our board and keeps our attention focused on that, and does a great job, by the way. Certainly, we are looking at that. The service patterns are changing. As I stated be-

fore, airports look at their own circumstances and are working very, very hard to meet the expanding and changing needs in their communities and trying to expand the reach, but this 300 million new people is an inescapable fact. I have yet to find anybody who doesn't think that is going to happen. That seems to be the one number everybody agrees on.

Mr. DUNCAN. Have we been able to speed up some of these projects? I remember years ago they said it took, for the big main runway at the Atlanta Airport, it took 14 years from conception to completion. That is part of what I am getting at when I say how far behind are we. If we are going to take a long time for some of these projects——

Mr. PRINCIPATO. We have made a lot of progress in the last 10 years, but we are still behind. And if we don't update the tools at our disposal, the PFCs, keep AIP strong and growing, then we are just going to fall further and further behind.

Mr. DUNCAN. What effect would it have, Mr. Barclay, if the Senate did to you again what they did before? You know, the Senate messes up a lot of things.

[Laughter.]

Mr. DUNCAN. I agree with you, Congressman, that they did this last time. You know, you are making the point that one of the beauties of the PFC is that it is a ceiling, it is not a requirement, and it has got restrictions on it. And airports, their local government, they don't have a profit incentive, they don't have the incentive to go build things that aren't needed. But where you do have the needs, if you provide the room that airports can utilize, an increased PFC, they can go build things where they need them.

We are not at a crisis now. Post-9/11, as you know, that gave us some extra time. We were going to reach a billion passengers by 2011, before 9/11 occurred. But we then also turned around and started spending a lot of money on security, and we are still spending a lot of time on security at the same time we are trying to add capacity. So when you balance all those issues out, our members tell us we are not in a crisis now, but we will be if we get that population the United States added to the system and we haven't started building this year and next year.

Mr. DUNCAN. I will just end with this. In some ways we are going overboard on this security and shortchanging the expansion of capacity efforts.

Thank you, Mr. Chairman.

Mr. COSTELLO. Thank you.

The Chair, at this time, recognizes the gentleman from Oregon, Mr. DeFazio.

Mr. DEFAZIO. I thank the gentleman.

Mr. Shaffer, are you familiar with the history of PFCs?

Mr. SHAFFER. Very much so.

Mr. DEFAZIO. Are you? Okay. So you are familiar with the period during which PFCs did not exist and the reasons why they didn't exist?

Mr. SHAFFER. Yes, sir, I am.

Mr. DEFAZIO. Okay. And that had to do with?

Mr. SHAFFER. Revenue diversion, sir.

Mr. DEFAZIO. Okay, that is good. You don't think that, potentially, your rather broad expansion of the license for PFCs could lead to what many people might consider revenue diversion?

I have one other question. Do you know the breakdown on PFC revenues between what is collected at origin versus what is collected en route?

Mr. SHAFFER. I don't.

Mr. DEFAZIO. Okay.

Mr. SHAFFER. I would be glad to get that for you if it would be of assistance to you.

Mr. DEFAZIO. It would be very useful, because my point is that I really think it is hard to make the case that an en route fee is a local revenue. You know, I fly from Eugene to Denver, I pay a PFC in Denver. I have never even been outside the new terminal on the grounds, never. And I think there are a heck of a lot of other people in that situation at Chicago or anywhere else. I have been outside in Chicago twice in 20 years, I think.

So I think making the case for a local revenue is hard, and I am concerned, as the original Democratic author of PFCs, that we may be headed back down that route where we are making it more controversial than it needs to be. My position would be, yes, you may be able to make a case—you certainly, I think, can make a case for terminal construction in some airports, but I am worried about the latitude you are proposing and would urge you to rethink that, with your knowledge of the history.

Mr. SHAFFER. I believe I understand your concern, Congressman, and I will see if I can't get that en route PFC data for you.

Mr. DEFAZIO. That would be very helpful.

Dr. Dillingham, I know we have plowed this ground many times, but as I understand the Administration's fee proposal, it presents us with a deficit, basically, in terms of our capital needs for our airports as we move toward a billion or more passengers in the not-too-distant future, is that correct?

Mr. DILLINGHAM. Yes, sir.

Mr. DEFAZIO. Now, if we kept the current fee structure and that many people really flew and airline ticket prices stayed about where they are, all things considered, would that create enough revenue to fill that deficit?

Mr. DILLINGHAM. Yes, sir. Based on our analysis and based on our understanding of the CBO analysis, it would provide enough revenues.

Mr. DEFAZIO. I mean, that is assuming other things are pretty much held the same.

Mr. DILLINGHAM. Yes, sir.

Mr. DEFAZIO. But we could fill that deficit.

Mr. DILLINGHAM. Yes, sir.

Mr. DEFAZIO. Okay. And, again, not asking you to pass a policy judgment or talk about the inequities that some of us feel are created by the Administration proposal, particularly the burden on GA, the Administration proposal would produce revenues that would not be adequate to meet that capital deficit, is that correct?

Mr. DILLINGHAM. I am sorry, would you say that again, Mr. DeFazio?

Mr. DEFAZIO. Well, I mean, their proposal, unless you were to further increase the gas tax or something else, would not produce revenues sufficient to meet that deficit.

Mr. DILLINGHAM. We have some concerns about that based on the way, as we understand, FAA computed their numbers, not taking into account the potential lessening of purchasing of gas tax and the elasticity issue.

Mr. DEFAZIO. Okay.

Mr. Barclay, I would just like you to sort of give us where do you see—we talked a little bit, when I saw you yesterday, about the need to streamline PFCs. I don't want to create an unnecessary and redundant paperwork process, but just be real candid here. Is what the Administration is proposing just getting rid of unnecessary paperwork or is it really creating the potential that we won't be adequately monitoring how PFCs are going to be spent?

Mr. BARCLAY. I honestly think you can streamline and go to a certification and auditing kind of procedure, because you have got experience in the system that, as I say, there has only been two PFCs turned down in the history of the program. So that gives you a track record to go on. And you know you have got the local checks and balances on these projects and on the levying of fees that are at least locally looked on as a local fee once they elect to put it on.

So the Administration recommendations, putting aside eligibility for the moment, but just streamlining, is one that is well worthwhile. We have done some experimenting with that at the smaller airports, and it seems to have worked pretty well.

Mr. DEFAZIO. Okay, thank you. My time has expired.

Thank you, Mr. Chairman.

Mr. COSTELLO. Thank you.

The Chair recognizes the gentleman from Missouri, Mr. Graves.

Mr. GRAVES. Thank you, Mr. Chairman.

I am just trying to clarify where we are in this whole proposal, in the FAA's proposal in terms of AIP. It is a network, as Mr. Shaffer pointed out, and wheels don't work without spokes, and our aviation network doesn't work without general aviation facilities, that is all there is to it. But it is not just about GA airports; there are a lot of jobs out there, there are a lot of small businesses out there that completely depend on those airports to function.

What I am trying to figure out, the FAA's proposal is going to cut the AIP program considerably. In fact, in Missouri, which is obviously the State I am looking at, we are talking about $2.1 million to the State for the Airport Improvement Program. Is that correct, is that the direction we are going to go? I hear talk about discretionary funding. This is just vitally important to many of our States and to GA. The program is designed to get GA pilots off the bigger airports. I mean, obviously, it works in conjunction with the bigger airports, and, just like you said, it is a network, and it is a network that is important. We don't want those delays at the larger reports; get GA off of those airports and get them onto the smaller airports.

But where are we in this process? Is the program being cut considerably? Are those funds going to be discretionary? I want to

keep that guaranty there. Somebody answer the question. I am trying to figure out where we are at.

Mr. SHAFFER. I couldn't agree with you more, Congressman, in terms of the critical nature of general aviation airports, not only on a local level, but as a part of the national system of airports. What we are proposing the AIP level plus the modifications that we are proposing to AIP and the passenger facility charge program includes things like this: a standalone State apportionment fund, and now with a minimum of $300 million per year in that fund; raising the discretionary account from $148 million, I believe it is, which is a number that is almost 20 years old, up to $520 million, preserving the 95 percent Federal share for that smallest tier of the nine and fewer based aircraft, preserving the 95 percent Federal share.

In making a lot of common sense changes, as you know, as a general aviator, one of the things that enables those airports to generate the most revenue is fuel sales. The other one is hangar rental. Well, right now, if one of those airports wants to spend AIP funds to add a credit card reader to their existing fuel farm, they can't do it, and that just makes no sense at all. Same result with regard to putting new skin on a bunch of T hangars. It is not eligible; you have to knock them down and start from scratch, and that just makes no sense. So we want to remove, frankly, silly restrictions that disable the smaller airports from being more sufficient.

Mr. GRAVES. Well, at my airports, my GA pilots are extremely frustrated. They are being told that their taxes are going to go up 300 percent and they are going to lose money to fix their airports at the same time, and it is extremely frustrating to them.

But this program is absolutely vital, and I hope that the Members of the Committee are paying close attention to this because those small airports out there depend on it. I would love to see some changes in it, some changes that make sense. We need to keep that money there and we need to make sure that it is always going to be there. We don't want to cut it.

Mr. Dillingham, I don't know if you had anything or not.

Mr. DILLINGHAM. No, sir.

Mr. GRAVES. Thanks, Mr. Chairman.

Mr. COSTELLO. I thank the gentleman.

The Chair recognizes now the gentleman from Wisconsin, Mr. Kagen.

Mr. KAGEN. Thank you, Mr. Chairman.

And thank you to all of you for your presentations, they have been very enlightening. As a new Member on this Committee, there is a great deal to learn. For many years I have been a great fan of the GAO. They have tremendous work and my reading of their product is that they have very little bias to add. So without getting Dr. Dillingham to be political, I will just ask you yes or no questions, and you can plead the fifth, if you would like.

[Laughter.]

Mr. DILLINGHAM. Thank you, sir.

Mr. KAGEN. Isn't it true that the proposal by the Administration is really attempting to do more with less?

Mr. DILLINGHAM. Yes.

Mr. KAGEN. So I got that right.

Mr. DILLINGHAM. Do you believe that the funding level proposed by the Administration for AIP is adequate to meet the current needs and future needs of our airport system?

Mr. DILLINGHAM. According to FAA's estimates, it is.

Mr. KAGEN. And according to your own analysis and years of experience?

Mr. DILLINGHAM. I think there is some value to looking at what the airports propose in terms of what they think they need. I mean, I think there is a balance in there. I think one of the things that needs to be considered is that the FAA proposal is a very complicated, integrated proposal where one element of it sort of is dependent on another element and you sort of have to take it as a whole to make some sense of it. And if you start pulling it apart, you start to see things where there is not enough money here or this shouldn't be done this way. So I think they intended it to be taken as a whole rather than the parts of it.

That is a little bit more than yes or no. Sorry.

Mr. KAGEN. So much for yes or no questions. Thank you.

[Laughter.]

Mr. KAGEN. Mr. Barclay, the current level of funding proposed would have a significant effect on small airports like where I am from in Northeast Wisconsin, Green Bay and Appleton. Can you comment, please, upon what you would recommend the level of funding be for AIP and others?

Mr. BARCLAY. Well, the current appropriated level is just over $3.5 billion. The current authorized level is $3.7 billion. We are recommending really a modest increase from the authorized level, start it at $3.8 billion and then take it up over the years of the authorization. Frankly, that is trying to be cognizant of the difficult budget decisions the Committee and the Congress have to make. And we have the advantage of having this leverage that the PFC can be used primarily by the larger airports. We can then shift more of the AIP to smaller airports, and you can get a balance that way. You don't have to entirely rely on the Federal budget for everything in the airport system.

So we would like to see at least that $3.8 billion level met for the first year of the program.

Mr. KAGEN. Mr. Principato, you mentioned in your opening statement that you would like to see a more creative and more functional contribution from bonding.

Mr. PRINCIPATO. Yes.

Mr. KAGEN. What specifically do you have in mind?

Mr. PRINCIPATO. That tax treatment of bonds?

Mr. KAGEN. Correct.

Mr. PRINCIPATO. On the tax treatment of bonds, about 60 percent of airport bonds—as Dr. Dillingham's slide showed before, over half of airport finance comes from bond, and about 30 percent of that, by the way, is backed by PFCs. So the PFCs have a utility well beyond just the dollar that you bring in. But about 6 percent of airport bonds are treated as private activity bonds, so subject to AMT; they can't advance refund them, so that adds to the cost of putting airport capital projects into place.

Our modest proposal would be simply that any project that is eligible for AIP or PFC be counted as a public purpose project and

be treated by the tax code that way. I know that is not this Committee's jurisdiction, but that would be our modest proposal. And if you like that idea, we would like to work with you on seeing if we can follow up on that.

Mr. KAGEN. We do have friends in other committees.

Thank you very much, Mr. Chairman. I yield back my time.

Mr. COSTELLO. The Chair recognizes at this time the gentlelady from Oklahoma, Ms. Fallin.

Ms. FALLIN. Thank you, Mr. Chair.

Mr. Dillingham, when I was viewing your charts that you were showing earlier, you talked about your difference in estimates on the FAA's and the ACI's average annual plan development costs that are coming up, and you showed a difference of $5.8 billion and what you anticipate the needs would be compared to the FAA's estimates, and then you segmented that out to ineligible and eligible AIP costs. Can you explain what an eligible cost would be and why the FAA does not include that in their estimates of needs for the future?

Mr. DILLINGHAM. An eligible cost is defined by statute. The statute says what is eligible for PFC. So that is what we mean when we say eligible AIP. Ineligible AIP are projects that are not included in the statute, and in large measure these are oftentimes that are income-generating projects such as a parking garage or some other income-generating project on the airport grounds.

I don't want to speak too much for FAA in terms of why they don't include them, but I think their estimate is based on what the statute allows them to include. Therefore, they wouldn't have something that couldn't be paid for by Federal grants as a part of their estimate.

Ms. FALLIN. Well, I guess that was my question, Mr. Chairman, if I could follow up. Your estimate costs are a lot higher than the FAA's, so if they are ineligible, why would we include that as something that is part of the costs?

Mr. DILLINGHAM. Well, actually, it is the airport organization's estimates of what their cost would be, and, again, not wanting to speak too much for the airport, since they are sitting close by, I think the airports see the needs differently than FAA in terms of they may see that some projects that—like it was explained earlier this morning, like if FAA concentrates on the air side—runways and taxiways and things like that—it is also important from the airport's perspective that passengers have someplace to pick up their bags, someplace to get on the airplane and that kind of thing. So they have a different perspective on sort of what they think is needed to enhance the system.

I think the airport people can probably speak better to that than I can.

Mr. PRINCIPATO. That is our organization's estimate, and we look at the entirety, the terminal, the gates, and everything else, because they are all really capacity projects when you think about it. You can have a lot of runways and the all work really well, but if you only have a couple of gates, you have no place to put the people. So that is one thing, we look at the whole picture.

The other is airports pursue a variety of strategies to raise capital for projects and so forth, particularly smaller airports are look-

ing at the parking garage issue and so forth. So we really look at the entirety of what is going on at the airport.

If I could say one other thing just about the difference in our number and the GAO number—I was talking to Dr. Dillingham's staff beforehand and we are going to work with them—our number is—we put an inflation adjustment into our number. Not construction cost inflation, a smaller inflation number, to get to our $17.5 billion over the next five years, and theirs are in constant 2006 dollars, so they are in deflated dollars. Also, we need to work with them, but we think they may understate the cost of repaying bonds that are out there. Again, about 60 percent of airport projects are financed with bonds, and it may understate that, but we need to sit down with their staff and work that out

Ms. FALLIN. Well, I have got a few minutes left, so I am going to ask you a question, Mr. Shaffer.

In light of them saying that there are some things that they believe should be eligible, have you had a discussion with the airports about changes that might be made to allow things that they need that would enhance service at the airports?

Mr. SHAFFER. We have, and that discussion is ongoing. More fundamentally, we have also been and continue in discussions not only with the airports, but with Dr. Dillingham's staff in terms of getting down to a common understanding of which projects, for what period of time, and under what eligibility is included in these needs estimates.

Ms. FALLIN. Thank you so much.

I yield back my time.

Mr. COSTELLO. The Chair thanks the gentlelady.

At this time, the Chair recognizes the gentleman from Washington State, Mr. Larsen.

Mr. LARSEN. Thank you, Mr. Chairman. I will just take a few minutes to ask some questions. Mr. Costello will be back in a few moments.

The first question is for Mr. Shaffer and has to do with comments on page 11 of your testimony. Mr. Oberstar asked some questions about one of the pilot projects you propose. The other pilot project you propose is use of AIP dollars specifically to install ADS-B equipment. Relating back to the hearing we had last week, I think the testimony last week was on the Next Generation ATC program. There were estimates anywhere from $12 billion to $15 billion from FAA, $10 billion to $14 billion from private airports. I may have those numbers wrong, but the magnitude is still the same. So you are looking at $22 billion to $29 billion over the next several years from user fees, from increased gas tax, and from some bonding authority in the second ten years, paid by potential surcharges.

So the question I would have is with that amount of money going potentially into the Next Generation ATC system, which would include ADS-B, why do you think it makes sense to use AIP dollars for ADS-B when, again, previous testimony to the Committee shows there is going to be a lot of money, potentially, flowing into Next Generation ATC?

Mr. SHAFFER. Congressman, that pilot program is directed toward those areas of the Country where either the ADS-B installa-

tions would not be included in the NextGen rollout or where, for example, either a community or an airport wants to install ADS-B in advance of the Administration's F&E schedule and budget. So it is really a supplement to the NextGen system as we have proposed it.

Mr. LARSEN. In addition to that, in your pilot project, does it not include the control over that particular portion of ADS-B system by the installer, or would this be part of the FAA system run by the FAA, staffed by the FAA?

Mr. SHAFFER. It would be part of the system, Congressman.

Mr. LARSEN. Would it be run by the FAA and staffed by the FAA?

Mr. SHAFFER. Yes, that is my understanding.

Mr. LARSEN. That is your understanding. How much do you anticipate would come out of the AIP to finance this pilot project, have you done an estimate on that?

Mr. SHAFFER. I don't have it on the tip of my tongue, Congressman, and I apologize for that; I will get it for you. I will also add that there is interest already in the system for doing things of this nature. For example, the State of Colorado has already begun installing ADS-B there because their terrain is such that there is really no amount of radar that can cover and provide the sort of air traffic control that a lot of general aviators, for example, need and desire.

That tells us that there is a lot of interest in that.

Mr. LARSEN. [Presiding.] Are they doing that out of AIP dollars?

Mr. SHAFFER. No, they are doing that on their own presently.

Mr. LARSEN. Doing it on their own.

Dr. Dillingham, in your analysis of the FAA versus AIP funding structure, did you take into account, did you make any estimate on the amount of AIP dollars that would be used in this pilot project to finance an earlier roll-out or supplemental roll-out of ADS-B?

Mr. DILLINGHAM. No, we did not, Congressman Larsen.

Mr. LARSEN. So those numbers are not included in your analysis?

Mr. DILLINGHAM. Not specifically. No, sir.

Mr. LARSEN. Not specifically. So if they were, that would mean, in my mind, I guess it would mean there would be fewer AIP dollars on your bottom line analysis.

Mr. DILLINGHAM. Yes, sir.

Mr. LARSEN. Mr. Barclay or Mr. Principato, have you looked at that particular pilot project and the impact that spending AIP dollars and the availability of AIP dollars for ADS-B roll-out and what that means for AIP dollar availability?

Mr. BARCLAY. That goes back to my earlier answer. We are hesitant to endorse giving AIP dollars going to nav aids, rather than F&E dollars going to nav aid. So some experimentation with the issue, let me step back and say we are big fans of ADS-B and the next gen system. We agree that is the right pattern to go with. It is a fundamental part of that system. There are a number of things about this pilot program we question. The money is not going to the airports and it is coming out of AIP, rather than F&E. So we would be happy to work with the committee to redesign that.

Mr. LARSEN. Okay.

Mr. PRINCIPATO. Actually, we have many of the same concerns, certainly with the last point Mr. Barclay made about some of the money not going to the airport. On the ILS question, I just wanted to put one more issue on the table. If we do move in the direction of a pilot program, a lot of airports have concern about the liability issue, if they are going to take that on. If the Congress in its wisdom puts it in place, we need to look at the liability issue moving forward.

Mr. LARSEN. I noted that in one of your testimonies, the liability if you were to take responsibility.

That takes my time. Where is the list here? The Chair recognizes Mr. Hayes of North Carolina.

Mr. HAYES. Thank you, Mr. Chairman.

A question for Mr. Barclay and Mr. Shaffer together, and thank you all for being here today.

How does the FAA count aircraft? If you were at a towered airport, obviously the arrivals and departures are counted, but many airports do not have towers and operate very safely, and have lots of traffic. In terms of AIP money, can you help me with that?

Mr. SHAFFER. Congressman Hayes, that is a great question. We put a lot of effort into figuring out the best way to count it. As you point out, if you have a tower, then obviously you have the log books and the radar tracks and you know exactly what is going on.

We also analyzed whether fuel sales might be a way of figuring out the number of based aircraft at a particular airport. For a variety of reasons, we concluded that was not likely to yield an accurate result, so we settled on the idea of getting the end numbers off of the aircraft at each particular airport.

Honestly speaking, the results in collecting that data up to this point have been spotty across the Country. Some areas we have gotten pretty high percentages of response, and others pretty low. As I sit here, I am open-minded, and if you have a better way to figure out that number of based aircraft, I would love to talk to you about it.

Mr. HAYES. Of course, based aircraft is important, but the folks that are coming and going to do business at that airport is equally important. I am thinking in my District, Salisbury is a non-towered airport. A tremendous of commerce goes in and out of there, not based traffic. Concord has the data. As you say, tracking information is available. The aircraft are, I am not a computer guy. Can you punch a button and say who went to Salisbury that day, Mr. Dillingham?

Having this conversation, Congressman Graves reminded me of a Phil Boyer quote, "Give me a mile of highway and you can go a mile. Give me a mile of runway and you can go anywhere in the world." And that is crucial as we face the future.

Do you want to comment on that, Mr. Barclay? Do you have some idea from an airport standpoint of how we might painlessly and properly count aircraft in and out?

Mr. BARCLAY. Well, I think it is currently done by estimates. We will get back to you. I have forgotten the details of exactly how they estimate those numbers, but your broader point is exactly right. To use a larger airport example, the Atlanta Airport recently did a cost/benefit analysis of their impact on the local economy. It

was $18 billion a year at one airport. We are talking about investing for all 550 airports in the country that get air carrier service, 3,500 airports that are eligible, a lot less money than that for the entire country.

Hong Kong spent $25 billion to build one airport for their country. It shows the importance to the economy in general of making these investments and what a wise investment it is for the, frankly, modest amount of money that we are investing in large and small airports, because the small ones are just as important to their communities as the large ones are to theirs.

Mr. HAYES. Okay, if you will help us track that going forward.

Mr. Dillingham was talking about all these additional passengers for airlines and general aviation. In the next generation equation from your perspective, has the revenue stream from these additional passengers, which we basically agree are going to occur, has that been taken into account as to what the present system is going to generate in terms of revenue dollars?

Mr. DILLINGHAM. I think when you look at the overall FAA proposal in terms of its move to user fees or the necessity to move to user fees for adequate revenues, it has not been taken into account, although the proposal does address some of the other issues that are of concern to the aviation community.

Mr. HAYES. Thank you.

So Mr. Shaffer, again welcome. The necessity for the next generation, I don't think we have come to that determination yet in terms of dollars, but you all make sure as this cost accounting system, which I am trying to match with something, doesn't quite measure up. Let's make sure we know how many dollars are coming in. If we take something that doesn't appear to be broken, then don't try to fix it until we need it. If you could kind of keep us up to speed on that.

Mr. Chairman, with time left, I yield back. Thank you all again.

Mr. LARSEN. Thank you.

Mr. Hall of New York?

Mr. HALL. Thank you, Mr. Chairman.

Thank you all, our illustrious panel.

First, I wanted to ask Mr. Barclay what the most common landside projects are that PFC's fund?

Mr. BARCLAY. It is primarily gates. Again, if you have your airside build-out, and you want to maximize the utilization of that, PFCs were designed to be able to fund gates and particularly gates that would allow more competition into the airport.

Mr. HALL. Thank you. In your testimony, you indicated the changing of the Federal share for airfield paving and rehabilitation projects for runways and taxiways at large and medium airports, and from 75 percent to 50 percent would be hardship. Could you elaborate on that, please?

Mr. BARCLAY. Well, if the purpose in general is to provide more funds for construction at airports, reducing the amount of money in the Federal share doesn't seem to make sense to us. That was, we think, driven primarily by the much lower number in the Administration's program. They are trying to make the dollars go farther so they reduced the Federal share of those programs.

If you pull an extra 25 percent away like that, you are just going to have to find it somewhere else in the airport financing system. So we think it makes sense to leave the percentages where they are.

Mr. HALL. Okay.

Mr. Shaffer, three quick related questions here. The FAA's proposal would eliminate the Military Airport Program discretionary AIP setaside. Could you explain the reasoning for that?

Mr. SHAFFER. Yes, sir. The Military Airport Program is presently 4 percent of the discretionary fund. It is about $35 million a year. But the number of airports coming into that program has dwindled to almost, well, it is single digits on an annual basis. Most of the airports that are presently in the program are second time entrants, and the new entrants are just ones and twos. So we want to leave the criteria in place, but the level of traffic there, or participation if you will, simply does not any longer justify the setaside, and it causes the setaside mainly to be an accounting exercise. But we are not removing the criteria. When an airport comes up that wants to go through that program, that will be available to them and we will have the money to fund it.

Mr. HALL. The setaside will be available?

Mr. SHAFFER. Not the setaside, but the program, the criteria to fund the types of projects like hangars and passenger terminals and things that a military airport ordinarily does not have, but are needed to convert to a civilian airport.

Mr. HALL. Okay. The proposal would sunset the 95 percent Federal AIP contribution to small airport projects and return it to 90 percent. What is the logic there?

Mr. SHAFFER. That is a great question, Congressman. It is simply this. When Congress established that 95 percent participation level by the Federal Government, it was in response to the impacts of 9/11. We are now six years down the pike almost from 9/11. As I testified earlier this morning, those impacts financially, trafficwise, passenger counts, are largely now gone and airports have recovered. So we are simply suggesting that Congress let the sunset, which you put in the provision in the first place, go ahead and occur.

Mr. HALL. Okay. The last question would be, well, there are two parts to this. Why has the FAA proposed to eliminate the reliever airport setaside? And also, the new tiered approach to non-primary entitlements which handle funding to the bigger small airports, I was curious if you could let me know either now or later in detail specifically how that would affect airports like Stewart International Airport which is in my District.

Mr. SHAFFER. Sir, the reliever setaside is presently two-thirds of 1 percent of the discretionary account on an annual basis. That translates into about $5 million a year. In actuality, we spend something in excess of $22 million every year on reliever airports. So this is a classic example of a true accounting exercise. The setaside really has been overcome by our actual commitment to assisting those airports. So we think that the setaside is no longer necessary.

I don't know where Stewart falls out. I am very familiar with that airport, having flown in there many times when it was still

an Air Force base, but I will have to get the response to you on that. I don't know which tier you would fall in.

Mr. HALL. Thank you. I appreciate it.

I yield back. Thank you.

Mr. COSTELLO. [Presiding.] I thank the gentleman.

The Chair at this time recognizes the gentlelady from Florida, Ms. Brown.

Ms. BROWN. Thank you, Mr. Chairman.

Mr. Shaffer, I want to follow up with your discussion about the FAA proposes to eliminate the Military Airport Program. You all brought this program elimination up the last time, and it was my amendment that reinstated it. You indicated that it was for hangars and other things. What the communities use that for is for those runway expansions, and most communities cannot afford to keep it up. But after 9/11, the military continued to use those runways in those communities, even though BRAC had done away with the major portion of what they were for.

So I don't understand. Do you not talk to the military?

Mr. SHAFFER. Actually, Congresswoman, we consult with them directly and often. Let me clarify what I said earlier just so everybody understands. We are not eliminating the program. The criteria for entrants and participation in the Military Airport Program will remain on the books for airports that want to go through that program. All we are suggesting is that the number of airports that now would be eligible is so small that FE

Ms. BROWN. What is it? About six? Is it about six a year, I think.

Mr. SHAFFER. That sounds about right, ma'am.

Ms. BROWN. Well, that is what it was before.

Mr. SHAFFER. Well, I understand what you are saying. We are simply saying that we have the money to put those airports through the system, but that number continues to decline. Six may not be exactly right currently, but it is a single digit number. So the setaside as a financial matter really doesn't have——

Ms. BROWN. Maybe we can talk and work on some additional language so that I can be assured that it will be available for those communities that want to continue these programs, in conjunction with the military.

Mr. SHAFFER. I would be happy to do that.

Ms. BROWN. Okay. My next question, the FAA proposes changing the Federal share of airfield payment and rehabilitation projects for runways and taxiways at large and medium hub airports from 75 percent to 50 percent. How are the airports going to finance these significant increases particularly given the additional security issues that the airports have had to step up to the plate with?

Mr. SHAFFER. The obligation to maintain the airfield that is paid for in part by the Federal Government has always resided with the airport owners and operators, Congresswoman. Our proposal to adjust the level of participation on rehabilitation going forward is in part a recognition of that preexisting obligation on the part of the airport owner and operator, but likewise, a recognition on our part that that is still an asset in the national system of airports, so the Federal Government should continue to have an investment in that.

I recognize exactly what you are saying with regard to the security burdens that have been placed on the airports. For example, in our proposal in-line EDS systems would be an exception, if you will, compared to prior practice, where even if an EDS system was being built for a sole user, just one airline, that would still be eligible for Federal participation because as you point out there are big dollars involved, and of course it is a critical priority. It is safety, security, which one of them is first?

Ms. BROWN. It is there together.

Mr. SHAFFER. They are together.

Ms. BROWN. They are twin babies. Would anybody else like to respond to that?

Mr. PRINCIPATO. I think the point about security is a good one for two reasons. As we talked about before, airports have been called upon to do more in the security area, and this is obviously a national and homeland security issue. And also, as we talked about the cost of building capital projects at airports and so forth, even construction costs, inflation understates it because there is a whole security component to that project you have to provide for that security. So I am glad you brought that up. We really start from the proposition, as has been said before by both Mr. Barclay and myself, that capital needs are going up. Everybody recognizes that, and so we start from the proposition that we should be increasing resources rather than decreasing them.

Ms. BROWN. Thank you very much.

Thank you, Mr. Chairman.

Mr. COSTELLO. I thank the gentlelady.

The Chairman at this time recognizes the gentleman from Florida, Mr. Buchanan.

Mr. BUCHANAN. Thank you, Mr. Chairman.

Mr. Shaffer, what impact would the Administration's proposed increase in the AIP discretionary $520 million have on the various airport communities? Where is that money going to be primarily spent? Or where would it be used?

Mr. SHAFFER. Sir, it will be spent on safety, security, capacity, those high priority projects that the smaller airports will be confronted with, given the advent of the various different types of transportation that I have already enumerated. We need to get out in front of that, if you will, and that has a benefit for the rest of the system as well because if we can put the very light jets, the air taxis and transportation modes like that at the smaller airports, that helps relieve congestion on the large and medium hubs.

Mr. BUCHANAN. Okay.

Mr. Dillingham, and I know you have said it a couple of times in your presentation here, how do you define small and large airports?

Mr. DILLINGHAM. We consider medium and large hubs as larger airports. And the smaller airports were the small hubs and below. I think Mr. Shaffer has the exact number of enplanements, the technical definition of them, if you would.

Mr. BUCHANAN. In our community, I am looking at Sarasota, and I have Tampa, which I know is a large airport, and Atlanta is a big airport. But is Sarasota considered a small airport in your definition? Or would you know that?

Mr. SHAFFER. Yes. It is a small hub, I believe, sir.

Mr. BUCHANAN. Okay. And just in the way of history, I am new to the committee, too. The PFCs, there has been a lot of discussion about increasing that. But why do we look at that just strictly as an option for large airports, or the top seven or eight airports? And why isn't that an option for little smaller airports if they felt that they needed that capability or something?

Mr. BARCLAY. Congressman, if I could answer that. One of the important values of PFCs is you don't have to just spend them as you collect them. You can use them to back bonds. So even at an airport the size of Sarasota, if they have projects that are bondable, they get leverage off the PFC revenues that they collect, and they can use them together with other revenues to back bonds.

Mr. PRINCIPATO. If I can just add to that, that really makes them the most effective, efficient, flexible financing mechanism for these kind of projects. Not all airports have gone to $4.50. I think 25 percent of medium and large hubs are still at $3.00. They don't have a PFC; 35 percent of small hubs have not gone to $4.50, but 65 percent have gone there. If we do convince you to raise the PFC ceiling up to $7.50, as has been said before, not all airports will go to $7.50. Airports in communities can have flexibility within that to really set their own rate and plan their own capital projects. It works for airports of all sizes.

Mr. BUCHANAN. But you talked about the growth in terms of passengers in the next decade or so, and everybody believes that it could be very much a reality. Do you think $7.50 makes sense? I know you touched on that as well, that that is something that we should consider?

Mr. PRINCIPATO. I think the $7.50, the argument we have made is that $7.50, if you apply construction costs and inflation to the $4.50 PFC, that would be almost $7.50 in 2008, the first year of this authorization. So we didn't pick the number really out of the air. We analyzed it and came up with that number.

If I might offer one small idea, there has been some fear that all airports may go to $7.50 and some folks, the airlines and others, multiply it out and say it will be $2 billion or $3 billion, whatever. If you put a set of rungs in there, maybe in 25 percent increments, airports in communities would have the flexibility to maybe do a $5.50 or $5.75, whatever works for that community. It is a very flexible tool that really gets you much more than a dollar's worth of value.

Mr. BUCHANAN. Once last comment for just any of the panel members. I look in our community. Tampa is our largest airport by far, but we have three or four other airports around it that have a lot more capacity, but yet we are looking to do a massive expansion in the one airport. Why is that? Why do we have airports that are under-utilized in the surrounding area? In our area, and I am sure it is in different areas of the country, but yet we keep plowing the money into the major airport that is there. Is it just because that is where people want to go, or the marketing? What drives that? Because we have other airports that could probably do five, ten times the business they are doing, but yet we keep expanding. I am all for Tampa Airport getting bigger, but I just want to understand the rationale.

Mr. BARCLAY. You have seen very strong growth at the airports surrounding Tampa, in addition to Tampa's growth. At airports, part of the challenge is you want to meet the marketplace demand, so people obviously want to keep going to Tampa. Our job is to build out the capacity there to meet that demand, but also make sure it is available. Because we have a seven to ten year time horizon, we want Sarasota to have the capacity to pick up more AirTran service, more other kinds of new services when Tampa is not the right market for them.

We need to build out as much capacity in this Country as we can. A lot of us who have been around Washington for a while remember when Dulles was described as a white elephant. More capacity then was needed, and today it is one of the most valuable resources on the whole East Coast.

Mr. BUCHANAN. I wasn't just thinking of Sarasota. I was thinking of St. Pete-Clearwater. Those other airports have a lot more capability.

I thank you. My time is up. I yield back.

Mr. COSTELLO. I thank the gentleman.

The Chair has just a few questions, and then we will move on to the second panel.

Mr. Barclay, let me ask you. You heard me mention in my opening statement my concern about the Administration's proposal to replace the small airport fund with a small airport setaside program. I wonder if you would comment. Are you supportive of the Administration's proposal?

Mr. BARCLAY. We are not, Mr. Chairman. First of all, it is much less money in the Administration's proposal. And second, on the philosophy, we think there is an advantage to continuing to tie together the interests of large and small airports in the PFC Program. The entitlements that are given up there go to the small airport fund. That has been a reason why all airports in a network system see an advantage to the two different kinds of funding. So our inclination is to continue to support the small airport fund and continue to build that.

The Administration plan would mandatorily take the large and medium hub airports out of the entitlement program. We see an advantage to continuing to let them elect whether they get out of that or stay in AIP or increase the PFC.

Mr. COSTELLO. So you clearly are opposed to the Administration's proposal.

Mr. BARCLAY. We agree with the Chairman.

Mr. COSTELLO. Dr. Dillingham, let me ask you again concerning small airports and the Administration's proposal. How would small airports compete for discretionary funds under the Administration's proposal?

Mr. DILLINGHAM. Small airports would compete in the same way that large airports compete, basically on the criteria by which discretionary funds are allocated in terms of safety and capacity and environment and security. However, large airports, their scores are higher for those same projects. Large airports tend to have more of those projects. The bottom line is, small airports will be disadvantaged.

Mr. COSTELLO. So there is no question there would be winners and losers?

Mr. DILLINGHAM. Absolutely.

Mr. COSTELLO. Very good.

Last question, Mr. Barclay. As you know, the Administration's proposal calls for increasing the fuel tax both on commercial and general aviation. At least part of the revenue would fund the AIP Program, research and development, and the EAS Program. I wonder if you would comment, does it really matter where the source of the revenue comes from to the AIP Fund? If so, why?

Mr. BARCLAY. It does, Mr. Chairman. We would not agree philosophically with the notion that AIP should be funded out of one very narrow set of taxes mostly on one part of the industry, general aviation. We think that all of the users of the system get a benefit out of airport capacity and what we fund in AIP, and we should continue that kind of broader base of funding.

Mr. COSTELLO. I thank you.

The Chair thanks all of the witnesses on the first panel for being here today.

I would recognize Mr. Petri for any comment that he might have.

Mr. PETRI. Our colleague, Mr. Coble is hurrying over because he had a question. There he is. Mr. Coble had a question. You go ahead and ask it. I don't know what it is.

Mr. COSTELLO. We are holding the whole show up for you.

Mr. PETRI. Go to a microphone. Here it is.

Mr. COBLE. First of all, Mr. Chairman, I apologize to you and the Ranking Member and all in the room. We had a Judiciary markup and I couldn't get away. I am not even sure whether my question has been asked or not, but let me go into this.

Mr. Shaffer, if I may?

Mr. SHAFFER. Yes, sir.

Mr. COBLE. A number of general aviation airports in my District are dependent upon the dollars from the AIP, the Airport Improvement Program, to meet market demands and make necessary upgrades. Would you elaborate for me, if you would, how the proposed tiered system would be more effective than the current entitlement-based system? And what, if any, reaction have you received from the airports that may be adversely affected by these changes?

Mr. SHAFFER. Sir, the tiered system that we have proposed is a recognition of the fact that not all general aviation airports are created equal. There is a broad range of operational levels, some have very simple airfields, others very complex airfields. They have different levels of need on an annual basis and on a long-term basis.

So our tiered proposal is our best effort to allocate the funds where they are most needed to meet oncoming safety, capacity, and security projects amongst these airports.

With regard to the reaction that we have received, it will come as no surprise to anyone that those that are in the lower tier, the nine or fewer based aircraft, are not very happy about that because no one likes to lose something that they already have. But as I pointed out in my earlier testimony, for the last, and this is just one example, over the last four years, there are 114 of these airports across the Country that have qualified for a non-primary entitlement, but have not taken a grant for four years.

We can only conclude from that that they simply did not have a need for the money during those years. That is not to say that they won't eventually have a need, because they certainly will. It is just that they don't need it year after year after year.

What we are proposing positions us to meet their intermittent demands, for example, every 10 or 15 years, whatever it works out to be, if they need to overlay a runway or expand a ramp or whatever the project happens to be, we will be in a position financially to pay for that project from the Federal side just like we always have.

Mr. COBLE. I would like to talk to you in more detail about this.

Dr. Dillingham, good to have you back up here.

Mr. Chairman and the distinguished gentlemen from Illinois and Wisconsin, we are all subjective. That is to say, I am hoping that my airports will be beneficiaries of good things to come. I think I speak for all of us up here. We are that parochial and we are that selfish about our places back home.

I had good folks in my office last week. Two were from my counties. A third was not. And I said to the third one, I am going to treat these other two better than we will treat you. He said, well, all 100 counties are important to me. I said, six counties are important to me. We are guilty of that.

Mr. Chairman, thank you, and Mr. Petri. I apologize again for my belated arrival.

Mr. COSTELLO. I thank the gentleman.

The Chair would recognize another Member who came in after a markup. This will be the final round of questions for this panel.

The gentleman from Illinois, Mr. Lipinski, is recognized.

Mr. LIPINSKI. Thank you, Mr. Chairman.

Just helping take care of those things in the Science Committee, the Chair there, and was not able to do, chairing this panel here this morning.

I just wanted to really go down a general road here, looking at PFCs. I certainly think PFCs are an important piece of the funding for necessary capital improvements at airports. But now we are looking at expanding PFCs, increasing the amount that can be charged for PFCs. So I just wanted to take a step back, first of all, and ask you what types of capital improvements are being funded right now, and then take a step forward, are there improvements that are not being done right now at the airports that you believe that the PFCs need to be expanded in order to cover these types of improvements, or further capital improvements?

I just want to throw that question out there because I think we really need to look at, when we are talking about increasing PFCs, what are they being used for and what more do you think they should be used for with this increase.

Whoever wants to start out.

Mr. PRINCIPATO. Well, I think the part of your question about the expansion of the eligibility. What we are really looking for is for the $4.50 PFC to be made whole against construction cost inflation because after all, we are not buying a loaf of bread with it. We are buying construction with it. Construction costs have soared. There is a table in my testimony that talks about that.

Certainly, major runway and airfield projects are being funded by PFCs. The Atlanta runway, 55 percent of that runway was by PFCs. It increased their arrival rate from 88 flights an hour to 117 just in the last year since that runway was opened, just huge capacity benefits. I told the Chairman the story yesterday. My wife flew to Bloomington, Illinois just south of where you are from, through Atlanta, and everything was just right on time and worked really well. So Bloomington was benefitting from that project. The St. Louis runway, 59 percent was PFC.

Again, a lot of PFC dollars are going into terminal projects as well because once the plane lands, you need to place to bring the people and take them of. In Charleston, West Virginia, they put PFCs into an expansion of the runway safety area. It is a smaller airport, but they also added four gates and a hold room so they could handle the additional flights that that smaller community is being able to generate.

So it has really been a wonderful tool for airports of all sizes.

Mr. BARCLAY. When we talk about the passengers increasing by 50 percent or adding 300 million passengers to the system by 2015, 90 percent of those passengers are at the large and medium hub airports. The top 80 airports have 90 percent of those passengers. They are the most reliant on passenger facility charge increases to meet that growing demand.

So you have two issues involved. One is should you expand eligibility for PFCs. We have a split opinion among our members as to whether or not you should expand eligibility. We have unanimity among the members that we have to increase that level if we are going to meet the demand coming for new facilities at airports.

Mr. DILLINGHAM. Mr. Lipinski, I take it from a slightly different angle. We don't have any disagreement with the fact that construction costs have increased and that there should be some consideration of raising the cap on PFC. However, we would caution that when you look at changing what is eligible for PFC, when you look at indexing PFCs, we would just caution that there should be due consideration for congressional oversight and accountability when we look at those aspects of it.

Mr. PRINCIPATO. On the expansion of the eligibility, as Mr. Barclay mentioned, there are some different views, but particularly the smaller airports, and both our memberships are very interested in seeing if we can work something out here to expand eligibility. They have less ability to go to the capital markets, and some projects that are not now eligible are really an important way to raise revenue for their capital program. So some of the smaller airports are interested in the eligibility expansion issue. I think as we go through this, perhaps we could work together on seeing if there is a way to help them.

Mr. LIPINSKI. Dr. Dillingham, could you just briefly expand on your thoughts on increased congressional oversight?

Mr. DILLINGHAM. Well, for example, if you index PFCs, it could mean that that airports and/or FAA does not have to come back to Congress on an annual basis or reauthorization basis for raising the PFC. Also, if the eligibility for PFCs is expanded, it is quite possible that PFCs will be spent for things that could be financed from the private sector market.

Again, Congress's role is to sort of set the criteria by which PFC-eligible projects are identified.

Mr. LIPINSKI. Thank you.

Thank you, Mr. Chairman.

Mr. COSTELLO. I thank the gentleman from Illinois.

Again, we would like to thank each of our panelists on the first panel for your thoughtful testimony. We look forward to your continued input as we go forward with the reauthorization. So thank you very much.

At this time, the Chair would invite the second panel to come forward please. As they are coming forward, I would like to introduce them and yield to some of my colleagues to make an introduction as well.

The first panelist on the second panel will be Mr. James E. Bennett, President and CEO of the Metropolitan Washington Airports Authority; the Honorable Nuria Fernandez, the Commissioner of Aviation in the City of Chicago; Ms. Elaine Roberts, President and CEO of the Columbus Regional Airport Authority; Mr. John Clark, the Executive Director at the Jacksonville Aviation Authority.

I would yield at this time to my friend from Florida, Mr. Buchanan, to introduce a witness from his area.

Mr. BUCHANAN. Thank you, Mr. Chairman.

I want to take a moment to introduce Rick Piccolo. Rick is the President and CEO of the Sarasota-Bradenton Airport, which sits right in the middle of our two counties, two of the bigger counties I represent.

Rick is also the Chairman of the Airport Council International-North America. We are proud of that, Rick. Rick and I have had an opportunity to work together for probably six to eight years for economic development. We talk a lot about airport issues because I have also been in the aviation business.

So I want to thank the Chairman of the Council. We are proud of that, for taking his time to come to the committee today. I look forward to hearing about your testimony.

Thank you, Mr. Chairman.

Mr. COSTELLO. I thank the gentlemen from Florida.

Next, I would introduce Ms. Karen Ramsdell, who is the Airport Director, Santa Barbara Municipal Airport; Mr. Doug Kimmel, who is the Airport Manager from the Williamson County Regional Airport in the southern part of my congressional District. Mr. Kimmel, we are pleased to have you here to offer your testimony. Mr. Kimmel is a graduate of the Southern Illinois University. The President of that university is a former colleague of ours, and was on the Transportation Committee and on this Subcommittee. So we welcome you here today and we look forward to your testimony.

The Chair would now yield to my friend from Oregon to introduce a witness from Oregon.

Mr. DEFAZIO. Thank you, Mr. Chairman.

I want to thank the next witness for making the long trip. He even had one more leg than I have, and it is as far away from Washington as you can get, which is often a blessing.

So Mr. Gary LeTellier, who is the Executive Director for the Coos County Airport District at Southwest Oregon Regional Airport. We have renamed it, so I had to read that. I am not quite up on the

name yet. He comes to Oregon with extraordinary experience in major airports. He has a professional education in aviation from Embry-Riddle and a master's from the University of Washington. He flew with United Airlines. He was a military aviator. I don't think you could have a broader experience. And Gary might not agree with this, but I am going to say that in a way, you look at his past experience and you wonder how did he end up in Coos Bay? And I would say it has to do with the water. It is on the Pacific Ocean. It is a beautiful, beautiful community. I think Gary chose to move there when he could have had what would be considered by many, not those of us from Oregon, but others, much more prestigious positions in major urban areas around the country, but he has chosen to honor us with his work. I really appreciate you being here today.

I do have to say, Mr. Chairman, I have a markup in Homeland Security and also a hearing in Resources. I am going to have to absent myself at this time, but I leave it in your able hands.

Mr. COSTELLO. We trust that our friend from Oregon will protect the interests of this committee.

Mr. DEFAZIO. There are a few aviation issues that we will be discussing in the markup.

Mr. COSTELLO. We thank you.

The Chair now recognizes Ms. Brown from Florida to introduce a witness from Florida.

Ms. BROWN. Thank you. I want to thank you again for holding this hearing.

I want to take a moment to introduce Mr. John Clark, one of today's distinguished panelists, who is from my home town of Jacksonville, Florida. He is a life-long aviation professional and is currently the Executive Director and CEO of the Jacksonville Aviation Authority, which includes Jacksonville International, two general aviation airports, and a former military airport that is being transitioned to civilian use. In 2006, the airport handled over 6 million passengers and 140 million pounds of air cargo. John is a past board member of the American Association of Airport Executives and is currently the Secretary Treasurer of the Airport Council International Board. Prior to his time in Jacksonville, he was Detroit Airport Director and held management positions in Sacramento.

John will testify about the tremendous population growth in our area and the anticipated need for nearly $500 million in capital programs over the next 10 years. This can only be done by reauthorizing and enhancing the Airport Improvement Program and providing all our airports with the funding they need to continue to serve the flying public in a safe and efficient manner.

With this, I want to welcome John Clark and the other distinguished panelists to today's hearing. I am looking forward to hearing your ideas on strengthening the Airport Improvement Program.

Thank you.

Mr. COSTELLO. The Chair now recognizes the gentleman from Colorado, Mr. Salazar, to introduce a witness who will be actually on the third panel.

Mr. Salazar?

Mr. SALAZAR. Thank you, Mr. Costello, and thank you for indulging me.

It is my honor today to introduce someone who is from Colorado and has been with the Colorado Department of Transportation for over 15 years. He worked under both the Democratic and Republican Administrations in Colorado. It is my honor today to introduce Travis Vallin who has been the Director of the Colorado Division of Aeronautics for 10 years in the State of Colorado. He is now the current Chairman of the National Association of State Aviation Officials. Although he is on the third panel, and I apologize Mr. Chairman because I have to run off to another committee hearing, Travis, welcome.

Mr. COSTELLO. I thank the gentleman from Colorado.

Let me announce to everyone that we expect to have four votes on the floor of the House right at 12:30. What we intend to do is when we get down to about five minutes, we will recess, go to the floor, vote and we will come back immediately, which should be about approximately 30 minutes from the time that we recess. So I will just put you on notice that we will be coming right back.

The Chair recognizes, and again as you can see, we have eight witnesses on this panel. We have your written statements. I can tell you that I sat up late last night and early this morning reading some of the testimony. So we would ask you to summarize your written statement in five minutes or less.

The Chair recognizes at this time Mr. Bennett.

TESTIMONY OF JAMES E. BENNETT, PRESIDENT AND CEO, METROPOLITAN WASHINGTON AIRPORTS AUTHORITY; THE HONORABLE NURIA I. FERNANDEZ, COMMISSIONER OF AVIATION, CITY OF CHICAGO; ELAINE ROBERTS, A.A.E., PRESIDENT AND CEO, COLUMBUS REGIONAL AIRPORT AUTHORITY; JOHN CLARK, EXECUTIVE DIRECTOR, JACKSONVILLE AVIATION AUTHORITY; FREDERICK J. PICCOLO, PRESIDENT AND CHIEF EXECUTIVE OFFICER, SARASOTA MANATEE AIRPORT AUTHORITY; KAREN RAMSDELL, AIRPORT DIRECTOR, SANTA BARBARA MUNICIPAL AIRPORT; DOUGLAS KIMMEL, AIRPORT MANAGER, WILLIAMSON COUNTY REGIONAL AIRPORT; GARY W. LETELLIER, AIRPORT MANAGER, SOUTHWEST OREGON REGIONAL AIRPORT

Mr. BENNETT. Chairman Costello, Ranking Member Petri and Members of the Aviation Subcommittee, on behalf of the Metropolitan Washington Airports Authority I want to thank you for inviting me to testify today.

I am President and Chief Executive Officer of the Airports Authority, the operators of Ronald Reagan Washington National Airport and Washington Dulles International Airport. In addition, I wear a hat today as Chair of the Airport Legislative Alliance Policy Roundtable. The ALA is comprised of 119 airports large and small located throughout the United States.

I had the privilege of attending FAA's annual forecasting conference here in Washington, D.C. just the other day. Among the distinguished speakers was FAA Administrator Marion Blakey. In the course of her remarks, she reminded the 600 assembled guests that Washington Dulles International was going to be one of the

fastest growing commercial airports in the United States between 2006 and 2020, with a projected growth in aircraft operations of 68 percent, and a 112 percent growth rate in passenger enplanements.

The Airports Authority utilizes quite effectively the two financing mechanisms that are part of the FAA reauthorization legislation before the Subcommittee, namely the AIP and PFC programs. Together, these financing tools are important components of our ability to expand and maintain the infrastructure to keep pace with the significant growth that Administrator Blakey referred to in her remarks.

In that regard, any legislation or proposal that would affect either of these programs is of great interest not just to the Airports Authority, but to airports nationwide. The Airports Authority has a $7 billion capital construction program planned through 2016. The program is funded with $4.7 billion in bonds, $1.7 billion in PFCs, and $600 million in AIP grants.

In the execution of the current program, we are spending roughly $2 million per day on construction and related services at Dulles Airport. We agree with the Administration's recommendation to increase the AIP discretionary fund to $520 million to meet the need of letters of intent.

LOIs are important financing tools for airports. As a matter of fact, in 2006, the Airports Authority received a $200 million letter of intent from the FAA to fund the construction of our much-needed fourth runway at Dulles, which we plan to open in October of 2008. This LOI represents approximately 56 percent of a total project cost of $357 million. By having this LOI available, we are able to construct this much-needed capacity enhancement to the airport in a cost-effective manner.

Of equal importance to the Airports Authority is the issue of passenger facility charges and the proposal to increase them. Since PFCs were authorized by Congress in 1990, they have become the second largest source of financing infrastructure at the Airports Authority, following only behind bonds. PFCs have not kept pace with the rate of construction inflation. Most airports have committed their PFC authority well into the future. For example, at Dulles our PFC authority is used through the year 2017. PFCs originally authorized airports to collect a maximum of $3 per enplanement. This increased to $4.50 in 2001. However, because of the inflation and the increased cost of construction, PFCs do not have the buying power that Congress authorized. Today, they should be increased.

I support the Administration's proposal to increase the PFC to a level of $7.50 in lieu of $6.00 per enplanement, which has been proposed by the FAA. At the $7.50 rate, the construction buying power of the PFC will return to about the same rate as when it was authorized at the $4.50 level in 2001. To further prevent the erosion of the buying power of the PFC, we believe that it should be indexed to construction inflation.

I also would like to, in the interest of time, speak very briefly about bonds sold through the capital markets. We believe that bonds sold through the capital markets should be classified as public bonds, and not subject to the alternative minimum tax. Because most airport bonds are considered private activity, they are subject

to the AMT and the penalty of the AMT is between 20 and 30 basis points on each of our bond sales, which amounts to about, we have over $4 billion in debt. That AMT penalty adds nearly $10 million annually to our airline rates and charges at the two airports.

Chairman Costello, Ranking Member Petri, thank you again for inviting me here to testify.

Mr. COSTELLO. We thank you, Mr. Bennett.

Commissioner Fernandez?

Ms. FERNANDEZ. Good afternoon, Chairman Costello, Ranking Member Petri, and the honorable and distinguished Members of this committee. On behalf of the City of Chicago, its 3 million residents, our two airports, I want to thank you for the opportunity to present our views on this very important reauthorization proposal.

As a large airport hub, we are facing some very significant challenges as it relates to upgrading, and we are not alone. All the other large airport hubs are in the same place that we are. What we foresee is that in the coming years, it will take billions of dollars to maintain vital infrastructure and billions more to increase capacity. If you add the FAA's need to modernize the air traffic control system, you will see that a very robust and dependable funding for the air transportation network is an urgent national priority.

Airport financing is the key element to meeting the needs of growing demand for air travel. The FAA has projected, as has been mentioned here, that air traffic will reach 1 billion enplanements per year, 300 million additional enplanements by 2015. Moreover, FAA's forecast for O'Hare International is expected to increase in traffic from 37 million enplanements that we experienced in 2006, to 53 million in 2020. Similarly, Midway International Airport anticipates increase from 8.9 million to 16.3 million. That is a significant increase.

Without adequate financing for capacity-increasing projects, it will be very difficult for our airports to safely and securely accommodate the substantial growth in air traffic. So therefore, the ability of airports to find a reliable source for their capital is going to continue to be critical for the future of aviation.

I want to thank this committee for its support of the O'Hare modernization program, which is a prime example of how crucial the different funding sources are now and they are being used to finance capacity enhancements at airports. Over 35 percent of the funding for phase one of the OMP is comprised of AIP grants and PFC funding. As we work towards the phase two of this very important program, AIP and PFC will play a significant role in funding the completion of the modernization of our airports.

First, I would like to discuss the importance of the PFC provision in the reauthorization proposal. We believe that the FAA's decision to increase the cap to $6.00 is a step in the right direction, but it does not go far enough. We recommend that Congress set the PFC cap at $7.50 and index it to inflation, because the effects of the inflation have diminished the power of current PFC levels to adequately finance airport construction projects.

Additionally, we note that the increasing PFC cap is merely that, a ceiling. It does not require airports to adopt the $7.50 PFC, but rather it gives airports the flexibility to select the level that best

addresses their needs. Market principles, we believe, and agreements with airlines will determine the level of PFC that their passengers are willing to absorb.

We appreciate the fact that FAA was receptive to the airport's concerns at the existing PFC application process, which was overly bureaucratic and burdensome. Their proposal for new measures will help streamline the PFC process and get us the dollars quicker.

Second, a balanced capital investment strategy for airports requires a strong AIP program. AIP is important to airports of all sizes, and we are encouraged that there was an increase included in the AIP discretionary account, and that all existing AIP letter of intent commitments will continue to be honored.

For large airports, a robust AIP discretionary program is critical. These funds are being used by airports for very important safety, security, expansion programs for capacity, and more important, to address some of the environmental needs of our airports, as we continue to strike the right balance between the airport and its compatibility with the surrounding community.

I would like to just once again thank the committee for this opportunity to come before you and express our gratitude for all the important work that you have done, as we continue as a large hub, and all airports in this Nation, to look for funding sources and the flexibility that we need to continue to be implementing safety and security to the aviation industry.

Thank you.

Mr. COSTELLO. We thank you for your testimony, Commissioner Fernandez. I would note that the Administrator and I both came to Chicago not too long ago and had a briefing on the O'Hare modernization, as well as the proposal to privatize Midway Airport, which of course I have expressed some concerns about. But let me say that both the Administrator and I were impressed with how well the project is going as far as the expansion of O'Hare.

The Chair recognizes Ms. Roberts at this time.

Ms. ROBERTS. Thank you, Chairman Costello, Ranking Member Petri, and Members of the House Transportation and Infrastructure Subcommittee on Aviation. Thank you for inviting me to participate in this hearing on the Administration's proposal to reauthorize the Federal Aviation Administration's Aviation Improvement Program.

As the CEO for the Columbus Regional Airport Authority, I am also wearing a second hat today. I am the Chairperson of the American Association of Airport Executives this year.

Just briefly, we operate three airports, all different sizes, with unique roles. Port Columbus is our passenger, commercial airport, a medium hub. Rickenbacker is a cargo airport, also jointly used with the military. And Bolton Field is a general aviation airport. The latter two are relievers to Port Columbus.

You have heard the forecast for continuing growth in our industry. We have seen similar growth in Columbus over the last few years. Not only have we rebounded from the impacts of 9/11, but even more significantly, we suffered a 25 percent reduction in all of our scheduled departures just in mid 2003 by America West, when they closed their small hub in Columbus. We have fully re-

bounded now from that cutback as well, and have had record passenger growth in four of the last five months.

Traffic for the first two months of this year is also up over 10 percent, and projected to continue to climb, largely due to new air service being brought to our market. Southwest has also continued to grow and became our largest airline last year and grew 18 percent in terms of passenger growth.

Our cargo traffic has also been up significantly at Rickenbacker. We saw a 20 percent increase in cargo tonnage in December, and ended the year with over 250 million pounds of cargo, as well as over 37 percent more landed weight. Our general aviation airport has over 110 based aircraft and has also seen steady growth in terms of operations.

All of this just means that we have an increased demand for continued infrastructure development at our airports. We have a $1.2 billion capital program for the next 12 years in Columbus for our airports. Due to rising construction costs and the rate of inflation, we also are not convinced that the current resources we have are adequate to cover this program. We ask your help in helping secure more resources to accommodate that increasing demand as costs are also rising.

I also appreciate the fact that the Administration has proposed to increase PFCs to $6.00, but would urge you to consider increasing it further to the $7.50 rate that you have heard a lot about this morning. Also, by increasing AIP funding to at least $3.8 billion for fiscal year 2008, we think those two primary funding sources will help airports of all sizes. Although we are a medium hub airport in terms of Port Columbus, and we are not totally reliant on the AIP funding, we are still looking to receive over $110 million of AIP funds for a proposed new runway that is currently in the EIS process. We are looking to have about one-fourth of that runway project covered by PFCs and the remainder we would have to go out and issue new debt and pass on the cost to the airlines.

AIP funds are also critical for us at Rickenbacker in particular. It is in the Military Airport Program and has significant capital needs, including $15 million to rehabilitate one of our 12,000 foot runways. The airport is not self-sufficient yet, due largely to the large investment required in infrastructure.

One-fourth of our entire capital program for the next 10 years is projected to be paid for with PFCs. So a $7.50 PFC is really important to our long-range requirements. It would generate about $10 million per year right now at our current level of enplanements, which is around 3.4 million enplanements per year.

We have used PFCs, like many airports, largely for airside capacity projects, extending runways, airfield improvements, as well as about 10 years ago, adding some gates to our terminal for needed capacity.

In summary, although over half of our capital program will be paid for with airport-generated funds like parking revenues and concession fees and issuing new airport revenue bonds, AIP funding and PFCs are essential for us to be able to operate all three of our airports and keep up with the growing demand for infrastructure.

I thank you again for the opportunity to be here today. I hope you will continue to provide airports of all sizes in this Country with the tools that we need to be able to keep up with the increasing demand and to help offset the rising cost of construction.

Thank you very much.

Mr. COSTELLO. We thank you, Ms. Roberts.

The Chair now recognizes Mr. Clark.

Mr. CLARK. Thank you, Mr. Chairman and Congressman Petri and Members of the committee.

I represent Jacksonville Aviation Authority. It is a system that has four airports, the primary airport being Jacksonville International Airport, which we saw 6 million passengers in 2006.

Since you have the written testimony, I would just like to take the opportunity to emphasize three points in my written testimony. That is in support of the increase of the passenger facility charge from $4.50 to $7.50. This has become very important to the Jacksonville Aviation Authority as we are faced, like other airports, with many capital demands. But the PFC allows a greater level of flexibility in being able to respond more timely than any other mechanism that we have at this point. So we highly encourage an increase of the PFC to $7.50 and more flexibility with that funding mechanism.

Also, we would like to speak to the military assistance program. Having been in a community that was part of the BRAC process and bringing on an airport into our system that actually adds considerable capacity, the military assistance program has provided a level of funding which otherwise we would not have been able to move forward on the development of Cecil Field.

To this day, Cecil Field is now in consideration for a commercial space port. It provides activity and capacity for air cargo, as well as maintenance and repair and overhaul. So we would like to extend and encourage this committee to consider the continuation of the military assistance program.

Additionally, we rely on AIP funding and would encourage that the committee would consider levels that are at least of current authorization levels. To decrease it would only hurt our system and our ability to meet the capital needs of the airport system.

Our final point, in trying to recognize the continuous demands on the need and infrastructure at the airports, we, too, are looking at the possibilities of privatization, and therefore would encourage in the Administration's proposal increasing the number of privatization opportunities. As we try to address in an innovative way the way we will provide funding and grow the system in Jacksonville, we have begun to look at the alternatives. One of those alternatives is airport privatization.

Having spent several years now looking at the models, both in Europe and Australia and in Canada, we believe that there is opportunity here in the United States to consider airport privatization as the community continues to grow. Jacksonville happens to be one of the fastest growing communities in the Southeast, and therefore we are trying to determine what are the best ways that we can continue to fund our capital programs and meet the growing needs of our region.

Mr. Chairman and Members of the Committee, I will end my remarks there.

Thank you.

Mr. COSTELLO. Mr. Clark, thank you. I am pleased to hear that the Military Airport Program has worked for you. It was my first year in Congress and first year on this committee and Subcommittee that Congressman Henry Nowak and I offered the amendment that created the Military Airport Program. So we are pleased that it has worked for you.

The Chair now recognizes Mr. Piccolo.

Mr. PICCOLO. Chairman Costello, Ranking Member Petri and Members of the committee, thank you for the opportunity to appear and speak to the issue of AIP.

I would also like to thank Mr. Buchanan for your kind introduction.

I appear today wearing two hats, first as Chairman of Airports Council International-North America. Our member airports enplane over 95 percent of the domestic and virtually all the international airline passengers and cargo traffic in North America. I also wear my hat as President and Chief Executive Officer of the Sarasota Bradenton International Airport, a small hub facility on the west coast of Florida.

This year is critical for aviation in the United States. The expiration of the Federal Aviation Administration's programs, taxes and fees provides an historic opportunity to make needed changes that enhance and strengthen our national air transportation system for decades to come.

Main Street and downtown were the centers of commerce and economic growth prior to the construction of our Interstate Highway System. When the Federal highway system linked our Country from coast to coast, economic expansion ensued that created a large middle class with increased educational and economic opportunity for millions of Americans.

Airline deregulation and the creation of the computer have made the term "global economy" a part of our lexicon. The key component of our Country's ability to compete successfully in this global economy has been a robust and expanding aviation platform, not just from the major hubs like Atlanta, Chicago, New York and Los Angeles, but from smaller facilities that have made global markets accessible and cost-effective, places like Louisville, Kentucky; Greenville-Spartanburg; and Flint, Michigan, which are located near major automobile manufacturing facilities; or Rochester, Minnesota, home of the world's renowned Mayo Clinic; or wonderful tourism destinations like Palm Springs, California or Sarasota, Florida. These facilities provide critical access for our citizens and visitors.

The FAA has taken some innovative first steps in their proposal and they are to be applauded for their effort. With that said, there are some areas of concern for smaller airports. The AIP funding source must be stable and predictable. We are concerned that dedicating just international arrival and departure taxes, along with some portion of gasoline taxes and general fund contributions, will lead to a very unstable funding source for AIP.

Small and non-hub airports are much more dependent on this program for their capital funding needs. It would seem fair and prudent that whatever tax and fee program is devised should be used to fund all facets of the aviation system, rather than reserving specific parts of each program. This cross-financing of the system ensures that during difficult times, all sections must sacrifice equally.

The Passenger Facility Charge ceiling should be raised to $7.50 and the application process must be streamlined and eligibility rules aligned with airport needs. The PFC program is a way for local communities to make direct decisions on how to build infrastructure and compete in the global marketplace. This increase in the flexibility for its use as the local governing body deems appropriate is a critical element in the future of our Nation's airports.

The Small Community Air Service Development Program should be preserved, not eliminated, as proposed by the Administration. Sarasota Bradenton International Airport is a shining example of the success of the program. Before receiving that grant, the airport had lost 50 percent of its passenger traffic and was bleeding 1.6 million passengers annually to Tampa International. In 2005, SRQ received a grant of $1.5 million that was used to attract a low-cost carrier, AirTran Airways, which started with three daily flights to two cities. In 2006, AirTran carried almost 400,000 passengers and provided nine daily departures to five nonstop destinations during peak season, and five daily departures to three nonstop destinations off season.

SRQ has been one of the fastest growing airports in the Nation since that time, and the economic health of the airport and the community has been helped many times over by this investment. Not only did this result in increased ridership, but the introduction of low-cost service injected competitive pricing into the community.

We all know that airlines have been pushing their prices higher in an effort to become profitable. At SRQ, the average fare increase from 2004 to 2006 is 15.5 percent. However, in markets where AirTran was introduced, fares have risen less than 1 percent over those two years. This has resulted in a saving of $17 million for our local consumers. In addition, the additional 400,000 passengers have additional economic impact on the community.

Finally, small airports are feeders to larger facilities. They help feed the hubs and provide efficiency. If small airports fail or cannot remain competitive, those passengers must drive to larger facilities. In 2000, the Airport commissioned an environmental study that measured the effects of that bleed of 1.6 million passengers annually. It resulted in the following environmental impacts.

There were 224 million miles of additional road travel; 11.2 million additional gallons of fuel were consumed; and the added carbon dioxide in the air was 1.28 billion grams. There were 203 million additional grams of nitrous oxide, and 2.24 million additional grams of particle matter. As you can see, these figures cover only one small airport. The support of the Nation's small and non-hub airports is not only good economic policy, but it is good environmental policy.

On behalf of all our members, and small airports in particular, I want to thank you for the opportunity to comment and look for-

ward to working with you to strengthen our national aviation system.

Thank you, Mr. Chairman.

Mr. COSTELLO. Thank you, Mr. Piccolo.

Ms. Ramsdell?

Ms. RAMSDELL. Chairman Costello, Ranking Member Petri, and Members of the House Transportation Infrastructure Subcommittee on Aviation, I thank you for inviting me to participate in this hearing today.

Santa Barbara Municipal Airport is a small hub airport on the coast of California. Last year, the airport had over 400,000 enplanements and ranked in the top quarter of non-primary and primary commercial service airports in terms of enplanements.

The FAA terminal area forecast projects a 45 percent increase in Santa Barbara enplanements by the year 2020. In 2002, Santa Barbara completed its master plan after many years of environmental hurdles. The plan proposed some priority projects for our airfield. Two of the projects addressed runway incursions, and a project to extend the safety areas at each end of our main runway to meet current FAA standards.

The plan proposed also a 67,000 square foot airline terminal project to meet current and future demand. Our ACIP for 2008 to 2012 totals $61 million. That is in contrast to the $71 million in entitlement and discretionary money that the airport received over the last 20 years.

The airfield safety projects totaled $35 million. They will be completed this year, with our $15 million fiscal year 2007 AIP request. Funding for these projects included four years of the airport's entitlement plus discretionary funding. PFCs provided the local AIP match.

The terminal project will be funded with AIP grants and debt financing, and I might add, our first debt in the airport's history, and using PFCs to back debt service. Due to increasing construction costs, our project square footage and other features of the project have been cut and cut and cut. It has been 30 years since the last expansion of the terminal, and passenger use has grown over 100 percent.

AIP grants and PFCs are the financial resources that Santa Barbara depends on for the critical capital development projects. I urge you to increase the PFC cap from $4.50 to $7.50. With PFC revenues at Santa Barbara growing at about 3 percent per year, but construction costs in Santa Barbara growing at about 6 percent per year, you can see that our purchasing power has eroded every single year that we go forward.

At Santa Barbara, the additional PFC revenues above what we need for debt service would be used to fund other eligible features of our terminal project that have been cut, and also fund the AIP match for airfield safety and infrastructure projects.

I urge you to increase the AIP funding levels, even one year with a 35 percent cut as currently proposed can impact a small airport's ability to construct a project, and will impact our terminal project. If levels are increased, Santa Barbara could fund eligible portions of the terminal project for which there are not sufficient AIP dollars under current levels, and additional AIP funds would also be

used to complete airfield safety and infrastructure projects that we have had to plan for at least five years away due to lack of available funding.

I urge you to maintain the 95 percent Federal AIP share for smaller airports. For many small airports which have large projects such as our airfield safety projects, coming up with a 5 percent match is difficult, let alone a 10 percent match. For that project, we got a substantial amount of discretionary funding, but it doesn't help if you can't come up with the local share.

Santa Barbara's air passenger traffic has fully recovered from September 11, yet the security impacts to our terminal taking up more space has increased as our passenger demand has also increased. AIR-21's enactment increased AIP funding levels, increased PFC cap, and then the increase in the Federal AIP share after 9/11, combined to make it possible for Santa Barbara to construct over $35 million in airfield safety projects over the course of four years.

Today, increasing the AIP funding levels, increasing the PFC cap, and maintaining the Federal AIP match, combined will make it possible now for Santa Barbara to construct its air terminal project to meet passenger growth, and have funding for future capital priorities.

Chairman Costello, Ranking Member Petri, and Members of the Aviation Subcommittee, I want to thank you for inviting me to appear before you today and to represent the small airports perspective. I urge you to continue to assist airports of all sizes to keep pace with the increasing passenger demand and skyrocketing construction costs by raising the PFC cap and increasing AIP funding.

These actions will have an impact on Santa Barbara Airport by improving safety and increasing air terminal capacity to meet growing passenger demand.

Thank you.

Mr. COSTELLO. We thank you for your testimony.

Let me announce that we have four votes on the floor. We have six minutes to get over to the Capitol to vote. We are going to recess at this time. I would expect that we will come back immediately after the last vote, which I would guess will be somewhere in about 20 to 25 minutes. So we will recess until then.

[Recess.]

Mr. COSTELLO. The Subcommittee will come to order.

Mr. Kimmel?

Mr. KIMMEL. Thank you, Mr. Chairman, Representative Petri and Members of the Aviation Subcommittee, I am honored to be here today to discuss the AIP program and its significance to Williamson County Regional Airport, a non-hub primary commercial service airport located in Southern Illinois.

Though the services and benefits our airport provides to the surrounding region are significant, so too is the reality of the financial challenges we face. In any given year, airport revenue struggles to cover the cost of operating and maintaining the facility. So as we have heard here earlier today, capital improvement projects at smaller airports, particularly such as ours, can only be accomplished with funding through AIP.

In recent years, we have relied on AIP to extend our primary runway, acquire land, remove obstructions, rehabilitate and expand aircraft parking areas and taxiways, and acquire aircraft rescue and firefighting equipment. Over the next five years alone, we have identified project needs requiring over $6.6 million in AIP funding.

Mr. Chairman, I ask that the Aviation Subcommittee account for the capital development needs of our Nation's airports by supporting AIP funding levels in the amount of $3.84 billion and $4.2 billion for fiscal years 2008, 2009 and 2010 respectively, while setting forth a minimum level of 25 percent as the general fund contribution throughout this period.

Also important for smaller airports, as has been discussed this morning, will be retaining the Federal matching fund amount of 95 percent. A $500,000 airport improvement project, as an example, that has a local matching share that increases from $25,000 to $50,000 is truly significant to smaller organizations, and in many cases could prevent smaller airports from moving forward in a timely manner with planned and necessary improvements.

Regarding the small airport setaside fund, there certainly has been discussion this morning indications that this will result in reduced funding for smaller airports. So I would certainly ask that we exercise caution with considering any formula change that has that potential across the board. Though we are not a general aviation airport, I would offer that any future formula based upon a tiered level of funding for airports, the only way that that could have any viability would be if that lowest tier still is afforded entitlement funding under AIP.

I would like to voice support of an increase in the PFC cap up to $7.50. Though paling in comparison to the amount of money that this generates at larger airports, this increased funding capability is significant, too, for smaller airports that also must be creative in financing airport improvements.

Now, alongside AIP, two other programs that are of particular concern to smaller airports during this reauthorization proposal and period are the Essential Air Service Program and the Federal Contract Tower Program. Connecting small communities to the national air transportation system is both fundamental for local economic vitality and is in the national interest. This was stated by the GAO in its reference to the Essential Air Service Program. Unfortunately, once again the current proposal would result in over 70 communities being dropped from the program, including Williamson County Regional Airport. This discontinuation of air service that would result for communities across the Country would be an unprecedented tragedy in Federal aviation policy.

The Contract Tower Program is a vital safety and economic asset to smaller airports as well. At our airport, the mix of student pilot training from nearby Southern Illinois University's program, and our own air carrier operations, makes the ability to maintain these air traffic control services essential to safe operations. In the short term, our airport will likely depend upon the cost sharing provisions of this program in order to maintain these services. So I would like to make particular mention of the need to authorize $8.5 million for the cost-sharing program in fiscal year 2008.

Finally, Mr. Chairman, I would like to voice my opposition to the proposed increases in general aviation fuel taxes and user fees. General aviation is a very broad term and it consists of numerous small operators and private aircraft owners far less capable of absorbing an increase in costs. If such a proposal were to be implemented, then that effect would be fewer operators providing fewer operations at smaller airports across the Country, and fewer services to the public.

Thank you, Mr. Chairman.

Mr. COSTELLO. We thank you, Mr. Kimmel.

The Chair recognizes Mr. LeTellier for five minutes.

Mr. LETELLIER. Chairman Costello, Ranking Member Petri, and Members of the Subcommittee, thank you again for my invitation to be here today. I am testifying on behalf of the Coos County Airport District, who is the owner and operator of the Southwest Oregon Regional Airport, a non-hub commercial service airport on the coast of Oregon.

As a small hub commercial service airport, our planning and capital needs for development and renewal and replacement of aging infrastructure are met almost exclusively from the AIP and passenger facility charge programs. I would like to just hit a couple of highlights of my written testimony to you now.

The first is the increase in AIP funding. The Administration's request for $2.75 billion of AIP in the next fiscal year is about $1 billion less than what the Congress has authorized for this current year. The proposal would reduce the total entitlements for non-hub airports from $307 million to $269 million, a $38 million reduction year over year.

It also appears as if the Administration's proposal to replace the small airport fund with a small airport discretionary fund could also cost small airports.

We, like our colleagues, urge you to increase AIP funding so the program can at least keep pace with increasing construction costs, and ask you specifically that you protect small communities like ours from penalties being imposed through the formula changes for the distribution of the AIP funding.

We also are concerned over the Administration's proposed reduction of the Federal share for AIP projects. AIP funding actually accounted for 94 percent of all capital expenditures for non-hub airports in fiscal year 2003. This proposal would decrease the eligible share for a qualified AIP project at smaller non-hub airports to 90 percent. In our case, PFCs are used for the actual match, and our ability to collect is very small. So a 5 percent increase in matching fund requirements for us would prevent us from moving forward with many of our planned construction projects.

We would also like to see the PFC cap increased. You have heard that at $3.00 PFC in 1990 is worth only $1.73 today; and a $4.50 PFC is worth $2.86 over 2000. The American Association of Airport Executives' analysis projects that a $4.50 PFC in the year 2000, adjusted for inflation and increases for construction costs, would need to be $7.20 this year. The Administration's proposal to raise the cap on PFCs to $6.00 is not enough to overcome the effects of inflation and increasing construction costs. We therefore join our other colleagues in asking you to raise the PFC to $7.50.

We believe that it is important to ensure that there is a stable source of funding to pay for the airport improvement program and we are concerned about the Administration's proposal to increase general aviation fuel taxes.

Fourth, I wanted to talk just a moment about continuing the Small Community Air Service Development Program. Small and rural communities with non-hub airports like ours have struggled since deregulation. There is a very deliberate trend toward fewer flights by incumbent airlines to these communities, even though overall passenger levels are continuing to increase across the Country. Congress and the Administration should work together to ensure that these small and rural communities can continue to have access to our national aviation system. It is disappointing that the Administration's proposal does not include funding for this vital program. We urge you to reauthorize this program up to $50 million for the Small Community Air Service Development Program.

Mr. Chairman, that concludes my remarks. I would just like to say that you have heard remarkable unanimity here today from the industry about the Administration's proposed legislation.

Thank you very much.

Mr. COSTELLO. Thank you very much.

We thank each of our witnesses on this panel. A few brief questions, if I can.

Mr. Bennett, I am pleased that you touched on the bonds, so you have covered that question for me. But in your written testimony you indicate that you would suggest that when the FAA is denying a grant to the PFC authority to a project that you would like them to give 30 days notice. Can you explain the reason for that?

Mr. BENNETT. Yes, sir, Mr. Chairman. Thank you for that question. The effort there is to make sure that there is no retroactive reversal under this scenario, a retroactive reversal of a PFC that might otherwise have moved forward without the opportunity to discuss that with the FAA. The concept is not in the manner in which PFCs are currently approved.

It would be in a more streamlined manner and it would be very difficult for airports following that streamlined approach to have the FAA have the ability to just at some point down that process just cut them off. We would like some kid of 30 day notice period so that we could say, wait a minute, let's talk about this; just don't completely cut this PFC off today. Give us an opportunity to review and comment and try to change your mind before you disapprove that.

Mr. COSTELLO. Thank you.

Commissioner Fernandez, speaking of streamlining the PFC process, you indicate in your testimony that the process is overly bureaucratic and burdensome. I wonder if you might explain some of the problems that you have personally experienced with the bureaucratic process.

Ms. FERNANDEZ. Thank you very much, Mr. Chairman, for that very important question. As you know, we have been moving forward with our air modernization program, and one of the challenges we face is that a significant portion of that capital program is reliant on PFCs. We have had the good fortune to work very closely with the regional office of the Federal Aviation Administra-

tion as it relates to ensuring that the various elements contained within the application meet their satisfaction.

But we are also on a time table where the cost of the project is going to continue to increase if decisions are not made in a timely fashion. So as we go back and forth with the Federal Aviation Administration to resolve the issues contained in the application, we would urge them to expedite that application so that we can in the near future submit future applications to be able to continue, keep our project within the time line that have established, and avoid any increases in construction costs and labor by deferring the construction bids waiting for these funds to be available.

Mr. COSTELLO. Mr. Clark, you indicated that the PFC funding is too restrictive. I wonder, are there any projects in Jacksonville at the Aviation Authority that have not been completed because of the restrictions? In other words, if the restrictions were removed, what projects would you endeavor to undertake?

Mr. CLARK. Thank you, Mr. Chairman. The recent example of the restrictiveness of the PFC is, we needed to buy some additional land for a proposed future runway. And although land is eligible, the criteria is that you have to be at at least 65 percent of capacity of your existing runway.

The problem that we ran into is immediately adjacent to the airport there is a development that is occurring that will bring some 15,000 homes right on the fringe of the airport. Our position was we needed to buy the land to protect that next parallel runway system. Trying to work through the process with the FAA, we were going to have to buy the land whether we got PFC funding or not. We just needed to do that to protect the future interest of the airport.

So in that manner, sometimes even though there is flexibility with PFC, it can be very difficult to accomplish what the airport needs in a more timely manner. It was looking at the fact that this development was about to occur and is occurring and we would not have had the ability to protect the interests of the airport on a long-term basis.

Mr. COSTELLO. Thank you.

Mr. Piccolo, you indicate that you believe, I think you say a proper and equitable level of support should come from the Federal Treasury, from the general fund.

Mr. PICCOLO. Yes.

Mr. COSTELLO. I wonder, what do you consider proper and equitable, the percentage, for instance?

Mr. PICCOLO. The historical average has been, in prior years, the 25 percent range. So we think that somewhere in that area is a good percentage. There is a great deal of benefit for the entire Country, both from a defense standpoint and from an economic standpoint. Having a quarter of those revenues coming from the general fund seemed to be something that for a long time the Congress traditionally did, as it was before.

Mr. COSTELLO. Just as a side note, I am in total agreement with you. For those who I think have a tendency, some of our friends at the FAA, to shift costs and to reduce the contribution from the general fund, I think we ought to be trending in the opposite direction. Those who never use the system benefit, the Country benefits

as a whole. As a result, there ought to be a robust contribution from the general fund.

Mr. Kimmel, you describe in your testimony $6.6 million in AIP funding for your airport in anticipated needs over the next five years. I wonder, what type of projects, quickly, are you planning, and what would be the result if the AIP funds were not available?

Mr. KIMMEL. First and foremost, one is actually required by FAA, due to our certification as a commercial service airport, a runway safety area issue of having to relocate the end of our north-south runway to accommodate the higher standards. Obstruction and removal, more land acquisition, pavement projects, runway overlay, ramp expansion.

And this doesn't even taken into account what I foresee us coming up with in the next five years, particularly at our airport, which is the need for a new airline terminal. You have been to our airport on many occasions, and unfortunately we are in a facility that we have talked about capacity constraints. They are not always airside. And in our case, in particular, even a smaller regional airport, we have a 1972 facility that was designed with utter disregard for the functions of what we need it to accommodate. We have grown out of that facility right now and so, we are this year putting some AIP money into a planning study for a new terminal, new terminal development, looking at options on expanding on to the existing but most likely replacing the existing.

So the $6.6 million figure that I used earlier doesn't even take into account the probable need for a new airline terminal.

Mr. COSTELLO. I thank you.

The Chair recognizes at this time the Ranking Member of the Subcommittee, Mr. Petri.

Mr. PETRI. I have a kind of general question for any or all of the panel members to comment on, and that is, really your attitude and the role of airports, your attitude toward and the role, if any, of airports in the NextGen effort or the FAA's effort and plan to roll out more modern and satellite and transponder-based air traffic control as opposed to the old radar-based system. Do you have any comments or concerns about that as it affects airports?

Mr. BENNETT. Just speaking from our perspective, our concern is we need it soon. And we need to make sure that there is a method to fund it and get it in place. Because every estimation of our system suggests that demand is going to far exceed the capacity of the existing system. We need NextGen and we are very hopeful that it moves forward with dispatch.

Ms. FERNANDEZ. I would echo that sentiment. One of the concerns that I have as a large hub is the fact that the forecast for the increase in operations is just eight years away. If we are talking about 300 million more operations in the air space and we are still using technology that dates back 20 years, that is a pretty frightening scenario. So clearly, the sooner this new technology can be rolled out, the better. As we are looking to more technology to supplement the manpower that is overseeing that technology, I think it is necessary that the Next Generation be implemented expeditiously.

Mr. CLARK. I would echo my concerns and just say that when you look at the fact that you can get in your car and go on GPS and

know exactly where you are and where you are moving to, it would seem that it is something that we would also have with aviation, which is much more technologically-involved.

Mr. KIMMEL. I would offer that the technology is needed. But the existing funding mechanisms, based upon the Aviation Trust Fund, need to be utilized to fund it. The proposal with user fees and increases in taxes would kill smaller airports. I have 50 based aircraft that I can guarantee you would stop flying if they had to pay any more than what they already do. And we don't have a control tower, and we have less revenue and have to come back and ask for me from the Federal Government.

Mr. COSTELLO. I thank the gentleman.

The Chair recognizes at this time Mr. Moran.

Mr. MORAN. Mr. Chairman, thank you very much. I am pleased to join you here today and just generally like to get caught up. I missed the testimony, although I have had the opportunity to at least read the summaries of your testimony today. The AIP program is a very important one across the Country but clearly in States like Kansas, where we are so rural and the sources of revenue so limited. I appreciate the comments earlier that I heard about the importance of contract tower program, the essential air service program. Those are ones that matter significantly to communities I represent.

But I wanted to give you the opportunity, I am dismayed, can't imagine that anyone could reach the conclusion that Federal funding of AIP can be anything but increased. The suggestion that it would be reduced just absolutely makes no sense to me. And I wanted to give you the opportunity to put on the record the kinds of consequences you would see if the idea of AIP funding was reduced as proposed by the Administration, and give you the chance to point out any of the increased costs, the cost structure that you are facing in projects that you are contemplating at your airports.

Ms. ROBERTS. I would be happy to start. We have three airports, all of different sizes, a commercial passenger airport, a cargo airport and a general aviation. All three depend pretty heavily on AIP funding. We have a big project at Port Columbus, our medium hub commercial airport for about a $150 million replacement runway that we are in the middle of an EIS and in conversations with the FAA. We are optimistic that we would get about 50 percent of that from AIP and multi-year letter of intent.

The Rickenbacker, our cargo airport, has been heavily dependent on AIP and partially through the military assistance program. We have large needs there, having inherited a facility that was formerly exclusively military use, two long runways, a lot of pavement. And we are using every dime we can get from the AIP program as well as using local dollars.

So all three of our airports would be sorely hurt if we were not able to get AIP. It covers about 10 percent of our projected $1 billion capital program for our three airports in Columbus.

Mr. MORAN. Any comments about increasing costs? My impression would be that you are facing a cost structure, increasing construction costs.

Ms. ROBERTS. Absolutely. We have seen construction costs rising in the project right now that we are jointly funding with the State

department of transportation. We have seen the cost rise from a $40 million estimate to about $55 million. Because of Federal highway limitations, our State DOT is telling us we are going to have to fund the shortfall, which is almost $15 million. Not that that is an AIP project, but those are costs that then come out of other funding sources, or we issue new debt which ends up raising the costs to the airlines ultimately and makes it harder for medium and smaller airports to attract good air service for their communities.

Mr. MORAN. Thank you.

Mr. PICCOLO. Congressman, also on the construction cost index issue, not only has it gone up about 25 percent and eroded the effectiveness of AIP, but also for some places in Florida we have seen construction cost rises of about 50 percent. It really pushes a lot of projects right off the table. So a cut in AIP on top of the inflationary pressures that are in the construction cost index would have a very significant impact I think on airports across the Country, particularly in areas where that construction cost index is growing even faster. We have seen that go up some due to the hurricane issues that we have had the last couple of years in the southeast. There is so much work to do that there is such a demand for materials that it affects the public projects as well as the private projects.

Ms. FERNANDEZ. Just to quickly punctuate on the significance of the AIP program, we at O'Hare, for instance, we look at the AIP as one component of our funding sources. We put together a five year capital improvement program, and that include sa portion of AIP that we feel will be necessary. FPCS have always been a supplement to the AIP. We can't have a diminish in one and not an increase in the other. They really need to go hand in hand. That is how we have built not only our five year CIP, but we also, as part of our O'Hare modernization program, which is a $2.8 billion program, 12 percent of that program is intended to be financed through the AIP. So it is very important to us not only that it remains robust, but that it remains a dependable, sustainable funding source.

Mr. BENNETT. I would echo those concerns from the large airport. With large programs such as we have here in Washington, approaching about $7 billion, you have to have all sources of funding brought to bear in order to execute that project, so that you can keep your facility in a competitive manner with respect to the fees that you have to charge for the use of your facilities. And AIP is important even at a large airport in Washington. At Washington Dulles we are in the process as we speak of constructing a fourth runway that is being funded with, 56 percent of the resources for that project are coming from the AIP program through a multi-year letter of intent of about $200 million. So it is very important to those kind of capacity projects.

Mr. RAMSDELL. Congressman, at Santa Barbara Airport, a small hub, any cut in AIP, combined with the increased construction costs, will cause us to cut back or need to cut back more on our terminal project, which is already pretty much cut to the bone. More AIP would also help reduce the debt that we will need to incur which in turn will help reduce costs to the airlines it services.

Mr. KIMMEL. Just briefly, Congressman, I had touched on the importance of maintaining in AIP the 95 percent Federal share. Though Vision 100 had put that in place on a temporary basis, I would contend that that higher share should have been in place long before. Smaller airports, whether it is as a result of September 11th or other factors, have and continue to struggle in recent years. Costs of construction, as you have been hearing, and other significant factors.

In our portion of Illinois, our electric rates have gone up 40 percent in the last few months. I have a bill on my desk, our airline terminal went from $1,500 to $3,800. Our matching local fund, based upon our $1 million entitlement right now at 95 percent, of course, is $50,000. Going up to $100,000, we would be looking for areas to cut in order to do, plan any necessary AIP projects.

Mr. LETELLIER. Congressman, I would just like to echo my colleagues' comments. At the Southwest Oregon Regional Airport, our only access to capital funds are AIP and PFCs. So our revenue streams are not sufficient to access commercial debt markets. So without a PFC and AIP program, our capital program would come to as screeching halt. Needless to say, if you decrease it from our current allocations, it certainly is not going to help us any.

Mr. COSTELLO. I thank the gentleman from Kansas, and I thank all of our witnesses for being here today and we thank you for your testimony. I am sure that we will be speaking with and working with you as we go through the reauthorization process. Thank you very much.

We would now invite the third and final panel to come forward. I will do introductions as you are moving forward. Mr. Travis Vallin has been introduced by our colleague form Colorado, Mr. Salazar, but he is the Director of the Division of Aeronautics for the Colorado Department of Transportation. The Honorable James Healy, County Board Member from DuPage County, Illinois; and Mr. Robert Bogan, who is the Deputy Director of the Morristown Municipal Airport.

So we would ask the three of you to come forward, if you would, and take your seat.

Mr. PETRI. Mr. Chairman, I wonder if I could ask unanimous consent to introduce a statement by our colleague, Rodney Frelinghuysen, who is very interested in and wanted to express his support for the Morristown Municipal Airport.

Mr. COSTELLO. Without objection, it will be a part of the record.

The Chair recognizes Mr. Vallin at this time.

Mr. VALLIN. Good afternoon, Chairman Costello, Mr. Petri and Members of the Subcommittee. On behalf of the National Association of State Aviation Officials, NASAO, I thank you for this opportunity to share with you our thoughts.

My name is Travis Vallin, and I am the Aeronautics Director with the Colorado Department of Transportation. But today I speak to you on behalf of the men and women in State aviation agencies in all 50 States, Guam and Puerto Rico. We are a little bit unique from the testimony that you have heard today in that we represent aviation in all our collective States.

Airports, pilots, general aviation, commercial and airlines all fall underneath the category of customers. As I have said many times

to Congressman Salazar, I am the State Aeronautics Director, and we represent what is in the public's best interest. I am proud to say that NASAO's testimony today is based on that same simple principle: what is in the public's best interest.

I will provide to you my testimony in three general categories. First, what we like; second, what we have concerns over; and third, things that we just can't support.

First of all, what we like. The States fully support and encourage the modernization of the air traffic control system. NASAO members have been part of this transformation for years, whether it be the Wide Area Multilateration System funded by the State of Colorado or all the Atlantic Coast States putting in State-sponsored ADS-B ground stations. What we think is right about this proposal is that FAA agrees with us and the Administration is supporting ADS-B funding from the airport improvement program.

We also like the idea of the proposed hard floor for the $300 million for the State apportionment funding, as this is one of the most valuable investment categories to State aviation agencies in meeting the demands of the general aviation airports. NASAO also believes that Congress is going in the right direction with the PFC. Like our partners at ACI and AAAE, we agree that PFCs must be raised to $7.50 to meet the needs.

Next, some of the issues that we area little concerned about. There has been a lot of testimony today about the non-primary entitlement program. As you know, the proposed system would put airports into four different categories, resulting in net losses to many States. At this point, NASAO cannot support the four-tiered proposed system, but the good news is, we are actively working with the FAA headquarters airports office to find a workable solution that is a win-win for all of us.

Now the issues that we just can't support and think are not in the public's best interest. First of all, the proposed AIP level of $2.75 billion. That level simply will not meet the needs of the aviation community, both large and small, and it will not allow us to continue to be successful. NASAO recommends authorizing AIP at $3.8 billion in 2008.

The essential air service program, which as many of you know is a lifeline to small and rural communities. The Administration's proposal would eliminate more than 60 communities and slash the budget to $50 million. NASAO recommends and supports that Congress continue the EAS program and fund it at a minimum of $127 million. NASAO does not believe that the current funding structure, which has created the largest, safest and most efficient air transportation system in the world, is broken. The change to a radically different user fee system that would actually collect less user fees than what we enjoy today is most certainly not in the public's best interest. NASAO is adamantly opposed to any new user fees for general aviation.

We also strongly believe that increasing fuel taxes on GA by about 250 percent would not be in the public's best interest.

NASAO respectfully suggests that you have an excellent template at your disposal. That is Vision 100. And that the general fund contribution be no less than 30 percent.

Lastly, NASAO is opposed to the Administration's attempt to impose a new board of directors on the FAA. We feel they already have one, and that is you, the U.S. Congress.

That concludes my statement, Mr. Chairman. Thank you again for allowing NASAO to participate in this hearing and this legislative process.

Mr. COSTELLO. We thank you, and the Chair recognizes Mr. Healy at this time.

Mr. HEALY. Thank you, Mr. Chairman, Members of the Subcommittee. My name is James Healy, I am a county board member from DuPage County, Illinois.

Unlike all the other panel members today, I, like you, am an elected official, elected by the voters of my district. Today I speaking in behalf of the other county officials across America and NACo, the National Association of Counties, which represents the 3,100 urban, suburb and rural counties.

Counties own about one-third of the Nation's commercial and general aviation airports. This includes some of the largest airports in the United States, including the hubs in Miami, Las Vegas, Cincinnati, Milwaukee, Fort Lauderdale and Orange County, California. Counties also own or appoint the governing boards of the airport authorities at small airports, such as the Williamson County Regional Airport, the Outagamie Regional County Airport in Wisconsin, and the facility owned by my county, the DuPage County Airport, the third or fourth largest airport in Illinois, and a reliever for O'Hare Field.

Earlier this month, NACo adopted its policy on the Aviation Reauthorization bill. Much of our policy relates to the AIP program. Over the next five years, the existing airport infrastructure, both airside and landside, will be strained by increased usage and counties across America are trying to meet that need. Accordingly, NACo recommends the AIP program be funded at an average level of no less than $4 billion annually during the next reauthorization period. Further, NACo supports guaranteed funding of the AIP program through the existing point of order provisions or an even stronger guarantee.

One way to help ensure higher funding into the future is to index the revenue sources of the Aviation Trust Fund, such as the ticket tax and fuel taxes and adjust them annually. NACo believes the current revenue structure in place since 1970 and the revenue sources funding the AIP program have worked and should be continued.

NACo fully supports allowing airports to increase the passenger facility charge to no less than $6. NACo believes the FAA-proposed funding of the trust fund is likely to lead to a substantially smaller AIP program. The proposed 70 cents per gallon tax on aviation fuel would be devastating to smaller airports and ultimately lead to less revenue for needed improvements. NACo proposes that the proposed user fees based on air traffic control usage on general aviation. NACo believes the proposal would be counter-productive, adversely affecting safety and ultimately increasing gridlock on the Nation's hubs and undermine the investment counties have made in airport facilities.

Airports must have the flexibility to use the AIP and PFC funds to invest in landside and off-airport capital projects that are closely related to the operation and success of an airport. That includes roads, interchanges and public transit that are an integral component to the growth and sustainability of these airports. The priorities set by the local government bodies must be recognized.

While passengers need to be assured of the dependability of their flights, they also need to feel they can get to the airports easily and on time. This is especially true given the extra time passengers need at airports for security measures. It is important to begin moving away from the silo approach to mobility and begin to think of a comprehensive system of moving our citizens. Intermodalism is not just a buzz word we now use in the lexicon of transportation. It is what county officials are striving for.

Restrictions of what can be funded with AIP dollars is a major concern to county officials. At DuPage County Airport, our application was denied for funding of an emergency response vehicle to meet the needs of the larger corporate aircraft, which are equal to the size of commercial airliners. In another example, Outagamie County, Wisconsin, has invested in and operates a regional airport in Appleton, Wisconsin, serving a region of 500,000 people. However, the county is unable to use AIP funds for a new road into the airport and other related expenses as part of a $7.2 million parking and access project for that airport.

Allowing airports to use AIP funds for these types of related purposes makes sense to NACo. Counties are asking you to remove the shackles from how we use AIP and PFC funds. Our constituents have entrusted us to use these tax dollars wisely. We simply ask that you give us that same trust.

Based on feedback from some of our members regarding the eight-State AIP block grant program, it is NACo's believe this program imposes an unnecessary administrative layer between the airports and the FAA. The program should be eliminated and permit those airports to work directly with the FAA. The smaller GA airports in these States can continue to get technical assistance from their State agencies, the same as they do the other 42 States, which are not part of this program.

Thank you for this opportunity to address the Committee. I would be happy to answer any questions.

Mr. COSTELLO. Thank you, Mr. Healy.

The Chair now recognizes Mr. Bogan.

Mr. BOGAN. Chairman Costello, Ranking Member Petri and Members of the Subcommittee, thank you for giving me an opportunity to testify at this hearing.

I am Robert Bogan, Deputy Director of Morristown Municipal Airport in Morristown, New Jersey. I am here representing a group called Sound Initiative, a coalition for quieter skies. Sound Initiative was formed by airports and counts as its members airports, local governments and homeowner and citizen groups that are concerned about aircraft noise. Our goal is to encourage you to complete the job this Committee started in 1990 by phasing out all noisy Stage 1 and Stage 2 aircraft.

As you know, the FAA divides aircraft into three categories by the amount of noise they make. Stage 1 aircraft are the loudest, Stage 2 are also noisy, and Stage 3 aircraft are the quietest.

By 1985, most Stage 1 aircraft had been phased out as a result of earlier regulatory action taken by the FAA. In 1990, at the initiative of Mr. Oberstar and this Subcommittee, legislation was enacted to begin the phase-out of most Stage 2 aircraft. That legislation was included in the 1990 FAA reauthorization bill, known as the Airport Noise and Capacity Act, or ANCA. The phase-out of Stage 2 aircraft called for in ANCA was completed by the year 2000.

However, both the FAA regulatory action and the 1990 Congressional action applied only to aircraft weighing more than 75,000 pounds. Noisy Stage 1 and 2 aircraft that weighed less than that were not affected, and many continue to fly to this day.

According to the FAA, as of last summer, there were about 1,330 Stage 1 and Stage 2 aircraft registered in the United States. These Stage 1 and Stage 2 aircraft comprise about 13.5 percent of jet aircraft weighing less than 75,000 pounds. Although these aircraft represent a relatively small percentage of the total U.S. fleet, the FAA noted in a letter to the former Chairman of this Committee that while not an issue when measured at the system level, there are a few airports where, especially when adjusted for their limited number of operations, this segment of aircraft appears to contribute in a significant fashion to noise exposure contours.

So today, although those aircraft are small in number relative to all aircraft, many airports across the United States report that they account for a majority of noise complaints. In fact, at some airports, 50 to 80 percent of the noise complaints received are related to Stage 1 or Stage 2 aircraft. Sound Initiative was formed to address this problem.

Sound Initiative was organized by a group of airport operators who are on the front line of the aircraft noise debate on a daily basis. Across the Country, airport managers must respond to the concerns of neighbors, government officials, the news media and others who want to know what they are doing about aircraft noise. Some airports have installed sophisticated monitoring systems that identify aircraft and the noise they make when departing. Others have long relied on programs that try to be responsive to neighbors' noise concerns by mediating their complaints with operators based at their facilities.

But real action can only come from trying to reduce noise at its source. The power of local airports to do this is severely limited. That is why we call on Congress to complete the job it started in 1990 and phase out all noisy aircraft, regardless of how much they weigh. What happens at an airport like Morristown, when these Stage 1 and Stage 2 aircraft go away, it means quieter skies for people living and working nearby.

Morristown is among the busiest airports catering to corporate and smaller business aircraft in the New York City metropolitan area, logging an average of 210,000 departures and arrivals each year. Operations include those of based corporate tenants, transient business use, flight training and recreational traffic. Although only one Stage 2 aircraft is based at Morristown, more than half

the noise complaints from neighbors are the result of other Stage 2 aircraft landing and taking off there.

In a recent study, we reviewed the sound contour and the noise footprint of all airplanes and jets departing Morristown's runway 23. The study also looked at what would happen to those contours if only Stage 3 aircraft departed from the runway. The results show a significant reduction in the noise impact to our neighbors. As you can see in the chart, the noise footprint is radically reduced, it takes that footprint out of the town of Madison, which it pretty well encompassed, and it relieves about 3,000 people from the daily noise impact.

On the other hand, we have the example of Naples Airport in Florida. That airport tried to work through the FAA's existing Part 161 process to phase out noisy aircraft. It spent hundreds of thousands of dollars on consultant studies to tell it what it already knew about the need to reduce aircraft noise. When the airport instituted restrictions based on the Part 161 study, the airport lost funding from the Federal Airport Improvement Grant Program.

In the end, Naples successfully defended the lawsuits against it and did succeed in banning noisy aircraft at its airport. But it cost more than $3 million, money that could have been spent on safety or security projects.

I can assure you that other airports do not have the funds to take on the system the way Naples did. Rather than attempt to develop an airport-by-airport solution which has yet to be achieved even once by the Part 161 process, we believe a lasting, long-term nationwide solution to the aircraft noise problem can only come from Congress.

Sound Initiative does have a proposal we would like this Committee to consider to address this noise problem. Under our proposal, a copy of which is attached to the end of the written testimony, all Stage 1 and Stage 2 aircraft would have to cease operations in the 48 contiguous States three years after enactment. Almost all of these aircraft are close to 20 years old, most are much older than that.

So three years seems like a reasonable balance between the needs of aircraft owners to change over to quieter aircraft and the needs of airport neighbors for noise relief. It comes more than 17 years after Congress set precedent for this type of action and 7 years after the last Stage 2 weighing more than 75,000 pounds operated or was modified to meet Stage 3 standards.

Our proposed legislation goes a step further, however, by recognizing that some airports, due to their location or other factors, may not have as much need for noise relief. In those cases, we propose to let airports notify the FAA that they are wiling to continue to allow Stage 1 and Stage 2 aircraft to operate there.

Mr. Chairman, Congress provided noise relief to our Nation's larger airports several years ago. It is now time to provide added relief to those airports and to extend the same relief to the people who live near smaller reliever and satellite airports. On behalf of Sound Initiative, I urge you to include our proposed legislative language or something similar to it in the Subcommittee FAA reauthorization legislation.

Thank you very much.

Mr. COSTELLO. I thank you.

Let me follow up with a question. You mentioned the Naples Airport under the Part 161 process. Why did they lose their funding?

Mr. BOGAN. At some point, there was clearly some confusion about whether the actions that were taken by the airport were legal. I believe that the FAA merely took the position that it was not, that the Naples action was not consistent with FAA policy, so they withheld grant funding.

Mr. COSTELLO. Do you have any idea how long the process, going through the court system, how long it took and the approximate cost to litigate?

Mr. BOGAN. We were up here last week and this week, and I did run into a group from Boca Raton who was very familiar with that. They said it was up around $5 million and it took quite a while. I think multiple years were involved.

Mr. COSTELLO. Thank you.

Mr. Healy, in your testimony you talk about how you support, or NACo supports eliminating the eight-State AIP block grant program. I wonder if you would tell us why you support the elimination.

Mr. HEALY. That came about at our last conference here in Washington. As you know, we have county commissioners from across the Nation come together. Several of them came in from Michigan and from North Carolina, saying they were having a problem with it. I phoned home to my State, talked to my airport director, he said the same thing.

The reason is, we believe it is an unnecessary level of extra government. There is definitely a need for State agencies to assist smaller GA airports that don't have the resources or expertise to apply and utilize State Federal grant funds. However, for airports that do have these resources, dealing with State agencies under a Federal block grant program is an unnecessary and ineffective system. It is a bureaucracy that is adding to the cost of us doing business in our airports. It does not even eliminate the need for us to go to the FAA in the process of getting approvals for projects. It just adds to another layer of government, and we believe that it should be eliminated so that we can deal directly with the FAA. As the other 42 States do with their airports, the smaller airports that need this type of assistance would continue to go to the State agency.

Mr. COSTELLO. Very good, thank you.

The Chair now recognizes the Ranking Member of the Subcommittee, Mr. Petri.

Mr. PETRI. Thank you for your testimony.

Just one or two fairly quick things. It is my impression, Mr. Bogan, living part of the time within the flight path going to an airport, that there has actually been considerable improvement in the last few years as silenter planes have been phased in. Is that your experience, too?

Mr. BOGAN. Absolutely. I believe corporate America has stepped up, recognizing that they want to be good neighbors, too. My tenants have all upgraded their aircraft over the last 10 years, and they are all flying Stage 3 aircraft, save for one who is nostalgic for the old days, I guess. But yes, there has been quite an improve-

ment, and that is part of the problem. The community has now been educated to expect quieter aircraft. When one of these Stage 2s show up, they can tell the difference.

Mr. PETRI. I guess that is right.

Mr. Healy, why is it easier for the, we usually hear the opposite, why is it easier for local airport authorities to deal with the FAA, the Federal Government, than with these State aviation agencies?

Mr. HEALY. We already have to deal with the FAA. So to us, it is just another process we have to go through. We first go to the State agency, then we are at the same time either simultaneously or afterward dealing with the FAA on the same type of projects.

Mr. PETRI. So it is not necessarily easier, it is just duplicative?

Mr. HEALY. It is duplicative, and actually, it sometimes is a hindrance. Because if you are turned down at the first stage, you don't know if you can go to the second stage dealing with the FAA.

Again, we realize that some of the smaller counties and some of those smaller airports may need that type of assistance from their State agencies. We are not saying not to. We are saying that the other 42 States in the Nation are able to handle that by working with their local agencies and local airports. But for the eight States that have it, we believe that it is cumbersome.

Mr. PETRI. Thank you.

Mr. Vallin, your testimony was somewhat critical, I should say, but strongly critical in some aspects of the Administration's proposal but supportive in others. I wondered if you could talk a little bit about the new four-tiered non-primary entitlement program, which is a significant proposal people are looking at very carefully. Are there any changes or what changes would you make in that proposed program?

Mr. VALLIN. Right now, we do have open communications with the FAA on that. We are running a lot of different scenarios.

The problem that we face is when you take that tiered system today and you implement what the dollars will look like, I will give you an example, the State of Montana will lose about $700,000 from what they realized under a straight $150,000 entitlement. The State of Colorado goes up $1.2 million.

So because it creates such an inequity when it comes to winners and losers, it is very difficult for NASAO to take a positive position on putting fewer dollars in some of our smallest airports. A couple of scenarios that we are looking at is maybe adjusting the funding levels a little bit. But we understand it is a very complex issue. It is kind of like a Rubik's cube, we make an adjustment, we run the analysis and then we see where the winners and losers are. So we are actively involved in that process and hopeful we can find a win-win in that negotiation.

Mr. PETRI. Thank you. Thank you all very much.

Mr. COSTELLO. The Chair thanks the gentleman.

Let me thank our witnesses on this panel for being here today. We appreciate your time. You just happened to end up on the third panel, so you had to sit here quite a while. We appreciate your patience, your testimony and look forward to working with you and to considering your suggestions and your testimony as we go through the reauthorization process.

We thank you, and this concludes this hearing. Until our next hearing tomorrow morning, the Subcommittee is adjourned.

[Whereupon, at 2:30 p.m., the Subcommittee was adjourned.]

OPENING STATEMENT OF REP. STEVE COHEN

Transportation and Infrastructure Subcommittee on Aviation

"The Administration's Airport Improvement Program"

March 28, 2007

I am pleased to be here today to receive testimony from representatives of the Federal Aviation Administration (FAA), the Government Accountability Office (GAO) and others regarding FAA's Airport Improvement Program.

According to the FAA's Operational Evolution Plan (OEP), new runways and runway extensions provide the most significant capacity increases. In addition, projections developed by the DOT, FAA and the MITRE Corporation indicate that as early as 2013, 15 airports and seven metropolitan areas will need additional capacity to meet expected demand.

There are many concerns with FAA's proposal, not the least of which is that it provides $8.7 billion for the AIP from FY2008-2010, $1.8 billion less than from FY2005-2007.

It is important to have input from state and local officials regarding the impact of any changes to a federal program as significant as the AIP. I am delighted that we have such a diversity of witnesses today from so many airports across the nation. Your input is vital. Your views are crucial and should serve as a foundation for any prospective actions taken by this committee.

STATEMENT OF THE
THE HONORABLE JERRY F. COSTELLO
SUBCOMMITTEE ON AVIATION
HEARING ON
THE FEDERAL AVIATION ADMINISTRATION'S AIRPORT IMPROVEMENT PROGRAM
MARCH 28, 2007

- I want to welcome everyone to the fourth of our hearings on the Federal Aviation Administration (FAA) reauthorization. This hearing focuses on the FAA's Airport Improvement Program (AIP).

- The FAA estimates that during the next five years, there will be $41.2 billion of AIP-eligible infrastructure development, an annual average of $8.2 billion. The Airports Council International – North America (ACI-NA) estimates total airport capital development costs – including the cost of non-AIP-eligible projects – to be about $17.5 billion per year from 2007 through 2011.

- While the FAA acknowledges that airport capital needs are up, the FAA's new three year proposal provides approximately $1.5 billion <u>less</u> for the AIP program than what the FAA requested for the first three years of its last reauthorization proposal - the *Centennial of Flight Aviation Authorization Act.* I believe that we will likely need a more robust AIP program than what the FAA has suggested.

- I am particularly concerned about the impact of these cuts on smaller airports. AIP grants are generally a larger source of capital funding for smaller airports. The GAO will testify today that 64 percent of the capital funding for smaller airports comes from AIP.

- The FAA is proposing a number of interesting changes to the AIP program that it believes would help it target more active small airports. However, even with the FAA's programmatic changes, there would be less total funding for programs traditionally and specifically associated with small airports when compared with the current structure and funding levels.

- Further, under the FAA's proposal there may be some winners and losers when it comes to small airports. For example, while busier small airports would receive larger nonprimary entitlement grants than they now receive, the FAA estimates that several airports that are eligible to receive nonprimary entitlement grants would no longer be eligible. I look forward to hearing from our FAA witness regarding why the FAA believes that these airports are no longer deserving of AIP eligibility.

- The FAA believes that its cuts to the AIP program would be offset by raising the current $4.50 cap on the PFC to $6.00. The PFC cap has not been raised since 2000, and many in the airport community believe that inflation and construction cost increases have eroded the PFC's value. The FAA estimates that increasing the PFC cap to $6.00 would generate an additional $1.5 billion for airport capital development.

- I believe the PFC has been an important tool in improving and expanding our airports and I have an open mind as far as increasing the PFC to combat any loss of purchasing power or to adjust for inflation.

- In addition, the FAA proposes to greatly expand PFC eligibility for airport capital projects. More specifically, the FAA's proposal would expand PFC eligibility to encompass any airport capital project that is eligible to be funded with airport revenue, provided that the project is not anticompetitive. I do have concerns with expanding eligibility beyond our current requirements.

- Some have argued that the PFC is essentially "local money," and therefore there should be more local control over how PFCs can be spent. I believe that a significant portion of PFC revenue comes from interstate passengers. Therefore, money taken from those passengers should be used to promote <u>national</u> policy goals, such as increased capacity, safety and competition within our integrated system.

- With that, I want to again welcome the FAA today and I look forward to the testimony.

Statement of
Rep. Rodney P. Frelinghuysen
The House Aviation Subcommittee
March 28, 2007

Chairman Costello and Ranking Member Petri:

I want to thank you for inviting representatives of the largest airport in my Congressional District, Morristown Municipal Airport, to testify here today. The issues related to airport infrastructure are among the most critical to our intermodal transportation system. I commend your effort in this critical area.

I am also pleased that the Committee is turning its attention to issues that affect the quality of life for those who live and work near airports.

For twenty years, I have been extremely vocal in pushing the FAA and Port Authority of New York and New Jersey to tackle this important subject. Indeed, it was my language years ago in the Transportation Appropriations bill that directed that $6.5 million be allocated to airspace redesign activities in the New York/New Jersey metropolitan area with particular emphasis on aircraft noise.

Northern New Jersey is the most densely populated region in the most densely populated state in the nation. While the residents of this area recognize the importance of a robust aviation system, they also wonder why they have not received the kind of aircraft noise relief they are due.

Over 17 years ago, Congress enacted the "Airport Noise and Capacity Act of 1990." Included in its many provisions was a national mandate to reduce excessive air noise by phasing out noisier older, less efficient aircraft. At that time, the Congress provided a 10-year time-frame in which these so-called Phase 1 and Phase 2 aircraft were to be retired from U.S. service or be substantially mechanically retro-fitted to allow their engines to qualify as quieter Stage 3 aircraft.

However, this Congressional mandate specifically exempted Stage 1 and Stage 2 aircraft which weigh less than 75,000 pounds. As this Committee knows very well, this category of aircraft includes many corporate or business jets which often utilize smaller general aviation airports. And, as this Committee also knows, these smaller airports are often tucked into areas of high population density in the northeast United States, certainly in New Jersey.

In addition, current federal law restricts the actions that airport operators and state and local officials can take in limiting operations of noisy aircraft.

Therefore, the effect of this exemption has been to deny the same degree of noise relief to neighbors of small general aviation airports enjoyed by the neighbors of larger commercial airports.

Mr. Chairman, I want to thank you for allowing representatives of Morristown Airport and their umbrella organization, Sound Initiative, to testify today. You are to be commended for considering their proposal to phase out smaller Phase 1 and Phase 2 aircraft over a three year period.

Opening Statement for the Honorable Eddie Bernice Johnson
House Subcommittee on Aviation
The Airport Improvement Program
Wednesday, March 28, 2007 – 2167 RHOB

Thank you Mr. Chairman.

I want to thank you and Ranking Member Petri for holding this important and timely hearing this morning.

Your early consideration of matters pertaining to the reauthorization of the Federal Aviation Administration is commendable.

Based on your hearing schedules, Mr. Chairman, I think it is safe to say that the productivity torch has been passed from the Water Resources Subcommittee to the Aviation Subcommittee.

The challenges before us are real and we're going to have to take a hard look at what we can do to prevent a looming gridlock of our nation's aviation infrastructure.

Since the Airport and Airway Improvement Act of 1982, airport improvement funding has been used for runways, taxiways, aprons, noise abatement, land purchase, and safety equipment.

According to the FAA's National Plan of Integrated Airport Systems, over the next five years, there will be $41.2 billion of A-I-P eligible infrastructure development projects.

If this nation is to properly accommodate the projected growth in

passenger traffic, the Airport Improvement Program will obviously play a vital role.

I am not sold on the Administration's overall Reauthorization Plan; however, I there are certain aspects of the plan that I think make for a good starting point. Particularly, the raising of the current PFC from $4.50 to $6 dollars, and the expansion of PFC eligibility for intermodal rail ground access projects.

Mr. Chairman, airports within the North Texas region have expressed strong support for these measures and it is my hope the committee will give adequate attention to them.

I want to thank the witnesses that have come before us this morning, and look forward to their testimony.

Thank you Mr. Chairman, and I yield back the balance of my time.

STEVE KAGEN, M.D.
WISCONSIN
8TH DISTRICT

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Steve Kagen

Opening Statement
Honorable Steve Kagen, M.D.

Committee on Transportation and Infrastructure
Subcommittee on Aviation
Wednesday March 28, 2007

"The Federal Aviation Administration's Airport Improvement Program"

Mr. Chairman, I am pleased to participate in today's hearing on the FAA's Airport Improvement Program (AIP), and the administration's proposed changes to its reauthorization. The AIP provides critical funding for development of runways, taxiways and other granted projects. I am very concerned about the proposal to significantly reduce the AIP funding, as well as potential changes in eligibility for such AIP funding. I am particularly concerned about how such changes would affect smaller airports, which greatly depend upon AIP grants.

The FAA's proposal is, in my opinion, DOA – dead on arrival, yet I look forward to the testimony of both panel's, and listening to the administration's view of what will happen to small community airports under their leadership. The reality is we must invest in our airports now to guarantee the future success of both commercial and general aviation.

Thank you Mr. Chairman.

T&I Subcommittee on Aviation
Federal Aviation Administration's Airport Improvement Program
Statement of Rep. Doris Matsui
March 28, 2007

Thank you Chairman Costello and Ranking Member Petri for this continuing conversation on the FAA reauthorization. And thank you to today's witnesses for providing testimony.

The Airport Improvement Program is an essential component of FAA reauthorization. Like many other components of our aviation system, our airports and related infrastructure are aging, so we need to make strategic investments in our airports for the future. The Airport Improvement Program has provided an important stream of funding to maintain and modernize the nation's airports and it is important that this reauthorization build off that past success.

The FAA's budget for the Airport Improvement Program over the next three years does not appear to match the needs of our airports. I realize the administration has suggested some changes to the way AIP funding is allocated, and I believe the Committee should give serious consideration to those suggestions. But at the end of the day, it simply does not appear that the administration's funding proposal for AIP over the next three years matches the demands of this nation's aging infrastructure.

I am pleased to see that the administration's proposal includes an increase in the passenger facility charge. The PFC has not been raised since 2000 and inflation and rising construction costs have undercut its value. So I'm glad to see a proposed increase and I look forward to hearing about the methodology that was used to determine the value of that increase.

We have a diverse and experienced panel of witnesses today. I thank them for their time and look forward to hearing their views.

1

Statement of Rep. Harry Mitchell
House Transportation and Infrastructure Committee
Subcommittee on Aviation
3/28/07

--Thank you Mr. Chairman.

--This is the fourth in our series of hearings on FAA reauthorization.

--When the series began I identified a number of issues of concern to me.

--First and foremost, I am concerned about safety.

2

--According to the FAA, over the next 10 years, 70 percent of its air traffic controllers will become eligible to retire.

--We need to make sure the FAA has the resources it needs to recruit, train and maintain controllers to replace these retirees, and keep the flying public safe.

3

--I am also very concerned about reports of passengers being trapped on grounded planes for extended periods of time without access to food, water. In some cases passengers have been held in such conditions for more than seven hours .

--In my view this is not just a matter of comfort and convenience. It is a matter of safety, and needs to be addressed.

--In addition to safety, which, of course, is the top priority, I am concerned about efficiency. Last month, the Washington Post reported some sobering statistics.

--According to paper:

> **"Airlines' on-time performance dropped for the fifth year in a row in 2006, with one in four flights arriving late or not at all, according to data released yesterday by the Bureau of Transportation Statistics."**

5

" The airlines also mishandled a massive amount of luggage -- 4 million bags, or 6.7 for every 1,000 passengers, the industry's worst rate since 1990."

--I know we can do better.

--Today, we will address another key concern: airport maintenance and growth.

6

--The FAA proposes a $1.8 billion cut to the Airport Improvement Program, which funds capital improvements at commercial airports. This program funds everything from runway and taxiway improvements to noise abatement projects.

--Noise abatement is critically important to the communities that surround Sky Harbor Airport…an airport which serves as a hub for Tempe based U.S. Airways. Sky Harbor has requested more than $10 million for noise abatement projects in FY-08, and a drastic cut to the Airport Improvement Program could put this funding at risk.

--I look forward to learning how the FAA's proposal addresses these concerns.

8

--Thank you, Mr. Chairman. I yield back the balance of my time.

OPENING STATEMENT OF
THE HONORABLE JAMES L. OBERSTAR
SUBCOMMITTEE ON AVIATION
THE FEDERAL AVIATION ADMINISTRATION'S
AIRPORT IMPROVEMENT PROGRAM PROPOSAL
MARCH 28, 2007

I want to thank Chairman Costello and Ranking Member Petri for calling today's hearing on *The Federal Aviation Administration's Airport Improvement Program.*

The Airport Improvement Program (AIP) has been a major source of funding for airport planning and development for critical safety and capacity projects. In the 2003 FAA reauthorization (Vision 100), Congress provided a total of $14.2 billion for AIP for 2004 through 2007, and maintained the budgetary protections that guarantee that the entire authorized amount will be spent.

As a result of increased guaranteed funding under Vision 100 and its predecessors, eleven new runways have been opened at some of the nation's 35 busiest airports since 2000. Over the next five years, eight airfield projects - five runways, one runway extension and two airfield reconfigurations - will be commissioned providing the airports with the potential to accommodate more than one million additional annual operations.

Yet, despite this progress, much more is needed. Projections developed by the Department of Transportation, FAA and MITRE indicate that by as early as 2013, 16

airports and 7 metropolitan areas will need additional capacity to meet the expected demand. The FAA estimates that during the next five years, there will be $41.2 billion of AIP-eligible infrastructure development, an annual average of $8.2 billion. A comprehensive assessment of airport capital needs conducted by ACI-NA estimates total airport capital development costs – including the cost of non-AIP-eligible projects – to be about $17.5 billion per year from 2007 through 2011.

Unfortunately, the FAA's reauthorization proposal provides only $8.7 billion total for the AIP from FY 2008 to FY 2010. This is approximately $1.5 billion less for the AIP program in its new three year proposal than what the FAA requested for the first three years of its last reauthorization proposal. Given the fact that FAA acknowledges that airport capital requirements have increased, I believe that this funding request is extremely short sighted.

I am particularly concerned about the impact of these cuts on smaller airports because AIP grants are a larger source of capital funding for smaller airports. The FAA states that its proposed programmatic changes to the AIP program would help it target smaller airports. However, even with the FAA's programmatic changes, there is less total funding for programs traditionally associated with small airports.

The FAA believes that its cuts to the AIP program would be offset by raising the current $4.50 cap on the PFC to $6.00. The PFC cap has not been raised since 2000, and inflation and construction cost increases may have eroded the PFC's value. The cap may need to be adjusted. However, I have concerns with expanding eligibility for uses of PFC revenues. Expanding PFC eligibility and the proposed cuts to AIP could result in moving funding away from capacity-enhancing airside projects.

Some believe that the PFC is just another "financing tool" like bonding, and that it is "local money" anyway. As such, the federal government should take its hands off the PFC and fundamentally deregulate the program. I disagree. The PFC is not just a financing tool, it is a tax that Congress has allowed airports to impose in service of national policy objectives. A significant portion of PFC revenue will come from interstate passengers who do not live in the area served by the airport. PFCs are taken out of the pockets of airline passengers to promote capacity, safety and competition within the context of a nationally integrated aviation system.

Historically, about 17 percent of PFC revenues have gone to airside projects. More recently, it has been closer 32 percent. And roughly 44 percent of the runway financing at capacity critical OEP airports is PFC-related. Perhaps more should be spent on airside projects. However, I also understand that there are a great many

airport terminal needs that have been met with the PFC, many of which, like gates, might promote worthy goals such as competition.

That said, I have reservations about raising the PFC and expanding the eligibility, as the FAA has proposed, if it just means taking more money from airline passengers to help airports build shopping malls. In fact, in past reauthorization bills, Congress took steps to ensure adequate funding of airside projects is linked to PFC financing. For example, AIR 21 required that if airports charge a PFC of more than $3.00 for a terminal or other landside project, those airports must prove that their airside needs are being met. In addition, AIR 21 also required that if large or medium hub airports impose a PFC of more than $3.00, those airports must ensure their projects make a significant contribution to safety and security, increase competition, reduce congestion or reduce aviation noise. Congress should not abandon these principles, and I cannot see how fundamentally deregulating PFC eligibility will promote the public's interest.

Thank you again, Mr. Chairman, for holding this hearing. I look forward to hearing from our witnesses.

Opening Statement
Congressman John T. Salazar
T&I Aviation Subcommittee Hearing
FAA's Airport Improvement Program
March 28, 2007

Thank you, Mr. Chairman.

I'd like to thank all of the panelists for being here today.

I am especially happy to have Travis Vallin from the Colorado Department of Transportation here to testify.

It's clear that everyone here supports modernizing the air traffic control system.

Where we may differ is how to get there.

I'm on record with serious concerns about the user fee proposal.

I'm similarly concerned about the proposed reductions in AIP funding.

Airports and the aviation system in Colorado are very dependant on a strong AIP Program.

Of the 75 public use airports in Colorado, 49 are in the NPIAS, which makes them eligible for AIP funding.

From 2001-2006, when the AIP funding levels were between $3.2-$3.6 billion, Colorado averaged $75.7 million a year in FAA funding.

Cost estimates developed by CDOT in conjunction with the FAA indicate that a FAA funding level of $109 million each year is needed to meet the demands of the system through 2025.

Quite simply, the proposed AIP funding level of $2.75 billion is not sufficient to meet the identified needs of the Colorado Aviation System.

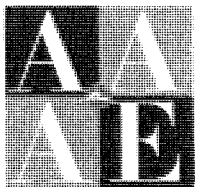
Airports are major engines of Colorado's economy, generating roughly $23.5 billion in annual economic activity and creating over 280,000 jobs.

So you can understand why I pay particular attention to anything that may negatively affect airports throughout my great state.

I've heard from several airports within my district and they have expressed their opposition to AIP cuts, so I'll be interested to hear what the panel members have to say on the issue.

I look forward to the testimony today and again, I thank the panel members for being here.

Thank you.



ALA

Representing America's Airport System

Testimony of Charles M. Barclay, A.A.E. President, American Association of Airport Executives on Behalf of the American Association of Airport Executives and the Airport Legislative Alliance

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Statement of
Charles M. Barclay, A.A.E.
President,
American Association of Airport Executives
on Behalf of
the American Association of Airport Executives
and the
Airport Legislative Alliance
Before the
Subcommittee on Aviation
Committee on Transportation and Infrastructure
U.S. House of Representatives
March 28, 2007

Chairman Costello, Ranking Member Petri and members of the House Transportation and Infrastructure Subcommittee on Aviation, thank you for inviting me to participate in this hearing on the Administration's proposal to reauthorize the Federal Aviation Administration's Airport Improvement Program. I am testifying today on behalf of the American Association of Airport Executives (AAAE) and the Airport Legislative Alliance (ALA).

AAAE represents the thousands of men and women who manage primary, commercial service, reliever and general aviation airports throughout the county. The ALA, representing America's airport system, is comprised of airports of all sizes from across the country that have come together to address federal legislative and regulatory matters on behalf of the industry. A roster of ALA members is included at the end of my testimony.

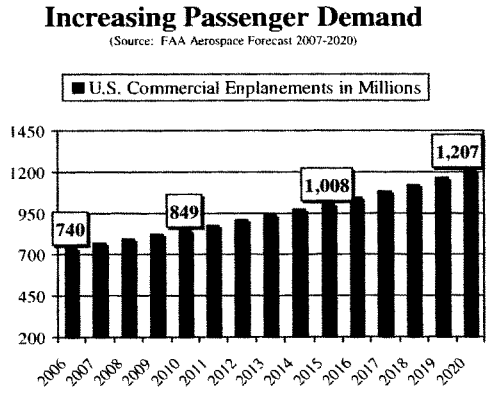
As we begin the debate on the next FAA reauthorization bill, I would like to thank the members of this subcommittee who played a role in the last two FAA reauthorization bills: H.R. 1000, the Wendell H. Ford Aviation Investment and Reform Act for the 21st Century (AIR-21) and H.R. 2115, Vision 100 – Century of Aviation Authorization Act. During consideration of those two bills, lawmakers agreed to increase the cap on Passenger Facility Charges (PFCs) from $3.00 to $4.50 and steadily increase AIP funding from approximately $2.5 billion in Fiscal Year 2000 (FY00) to $3.7 billion in FY07.

The aviation system has faced many challenges since Congress passed AIR-21 seven years ago. Despite the temporary downturn that occurred after September 11th, passenger levels, flight delays, airport capital needs and construction costs continue to rise. To help airports keep pace with increasing capacity and financial demands, we urge you to increase the PFC cap to $7.50 and index it for increasing construction costs. We also urge you to increase AIP funding to $3.8 billion in FY08, $4.0 billion in FY09 and $4.1 billion in FY10. By continuing the trend of increasing funding for airport capital development projects established in AIR-21 and Vision 100, this subcommittee can help to improve safety, increase capacity and reduce delays at airports around the country.

In addition to increasing funding for airport capital development projects, another top priority for AAAE and the ALA is to help small communities that are struggling to retain and attract new commercial air service. During consideration of AIR-21 and Vision 100, this subcommittee extended a helping hand to small communities suffering from infrequent air service and high airfares. We look forward to working with you to build on those successful efforts during consideration of the next FAA reauthorization bill.

Increasing Demand, Delays and Airport Capital Needs

Increasing Demand: The FAA recently released its Aerospace Forecast for 2007 to 2020. The forecast indicates that the number of passengers flying in the United States was about 6.2% higher at the end of 2006 than it was before the terrorist attacks on 9/11. The FAA is also predicting that passenger enplanements will increase from approximately 740 million in 2006 to more than one billion passengers in 2015 and more than 1.2 billion by 2020 at average annual increase of 3.5%.



These projected increases mean airports around the country must prepare for a major influx of passengers in the next several years. According to the FAA's Terminal Area Forecast, passenger enplanements are expected to increase from by 37.2 million in 2006 to 53.6 million in 2020 at Chicago's O'Hare International Airport – a 44.2% increase. At the Minneapolis-St. Paul International Airport, passenger enplanements are expected to increase 17.2 million to 27.4 million during the same time frame – almost a 60% increase. At the Orlando International Airport, passenger levels are expected to jump 48.2% from 16.9 million in 2006 to more than 25 million in by 2020. And the passenger levels at the General Mitchell International Airport in Milwaukee are projected to increase from about 3.5 million passengers to 6.7 million passengers – a 92% increase.

Passenger traffic between the United States and the rest of the world is also rising. Secretary of Transportation Mary Peters commented on increasing international

passenger demand at the FAA Aviation Forecast Conference, which was cosponsored by AAAE, on March 15, 2007.

"As domestic travel takes off, international traffic is growing at even faster clip, especially in the Asian-Pacific and Latin American markets," Peters said. "While the final numbers are still coming in, we estimate that 2006 will mark the first time passenger levels on international flights to and from the United States will have surpassed pre-9/11 levels. Our forecast anticipates international passengers travel doubling by 2020 – jumping from 141.5 million passengers to an amazing 274.7 million passengers."

The demand for air cargo is also growing. The FAA is predicting that total Revenue Ton Miles – or the measurement of moving one ton of cargo one mile – will increase from 39.7 billion in 2006 to 81.3 billion in 2020. This is an average of 5.3% per year. To handle that increased load, the number of cargo aircraft is expected to increase from approximately 1,000 in 2006 to 1,468 in 2020, which is an increase of 47.2%.

More regional jets and Very Lights Jets (VLJs) will be filling the skies, too. The FAA is predicting that the number of regional jets will increase from 1,687 in 2006 to 2,689 by 2020, an average annual increase of 3.4% per year. The agency also expects 350 VLJs will join the fleet next year and increase by 400 to 500 per year through 2020. In other words, approximately 5,000 VLJs will be operating by 2017.

Increasing Operations: As the numbers of passengers, cargo and aircraft increase so do operations at airports around the country. During the recent FAA Forecast Conference FAA Administrator Marion Blakey said, "The looming spike in passengers that's in our Forecast report will fuel a nationwide increase in takeoffs and landings by 2020. In turn some key hubs will see a significant ramp-up in their operations."

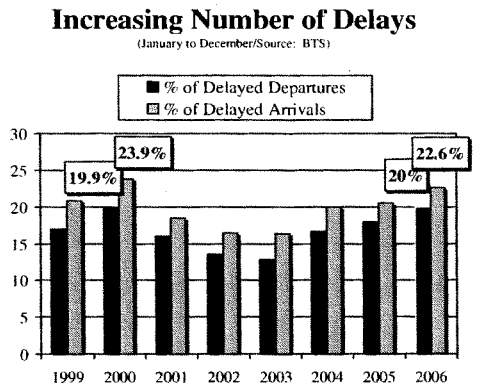
Overall, the number of take-offs and landings at the nation's towered airports will increase dramatically from 62.5 million in the current fiscal year to 81.1 million by 2020. According to the FAA's Terminal Area Forecast, operations are expected to increase by 68.3% at Washington Dulles International Airport between now and 2020 and by 59.5% at New York's John F. Kennedy International Airport. Operations at Los Angeles International Airport are expected to increase by 53.9%, and by 37.7% at Hartsfield-Jackson Atlanta International Airport.

"As more planes carry more passenger and eargo, FAA and contract towers will need to handle an average of 1.4 million more U.S. operations each year between now and 2020," Secretary Peters said. "To put this number in perspective, imagine adding twice the traffic at Dallas-Fort Worth airport into the system every year."

Increasing Delays: Flight delays are also on the rise. According to the Bureau of Transportation Statistics (BTS), 22.6% of all flights between January and December of 2006 arrived at their gates 15 minutes or more after their scheduled arrival time. That's a 2.1% increase from 2005, and it's nearly as high as the record delays that occurred in 2000 when 23.86% of all flights arrived at their gates behind schedule.

"As we speak, delays are mounting due to congested airports and airspace," Secretary Peters said. "They cost our economy $9.4 billion in productivity as passengers wait at airports for hours."

BTS also tracks the number of flights that leave their gates on-time. Between January and December 2006, almost 20% of all flights left their gates 15 minutes or more after their scheduled departure time. That's more than a 2% increase from the previous year and it's even higher than the delays that occurred in 2000 when 19.9% of all flights left their gates late. In other words, delays measured in both arrivals and departures are close to or have actually exceeded the 2000 levels when one in four flights was delayed cancelled or diverted.



Increasing Airport Capital Needs: As the number of passengers and aircraft in the aviation system increase, airport capital needs continue to rise. In 2004, the FAA issued a report entitled, "Capacity Needs in the National Airspace System." The report examined which of the busiest 35 airports in the FAA's Operational Evolution Plan will be able to meet future demand. It indicates that plans to increase capacity at 15 airports "are not enough to keep up with projected levels of demand" by 2013. By 2020, "18 airports are identified as likely needing additional capacity." Given the time it takes to bring airport infrastructure projects to completion, it is critical that we act now to address this situation.

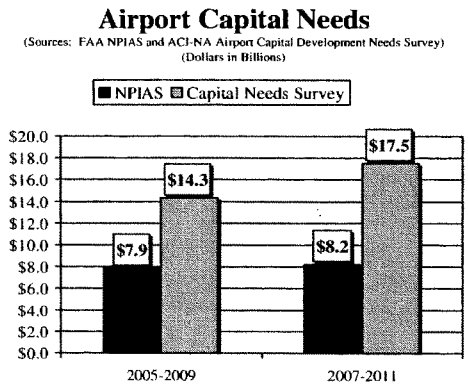
Late last year, the FAA also released its National Plan of Integrated Airport Systems (NPIAS) for 2007 to 2011. The report indicates that there will be $41.2 billion of AIP-eligible projects during the next five years – or approximately $8.24 billion per year. This is 4% higher than the $39.5 billion that FAA estimated for AIP-eligible construction projects for 2005 to 2009. Additionally, in its letter of transmittal of the draft bill, referring to the four percent increase over the previous report, the Administration states, "we believe that this figure is understated."

The NPIAS identifies 3,431 airports that are eligible to receive AIP grants. According to the report, 27% of the planned development is to bring airports up to current design standards, and 21% is for capacity-related projects. Another 17% of the planned development is for replacing or rehabilitating airport facilities such as pavement and lighting systems.

Airports rely on a number of sources for airport capital development projects. The overwhelming majority of funds come from airport bonds, AIP and PFCs. However, the FAA acknowledges in the report that "the NPIAS includes only planned development that is eligible to receive Federal grants under the AIP....It does not include development eligible under the passenger facility charge program but ineligible under the Federal grant program, such as gates and related areas."

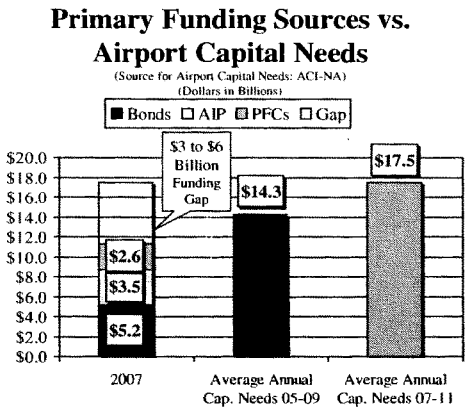
The Airport Capital Development Needs Survey, prepared by Airports Council International-North America (ACI-NA), also indicates that airport needs are on the rise. The preliminary results of the latest survey indicate that airports will need $87.5 billion between 2007 and 2011 – approximately $17.5 per year. That represents about a 20% increase from ACI-NA's previous survey that estimated airports would need approximately $14.3 billion per year between 2005 and 2009.

Unlike the NPIAS, the Airport Capital Development Needs Survey includes projects that are AIP-eligible *and* those that airports intend to fund with other revenue including PFCs and airport bonds. It is my understanding that the increase in the latest survey is due to increasing capital requirements and rising construction costs. According to the January 1, 2007 Means Construction Cost Indexes (CCI), the average construction costs for 30 major U.S. cities have jumped more than 24% in the past three years – at an average annual rate of more than 7.5%.



The
Airport Capital Development Needs Survey also reveals that there is a sizeable gap

between airport needs and the revenue that is available for capital development projects. On average airports issued about $5.2 billion in new bonds per year during the past five years. That amount coupled with the $3.5 billion that Congress recently approved for AIP in FY07 and the $2.6 billion that the FAA expects will be generated from PFCs this year totals about $11.3 billion. The total of primary funding sources, which does not include the local match or other airport revenue, is about $3 billion short of the previous estimate of airport capital needs for 2007 and slightly more than $6 billion below the most recent survey.



***The Solution:* Provide Airports with the Resources They Need to Accommodate Increasing Demand and Skyrocketing Construction Costs**

The FAA and Department of Transportation (DOT) should be commended for highlighting the need for a Next Generation Air Transportation System (NextGen). Although there may be strong disagreement on how best to pay for transforming the national air transportation system, there is wide agreement on the need to move from a ground-based to a satellite-based navigation system. This is another airport priority, and I am pleased that AAAE is working closely with other aviation stakeholders to develop a plan on how to implement NextGen and avoid congestion in the aviation system.

As I mentioned previously, the passenger level is expected to increase from 739 million to 1 billion seven years from now. That is the equivalent of adding the entire population of the U.S. on to an already delayed, already constrained system. While many are understandably focusing on the need to implement a satellite-based navigation system to reduce congestion in the skies, we should not lose sight of the need to increase capacity and reduce congestion on the ground.

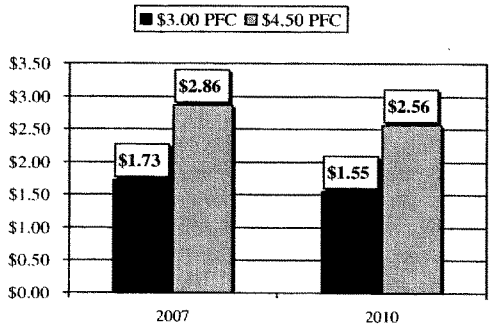
In an effort to be build the infrastructure necessary to accommodate increasing demand and to offset the impacts of skyrocketing construction costs, airport executives are urging Congress to raise the cap on PFCs, increase AIP funding and reduce the costs of airport bonds.

Increase the PFC Cap: The Aviation Safety and Capacity and Expansion Act of 1990 included a provision that has allowed airports to impose a local fee of up to $3 on passengers boarding aircraft at their facilities. AIR-21, which Congress passed in 2000, included a provision that allowed airports to increase that amount to $4.50. Money generated from PFCs augments AIP funding and other sources or revenue that airports use for a variety of purposes including building new runways, taxiways and terminals as well as paying for debt service.

Last year, airports collected about $2.4 billion from PFCs. Unfortunately, however, the value of PFCs has eroded over time due to inflation and increased construction costs. When you factor in the Consumer Price Index, a $3.00 PFC in 1990 is expected to be worth only about $1.86 in 2007, and a $4.50 PFC in 2000 is expected to be worth about $3.10.

The picture gets even worse when you examine the increasing construction costs, which provides you with a more accurate picture of the costs associated with airport construction projects. In that case a $3.00 PFC in 1990 is expected to be worth only about $1.73 in 2007, and a $4.50 PFC in 2000 is expected to be worth only $2.86 in 2007. Unless corrective action is taken, the value of PFCs will erode even more by 2010 when a $3.00 PFC is expected to be worth only $1.55, and a $4.50 PFC is expected to be worth only $2.56.

Erosion of PFC Value Due to Increasing Construction Costs



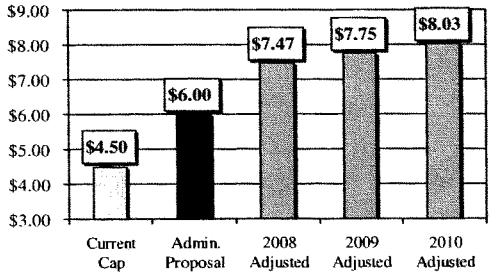
Conversely, a $3 PFC in 1990 would need to be adjusted to $4.77 in 2007 to offset the impact of inflation, and a $4.50 PFC in 2000 would be need to be set at approximately

$6.58. If adjusted for increasing construction costs, a $3 PFC would need to be set at $5.21 in 2007, and a $4.50 PFC would be $7.20.

Airport executives commend the Administration for calling for a PFC increase. Its proposal to increase the cap to $6.00 is an encouraging step in the right direction. According to the FAA, raising the cap by an additional $1.50 could allow airports to generate an additional $1.2 billion per year. That would help close at least some of the gap between airport capital needs and the amount of revenue that is currently available for airport capital development projects. But it is not enough.

It is not enough to close the funding gap especially when the Administration is simultaneously proposing to cut AIP spending by almost $1 billion from the authorized level. And it is not enough to keep up with inflation or increasing construction costs. By 2010 – the final year in the Administration's FAA reauthorization proposal – a $4.50 PFC would need to be raised to $7.14 to keep up with expected inflation and to $8.03 to keep up with the anticipated increase in construction costs.

Administration's Proposal vs. Adjusting PFCs for Increasing Construction Costs



Airport executives are asking Congress to take the next step and raise the PFC cap to at least $7.50. That would be enough to offset the expected impact of inflation over the next three years and the projected increased construction costs in 2008. To prevent further erosion of PFCs, we also ask you to include a provision in the next FAA reauthorization bill that would index PFCs to account for increasing construction costs.

Some may suggest that raising the PFC cap by $3.00 is too much of an increase at one time. However, I would point out that this committee and the House of Representatives approved a proposal to raise the PFC cap from $3.00 to $6.00 in 1999 – a $3.00 increase – almost eight years ago during consideration of AIR-21. Unfortunately, the Senate version of the bill did not include a similar increase, and the final version of FAA reauthorization bill only increased the cap to $4.50. If the $6.00 cap had been enacted

into law and had that cap been adjusted for increased construction costs during the past seven years, the PFC cap would be more than $8.00 today.

Mr. Chairman, I know some members of this committee have expressed concerns about how much PFC revenue airports are using for airside capacity-related projects. According to the FAA, approximately 32% of PFCs approved in FY06 are going to be used for airside projects. This is about $1.4 billion that airports will use for capacity projects such as building new runways, taxiways and aprons.

Airports – including the 35 busiest airports in the FAA's Operational Evolution Plan – rely on PFCs for airside projects to enhance capacity at their facilities. Airports also use PFC revenue for debt service on those airside projects. The Hartsfield-Jackson Atlanta International Airport, the world's busiest airport, opened its fifth runway last year. According to the FAA, the airport used about $542 million in PFC revenue and another $341 million in PFCs for debt service for its runway project. The airport issued a press release in 2005 that said the new runway is "expected to save the airlines about $5 million per week in operating costs by cutting aircraft delays at Hartsfield-Jackson in half."

Chicago's O'Hare International Airport used $651 million in PFCs for the first phase of its modernization program and another $600 million in PFCs in debt service for a total of $1.25 billion for that huge capacity project. The Minneapolis-St. Paul International Airport used $444 million in PFC revenue to construct its new runway, which opened in 2005. The airport also used another $135 million in PFCs for debt service. Overall, almost 80% of the revenue for that runway project came from PFCs.

Other OEP airports that have built runways recently include the Cincinnati-Northern Kentucky International Airport, which used $106 million in PFCs for a new runway and an additional $145 million in PFCs for debt service for a total of $251 million. According to the FAA, the Lambert-St. Louis International Airport used $330 million in PFCs for its runway that opened last year. It also used an additional $427 million in PFCs for debt service for a total of $757 million. Overall, 15 OEP airports have used more than $4.6 billion in PFCs to help build new runways and increase capacity.

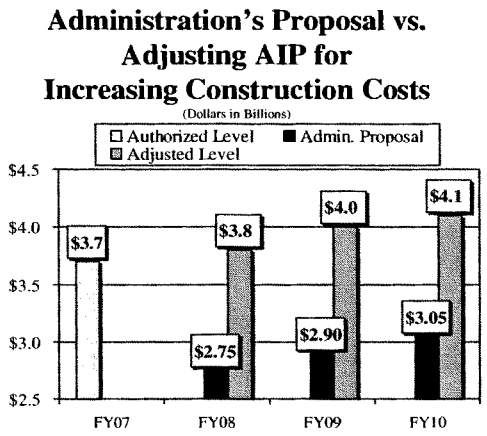
It is true that airports use PFC revenue for landside projects and for noise mitigation. It is important to note, however, that terminal-related projects are often necessary to accommodate increasing passenger loads and to increase capacity on the landside. Airports also use PFC revenue on the landside for security-related projects and to increase competition by building more gates. Increasing competition among air carriers has been a fundamental tenant of the PFC program since it was created. Reducing noise has also been a primary purpose of the PFC program, and it is directly related airside capacity. Airports often use PFCs to mitigate aircraft noise in order to receive approval to build new runways and other capacity enhancing airside projects at their facilities.

Increase AIP Funding: In addition to raising the PFC cap, airport executives are asking Congress to increase AIP funding. AIP is an important source of funding for all sizes of

airports. According to the FAA, AIP funding counted for 51% of capital expenditures for small hub airports in FY03, 94% for non-hub airports and 89% for nonprimary commercial service airports. Large and medium hub airports also depend on AIP funding -- particularly money distributed through the Letter of Intent Program (both entitlement and discretionary funds) to help pay for large capacity projects.

Given the increasing demand, inflation and construction costs, airport executives are dismayed that the Administration is requesting only $2.75 billion for AIP in FY08. This is approximately $1 billion less than the amount Congress authorized in FY07 and $765 million less than the appropriated level. The Administration is proposing to increase AIP to $2.9 in FY09 and $3.05 in FY10. However, even the highest proposed level would be $150 million less than the amount that Congress authorized for AIP six years ago. We cannot afford to take such an enormous step backward in terms of critical AIP funding.

We urge this subcommittee to reject the Administration's proposal to drastically cut AIP funding and roll back the progress made in AIR-21 and Vision 100. Instead we urge you to continue to increase AIP funding as Congress did in the previous two FAA reauthorization bills. At the very least, we urge you to increase AIP funding so that the program will keep up with increased construction costs. Doing so would translate into $3.8 billion for AIP in FY08, $4 billion in FY09, $4.1 billion in FY10, and $4.3 billion in FY11.



Reclassify Airport Bonds: The largest source of funding for capital development projects at airports is generated from airport bonds. Large airports particularly rely on the bond market to finance capital development projects at their facilities. In 2006, airports used approximately $3.9 billion in new bonds to finance capital development projects at their facilities. Over the past five years, airports issued an annual average of $5.2 billion in new bonds.

Unfortunately, federal tax law unfairly classifies more than 60 percent of airport bonds as private activity bonds even though they are used to finance runways, taxiways and other critical facilities that benefit the public. Since private activity bonds are subject to the Alternative Minimum Tax (AMT), airport bond issuers are usually charged higher interest rates on their borrowing. Depending on market conditions, AMT requires issuers to pay investors anywhere from 10 to 30 basis points (0.10% to 0.30%) higher interest costs on long-term fixed rate bonds. This can significantly increase overall project costs.

In addition to being subject to the AMT, private activity bonds that airports use to finance critical capital development projects cannot be advance refunded. Unlike homeowners who have the opportunity to refinance their home mortgages, airports typically are unable to refinance their debt and take advantage of lower interest rates for at least 10 years after issuing their bonds. By contrast, most governmental bonds can be advance refunded one time.

In general, airports are owned and operated by state and local governments, and airports serve a vital public purpose. We encourage you to include a provision in the next FAA reauthorization bill that would reclassify those private activity bonds that airports use to finance AIP- and PFC-eligible projects as public purpose. This would save airports in financing costs by allowing them to take advantage of lower interest rates and advance refund the bonds they use for AIP- and PFC-eligible projects. It would also free resources for additional projects.

AIP and PFC Modifications

The Administration is proposing major reforms for the AIP and PFC programs. It is clear from the Administration's reauthorization proposal that FAA staff dedicated a lot of time and energy toward coming up with a plan to simplify and improve both of these programs. We support many of the concepts outlined in the Administration's plan such as increasing the cap on PFCs. We may disagree with some of the Administration's specific proposals, and we may recommend modifying a few others. But we share the same goal of empowering local airports and truly appreciate FAA's efforts.

PFC Pilot Program for Large Airports: The Administration's FAA reauthorization proposal would create a new pilot program that would allow up to 10 medium or large hub airports to charge a $7.00 PFC if they agree to operate and maintain terminal area navigational equipment, such as instrument landing systems and approach lighting systems. Again, airports strongly believe that the PFC cap should be raised to at least $7.50. Some large and medium hub airports might be willing to participate in such a pilot program if it allowed them to increase their PFC by an additional dollar above the $7.50 level and if they received adequate liability protection.

PFC Streamlining: Airports support the Administration's proposal of streamline the PFC application process. The FAA points out in its section-by-section analysis of the bill that "current law requires an application and approval of each PFC project (or

amendment to a project) that sometimes involves prolonged reviews and delays." We agree with the FAA's assessment and strongly support its proposal to streamline the PFC process, which currently takes several months to complete.

Airports work closely with our airline partners to reach consensus on PFC-funded projects and will continue to do so if Congress endorses the Administration's streamlining proposal. For instance, airports would continue to provide a reasonable notice and comment period for carriers operating at their facilities. However, airports would be allowed to impose a new PFC earlier in the process and avoid months in unnecessary delays. Should a carrier file an objection, DOT would have the authority to terminate the airport's authority to collect PFCs for the new project if the agency concurred with the objection.

AIP/PFC Flexibility: The Administration's proposal would also allow small airports to use AIP funds for more purposes. For instance, it would allow nonprimary airports to use AIP funds for mobile fuel truck containment systems and allow them to use entitlements for revenue-producing aeronautical support facilities such as new fuel farms and hanger buildings. Small airports welcome the increased AIP flexibility, and airport executives are interested in learning more about how the Administration's proposal to expand PFC flexibility would impact their facilities.

The Federal Match for AIP Projects: A number of airport executives have expressed opposition to the Administration's proposal to reduce the federal share for certain airport projects. For instance, the Administration is calling for reducing the government's maximum share for airfield pavement and rehabilitation projects for runways and taxiways at large and medium hub airports from 75% to 50%. Decreasing the federal share would significantly increase the local cost of runway and taxiway projects at busy airports at a time when we should be trying to provide airports with more money to pay for critical infrastructure projects – not less.

Vision 100 included a helpful provision that increased the federal share for small hub and smaller airports from 90% to 95% through FY07. The Administration's FAA reauthorization proposal would allow that provision to expire and return the federal share to a maximum of 90% for many small airports. Small communities around the country often find it difficult to come up with a 5% percent local matching share. Increasing their required contribution to 10% might prevent certain small airports from moving forward with planned construction projects.

Airport executives oppose both proposals to reduce the federal share for airport projects. We would also argue that neither reduction is necessary if Congress rejects the Administration's proposal to cut AIP funding by almost $1 billion from the current authorized level.

AIP Funding for Small Airports: We have strong concerns about the impact that the Administration's proposal could have on small airports around the country. Its reauthorization plan would replace the Small Airport Fund, which is directly supported

by those entitlements that are withheld from large and medium hub airports that impose PFCs, with a new Small Airport Set-Aside. This new set-aside would use 20% of discretionary money to fund projects at small hub, nonhub, nonprimary commercial service, reliever and general aviation airports.

We question the wisdom of replacing the Small Airport Fund, which has successfully linked small and large airports together on AIP and PFC issues, with a new Small Airport Set-Aside. Moreover, the Administration's suggested formula change coupled with its proposal to cut the AIP funding to $2.75 billion would cost small airports approximately $430 million in FY08. Even if Congress endorsed the formula changes and provided $3.5 billion for AIP next year, it appears that small airports would still lose approximately $70 million. Rather than cutting funds for those airports that rely on AIP the most, we should ensure that small airports are "held harmless" by any proposed formula changes.

Nonprimary Apportionment: The Administration's proposal also calls for replacing the the maximum $150,000 apportionment for nonprimary commercial service, general aviation and reliever airports with "tiered funding levels based on airport size and aviation activity." The new entitlements would allow some of the larger nonprimary airports to receive up $400,000. On the surface, providing more money to busier nonprimary airports approach make sense, and a number of general aviation airports have expressed support for increased funding levels. However, we would reserve judgment until we learn more about how this proposal would impact all nonprimary airports.

Land Acquired for Noise Compatibility Purposes: The Administration's proposal would make a grant assurance change regarding the sale of land that an airport initially acquired for a noise compatibility purpose but not longer needs. Current law requires that the proceeds proportional to the federal government's share of the land acquisition be returned to the aviation trust fund. The reauthorization proposal would allow DOT to reinvest the government's share of the proceeds in another project at that airport or another airport. However, airport executives are concerned that the Administration's proposal does not resolve the question about what happens if an airport leases land initially acquired for a noise compatibility purpose. We would like to work with this subcommittee to address that omission.

Funding of FAA Programs

Provide A Stable Funding Stream for AIP: It is critical that enough money goes into the aviation trust fund to pay airport construction projects. The Administration's FAA reauthorization proposal would dramatically change how the AIP program is funded. Funding for airport improvements would still come from the Airport and Airway Trust Fund. However, money going into the trust fund would come from an increase in commercial and general aviation fuel taxes and revenue generated from international departure and arrival taxes.

The Administration is proposing to increase the general aviation taxes from about 20 cents per gallon to 70 cents per gallon. Of that amount, 13.6 cents per gallon would be used to fund AIP, RE&D and the Essential Air Service (EAS) Program. The remaining amount would be used to finance general aviation's share of the air traffic control system. The proposal also calls for raising the commercial fuel tax from 4.3 cents per gallon to 13.6 cents per gallon and reducing the international arrival and departure tax from $14.50 to $6.39. All the revenue from these two taxes would be used for AIP, RE&D and the EAS.

Airport executives understand the need for a rational and stable financing system for the FAA. However, airport executives would strongly oppose changing the current financing system in such a way that resulted in *less* money for airports to maintain safe and secure facilities and prepare for increasing demand. Airport executives want a stable and predictable funding stream for AIP, too. Frankly, they are not convinced that relying on a tripling of general aviation taxes to help pay for airport improvements would provide enough revenue or a stable source of funds.

Under the Administration's proposal, the 7.5% domestic passenger ticket tax and the domestic flight segment fee, which currently fund about 70% of the aviation trust fund, would be eliminated. Asking domestic passengers to help pay for capital development projects at airports through the AIP program has been a key component of the aviation trust fund since Congress helped to create it more than 30 years ago. Many airport executives would strongly oppose eliminating that funding source because they argue that domestic passengers should continue to directly contribute to the aviation trust fund just like international passengers, commercial aviation and general aviation.

The Administration is recommending that commercial and general aviation fuel tax increases go into effect in 2008 and be adjusted for inflation beginning in 2010. However, it is unclear whether the FAA has determined the price elasticity of its fuel tax proposal or precisely how the agency would make up any potential shortfall if the fuel taxes generated less revenue than expected. Moreover, it is uncertain whether Congress would be willing to increase AIP funding or even reject the Administration's proposal to cut AIP funding if doing so translated into even higher gas taxes on general aviation.

Strengthen Budget Protections: Whether Congress decides to keep the current excise tax system in place or call for some new user fees, it is critical that the next FAA reauthorization bill include budget points of order to protect AIP funding. AIR-21 included an airport executive-supported provision that requires all receipts and interest credited to the aviation trust fund to be spent on aviation. It also makes it difficult for Congress to appropriate less than the full amount authorized for AIP.

Those budget points of order have worked reasonably well over the past several years, and we encourage you to strengthen or maintain them in the next FAA reauthorization bill. Absent these protections, we are concerned that we would return to the days before 2000 when the gap between the amount authorized for AIP and the amount appropriated was routinely quite large.

General Fund Contribution: The Administration's FAA reauthorization proposal calls for not more than $2.6 billion in taxpayer revenue to pay for aviation in FY08 – or about 18.6%. That funding level would decline to $2.5 billion in FY09 and FY10. During the past 20 years, the General Fund contribution has been as high as 48% and has averaged about 27%. In recent years, however, the General Fund contribution has steadily declined. We strongly believe that Congress should increase the General Fund contribution to 25%.

Improve Service to Small Communities

Although overall passenger levels are continuing to rise, many small communities around country are struggling to retain and attract new commercial air service. In 2005, the General Accountability Office reported that service to large- medium- and small-hubs has largely rebounded since 9/11. However, non-hub airports had 17% less service in July 2005 than they did in July 2000.

In May, 2006, the DOT Inspector General also reported that scheduled flights at small communities for the first 3 months of 2006 were 17% lower than the number of flights scheduled in the same period in 2000. At non-hubs, the number of flights was down 29% from the first 3 months of 2006 when compared to the same period of 2000.

Many lawmakers have repeatedly pointed out that many small communities have suffered since the airline industry was deregulated almost 30 years ago. Congress, the Administration and all of us in the aviation industry should work together to find ways to address this problem and to ensure that people who live in rural areas have access to the aviation system.

Increase Funding for the Small Community Air Service Development Program: It is disappointing that the Administration's FAA reauthorization proposal does not include any funds for the Small Community Air Service Development Program. Small airports around the country are grateful that Congress helped to create what is now known as the Small Community Air Service Development Program in AIR-21. Since its inception this program has helped small communities that suffer from insufficient air service or unreasonably high fares.

Over the past four years DOT has awarded 150 grants, which have typically ranged from $20,000 to nearly $1.6 million. Last year, the department received 75 proposals from communities in 37 states requesting more than $32 million "to support new and ongoing air service development projects." However, the demand for federal assistance far exceeded the approximately $10 million that Congress approved for the program in the FY06. In August, DOT announced that it had awarded grants that will benefit 28 communities in 22 states.

Considering the number of communities that apply for funds from this program and the continuing pressures on small communities, we urge this subcommittee to consider making a greater investment in the Small Community Air Service Development Program.

Specifically, we urge you to authorize $50 million for the Small Community Air Service Development Program per year -- $15 million more than Congress authorized for the program per year in Vision 100.

Maintain the Essential Air Service Program: We also encourage Congress to maintain adequate funding for the EAS program and to take steps to improve the program as Congress tried to do in Vision 100. Unfortunately, the Administration's FAA reauthorization would limit funding for the EAS Program to just $50 million per year -- $60 million less than the amount Congress approved for FY07. The plan would also cut communities out of the program by limiting service to those: 1) that currently participate in the EAS program; 2) that are more than 70 miles from a large- or medium-hub airport; and 3) where the per passenger subsidy does not exceed $200 if the community is less than 210 miles from a large- or medium-hub airport.

Invest in the FAA's Contract Tower Cost Share Program: Another program that has improved service and safety at airports in small communities is the FAA's Contract Tower Program. This program has been in place since 1982 and currently provides for the cost-effective operation of air traffic control towers at 233 smaller airports in 46 states. Without the Contract Tower Program many simply would not have any air traffic control services at their facilities.

AIR-21 included a provision that created the Contract Tower Cost Share Program, which currently allows 26 airports in 22 states that fall slightly below the eligibility criteria to participate in the program if they provide local funds. We recommend that this subcommittee authorize $8.5 million for the Contract Tower Cost Share Program in FY08 and increase the amount by $500,000 per year. Doing so would keep the existing towers operating and allow additional airports to participate in the program.

Other Recommendations

Require FAA to Continue to Pay for Space the Agency Uses at Airports: Airport executives strongly believe that the FAA should continue to pay for the space that the agency uses at their facilities just like other airport tenants. Airports do not object to providing land to the FAA for Air Traffic Control facilities without cost. However, they believe that the FAA should continue to pay reasonable rates for space that the agency occupies in airport-owned facilities. For smaller airports, the potential loss of rental revenue – even at below market rates – could have a significant impact on their financial situation. We encourage Congress to include a provision in the next FAA reauthorization bill that would require to FAA to continue to pay for the space that the agency uses at airports. This would provide a permanent fix on this issue, which has been addressed annually in the DOT appropriations bill.

Conclusion

Chairman Costello, Ranking Member Petri and members of the House Transportation and Infrastructure Subcommittee on Aviation, thank you for inviting me to appear before your committee to discuss the Administration's FAA reauthorization proposal. This subcommittee has a strong tack record of increasing funding for airport capital development projects. We urge you to continue to help airports keep pace with increasing passenger demand and skyrocketing construction costs by raising the cap on PFCs and increasing funding for AIP. These actions would help to improve safety, increase capacity and reduce delays at airports around the country.

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Baltimore/Washington International Thurgood Marshall Airport
Chicago Department of Aviation
Cincinnati/Northern Kentucky International Airport
Dallas/Fort Worth International Airport
Denver International Airport
Detroit Metropolitan Wayne County Airport
Hartsfield-Jackson Atlanta Int'l Airport
Massachusetts Port Authority
Metropolitan Washington Airports Authority
Miami International Airport
Philadelphia International Airport
Phoenix Sky Harbor International Airport
Salt Lake City International Airport
San Diego International Airport
San Francisco International Airport
Seattle-Tacoma International Airport
The Port Authority of New York and New Jersey

Medium Hubs

Albuquerque International Sunport
General Mitchell International Airport
John Wayne Airport
Kansas City International Airport
Lambert St. Louis International Airport
Louisville International Airport
Manchester - Boston Regional Airport
Memphis International Airport
Norman Y. Mineta San Jose International Airport
Pittsburgh International Airport
Port Columbus International Airport
Portland International Airport
Reno-Tahoe International Airport
Rhode Island Airport Corp.
Tucson International Airport

Small Hubs

Atlantic City International Airport
Bangor International Airport
Baton Rouge Metropolitan Airport

Billings Logan International Airport
Birmingham International Airport
Dayton International Airport
Des Moines International Airport
Fresno Yosemite International Airport
Gerald R. Ford International Airport
Greenville Spartanburg International Airport
Harrisburg International Airport
Huntsville International Airport
Jackson-Evers International Airport
Lexington Blue-Grass Airport
Long Beach/Daugherty Field Airport
Metropolitan Knoxville Airport Authority
N.W. Arkansas Regional Airport Authority
Newport News/Williamsburg International Airport
Quad City International Airport
Santa Barbara Municipal Airport
Sarasota Bradenton International Airport
South Bend Regional Airport
Springfield/Branson National Airport
Tallahassee Regional Airport
Tulsa International Airport
Will Rogers World Airport

Non Hubs/General Aviation

Abilene Regional Airport
Addison Airport
Asheville Regional Airport Authority
Aspen/Pitkin County Airport
Bert Mooney Airport
Bismarck Municipal Airport
Capital City Airport (MI)
Centennial Airport
Charlottesville-Albemarle Airport Authority
Chattanooga Metro Airport
Cherry Capital Airport
Delaware County Airport Authority
Dothan Regional Airport
Durango LaPlata County Airport
Elmira-Corning Regional Airport
Evansville Regional Airport
Fernandina Beach Municipal Airport
Fort Wayne International Airport
Friedman Memorial Airport Authority
Gallatin Field Airport

Glacier Park International Airport
Glynco Jetport
Greater Peoria Regional Airport
Greenbrier Valley Airport
Hector International Airport
Inyokern Airport
Kalamazoo Battle Creek International Airport
Killeen-Fort Hood Regional Airport
Kissimmee Gateway Airport
Klamath Falls Airport
Laredo International Airport
Laughlin/Bullhead Int'l Airport
Mahlon Sweet Field
Marana Regional Airport
McAllen-Miller International Airport
Melbourne International Airport
MidAmerica St. Louis Airport
Monterey Peninsula Airport District
Morristown Municipal Airport
Nantucket Memorial Airport
Napa County Airport
Nut Tree Airport
Provo Municipal Airport
Redding Municipal Airport
Roanoke Regional Airport
Salina Municipal Airport
San Bernardino County/Needles Airport
San Luis Obispo County Regional Airport
Santa Maria Public Airport
Snohomish County Airport/Paine Field
Southern Illinois Airport Authority
Southwest Oregon Regional Airport
Springfield Airport Authority
Toledo Express Airport
Tri-Cities Airport
Tri-Cities Regional Airport, TN/VA
Valdosta Regional Airport
W.K. Kellogg Airport
Wilkes-Barre/Scranton International Airport
Williams Gateway Airport
Wilmington International Airport

Testimony of James E. Bennett
President and Chief Executive Officer
Metropolitan Washington Airports Authority

Before the Aviation Subcommittee
of the
House Transportation and Infrastructure Committee

March 28, 2007

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Chairman Costello, Ranking Member Petri, and members of the Aviation Subcommittee, on behalf of the Metropolitan Washington Airports Authority, I want to thank you for inviting me to testify today. I am Jim Bennett, President and Chief Executive Officer of the Airports Authority – the operators of Ronald Reagan Washington National and Washington Dulles International Airports.

In addition, I wear another hat today as I am serving as Chair of the Airport Legislative Alliance (ALA) Policy Roundtable. The ALA is comprised of 119 airports large and small located throughout the United States.

As the Subcommittee, the Transportation and Infrastructure Committee, and even the House of Representatives crafts and debates the FY 2008 Federal Aviation Administration Reauthorization Legislation, I would encourage you to remember that this is not about large airports and small airports, but rather about a nationwide airport system. At our two airports we have service to 95 communities of all sizes and in every part of the country. It is very important that as we frame the discussion on this very important topic that we not lose sight of the effectiveness of this integrated air transportation system and make changes to the Airport Improvement Program (AIP) or Passenger Facility Charge (PFC) Program that would negatively impact our ability to provide facilities and access to accommodate the needs of the communities served by our airports.

Last week I had the privilege of attending the Federal Aviation Administration Annual Forecasting Conference here in Washington, D.C. Amongst all the distinguished panelists and speakers who participated, I had the opportunity to hear FAA Administrator Marion Blakely, in the course of remarks, remind the 600 assembled guests, and me, that Washington Dulles was going to be one of the fastest growing commercial Airports in the United States between 2006 and 2020, with a projected growth in aircraft operations of 68% and a 112% growth rate in passenger enplanements.

I thought her remarks provided me a good segue into my participation in this hearing today.

The Airports Authority utilizes quite effectively the two airport financing mechanisms that are part of the FAA Reauthorization Legislation before the Subcommittee, namely, the AIP and PFC programs. Together, these financing tools are important components of our ability to expand and maintain our airport infrastructure to keep pace with the significant growth that Administrator Blakely referred to in her remarks last week. In that regard, any legislation or proposal that would affect either of

these programs is of great interest not just to the Airports Authority, but to all airports nationwide.

As you are aware, airport capital improvements are very expensive, long duration programs, and AIP is a very useful tool for us to meet these commitments. A recent Airports Council International capital needs study suggested that United States' commercial airports have a need for $87 billion for construction over the next five years. Yet, just as the value of Passenger Facility Charges (PFC) has declined due to inflation and the increased cost of construction, AIP funding has also not kept pace with escalating construction costs. The AIP has primarily funded capacity improvements including runways, noise and safety programs and, just when we need this source of funds the most, the Authority and our industry are looking at the possibility of a one-third reduction in AIP funding for 2008.

The Airport Authority's $7 billion construction program is planned through 2016. The program is funded with $4.7 billion in bonds, $1.7 billion in PFC, and $600 million in AIP grants. The major projects included in this program are:

- The AeroTrain, a new underground automated train system at Dulles, is scheduled for completion in mid-2009. This $1 billion project will replace the mobile lounges and will provide a new security level for passenger screening.
- The new 4th runway and related projects at Dulles, a $357 million project, will be completed in October 2008.
- The new, $51 million, Air Traffic Control tower at Dulles will be commissioned in May.
- A $124 million 12-gate addition to Concourse B will open by the end of this year.

In addition to these projects, we are currently negotiating the business deal with United Airlines to replace Concourse C and D, temporary facilities built in 1985. At Reagan National we are completing a consolidated public safety dispatch center, and at both airports, we are working with TSA to find cost efficient solutions to our baggage screening security needs.

We agree with the Administration's recommendation to increase the AIP discretionary fund to $520 million to meet the need of Letter-of-Intents (LOI). LOIs are important financing tools for airports. As a matter-of-fact, in 2006 the Authority received a $200 million Letter-of-Intent from the FAA to fund construction of our much-needed 4th runway at Dulles which we plan to open in October 2008. This LOI represents approximately 56 % of a total project cost of $357 million. By having this LOI available, we are able to construct this much-needed capacity enhancement to the airport in a cost-effective manner.

Of equal importance to the Airports Authority is the issue of Passenger Facility Charges and the proposal to increase them.

Since PFCs were authorized by Congress in 1990, they have become the second largest source of financing infrastructure at the Airports Authority, behind bonds. At Dulles and Reagan National, a total of $1.5 billion has been approved for projects including the new terminal at Reagan National, and at Dulles for the expansion of the main terminal and the aforementioned AeroTrain and Concourse B expansion. Of this total, $749 million has been collected. We currently have an additional PFC application pending with the FAA for $124 million to expand the International Arrivals Building at Dulles.

PFCs have not kept pace with the rate of construction inflation. Most airports have committed their PFC authority well into the future. For example, at Dulles, our PFC authority is used through 2017. PFCs were originally authorized for airports to collect a maximum of $3 per enplanement. This increased to $4.50 per enplanement in 2001. However, because of the inflation and the increased cost of construction, for PFCs to have the buying power that Congress authorized, today they would need to be increased to $7.19.

I support the Administration's proposal to increase PFCs, but to a level of $7.50 in lieu of the $6 per enplanement which has been proposed. At a rate of $7.50, the construction buying power of the PFC will return to about the same rate as it was when it was authorized at the $4.50 level in 2001. To prevent further erosion of the buying power of the PFC, we also believe that it should be indexed to construction inflation.

The increased PFC would allow the Metropolitan Washington Airports Authority to continue its Capital Construction Program at both Washington Dulles and Reagan National Airports in a cost effective manner. Because of the tremendous growth we have experienced and will be expecting, it appears likely that as soon as we finish with our 4th runway at Dulles, we will be forced to contemplate commencement of construction of our 5th runway – and it would be extremely beneficial to have the availability of an increased PFC to assist in its funding.

The Administration's proposal recommends eliminating AIP entitlement funds for large and medium hub airports. I encourage you to make sure that airports with outstanding Letters of Intent, like we have at Washington Dulles, do not lose entitlements that have already been pledged to projects. A grandfathering provision to continue the entitlements through the period in the LOI would assure the information that was given to investors through an airport's Revenue Bond Official Statement are accurate.

I also support the Administration's proposals to streamline the PFC approval process. An *impose/report/review* process would provide efficiencies for the FAA, the airlines, and the airports. During the impose stage and to help assure involvement, a majority of the airlines serving an airport could ask that a PFC consultation meeting be held to answer any questions they may have concerning projects that are to be financed by PFCs therefore eliminating unnecessary process on the majority of non-controversial projects. The Administration's proposal to expand PFC projects to include all eligible airport capital investments, as long as it will not hinder competition, while important,

needs to be approached with caution. The Administration proposes that PFCs can be expended on new projects until the FAA notifies the airport of disapproval. I suggest that the proposal be amended to eliminate a feature that reverses PFC authority retroactively, or that the legislation require the FAA to provide notice within a 30 day period if it does not expect to grant PFC authority for a project.

The report process should include an annual report to the FAA that would indicate how PFCs were expended and forecast how they expect to be used in the upcoming year. The report could serve as an amendment for approved projects and as a notice for any proposed projects. The review cycle would commence with the receipt of the reports.

In summary, I support the Administration's proposal to increase the PFC fee, but to a higher level of $7.50 to recognize the effects of prior inflation. I recommend the PFC be indexed to an appropriate construction index that will provide adequate protection of the future value of the PFC collected. I also I support their proposal to streamline the PFC approval process and suggest providing an "impose/report/review" process that will allow airport operators to manage PFCs just as they do their other sources of revenue; each according to federal laws and regulations.

One final area of airport financing which I would like to comment on is the issue of the Alternative Minimum Tax (AMT), and how it affects debt issued by airport operators and the Airports Authority.

Bonds sold through the capital markets provide airports with their single largest source of capital. The US capital markets are unique in providing governments the ability to access large sums of money for capital development while providing investors a safe source for investment income.

In 1986 the US Tax Code was changed and included provisions to define the majority of projects financed with airport bonds as Private Activity Bonds, subjecting the interest earned to the alternative minimum tax. Many middle class Americans are subject to the AMT. Because of the problems associated with the lack of indexing of the AMT, the market for airport bonds has been shrinking. The AMT penalty now costs 20 to 30 basis points on each of the Authority's bond sales which accounts for over $4 billion in debt. That AMT penalty adds nearly $10 million annually to the airlines' rates and charges at our two airports.

I am not here to ask this committee to consider changing the AMT. That is for another day and another committee. I am here, however, to ask you to consider that airports are government-like issuer of bonds and, therefore, should enjoy the same full tax-exempt status that is granted to cities, counties, and states. This could be accomplished by redefining all airport bonds as governmental. As many of you travel through airports, I am sure you see the hundreds of public safety personnel that work at our airports. More than thirty percent of the 1,300 employees at our two airports – 406 -- are either police or fire personnel. The Transportation Security Administration has over one thousand people employed at our airports. There are also air traffic control

personnel, federal air marshals, and others who protect the safety of our aviation system right here at home. Clearly, airports are not purely a private activity. Eliminating the private activity label would increase the market for our airport bonds, lower the interest cost, and allow airports to advance refund any outstanding bonds when and if interest rates fall.

Chairman Costello, Ranking Member Petri, thank you again for inviting me and the Metropolitan Washington Airports Authority to testify before the Aviation Subcommittee today on these airport finance issues. We will certainly maintain a keen interest in your deliberations on these issues, and I will be very happy to answer any questions you may have.

STATEMENT OF
ROBERT L. BOGAN, A.A.E.
DEPUTY DIRECTOR
MORRISTOWN MUNICIPAL AIRPORT
ON BEHALF OF
SOUND INITIATIVE: A Coalition for Quieter Skies
FOR THE HEARING OF
SUBCOMMITTEE ON AVIATION
U.S. HOUSE OF REPRESENTATIVES

March 28, 2007

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STATEMENT OF
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ON BEHALF OF
SOUND INITIATIVE
FOR THE HEARING OF
SUBCOMMITTEE ON AVIATION
U.S. HOUSE OF REPRESENTATIVES

Mr. Chairman and Members of the Subcommittee, thank you for giving me an opportunity to testify at this hearing. I am Robert Bogan, Deputy Director of the Morristown Municipal Airport in Morristown New Jersey. I am here representing a group called Sound Initiative: A Coalition for Quieter Skies. Sound Initiative was formed by airports and counts as its members airports, local governments and homeowner and citizen groups that are concerned about aircraft noise. Our goal is to encourage you to complete the job this Committee started in 1990 by phasing out all noisy Stage 1 and Stage 2 aircraft.

As you know, the FAA divides aircraft into 3 categories by the amount of noise they make – Stage 1, Stage 2, and Stage 3. Stage 1 aircraft are the loudest. Stage 2 aircraft are also noisy. And Stage 3 aircraft are the quietest.

By 1985, most Stage 1 aircraft had been phased out as a result of earlier regulatory action taken by the FAA. In 1990, at the initiative of Mr. Oberstar and this Subcommittee, legislation was enacted to begin the phase out of most Stage 2 aircraft. That legislation was included in the 1990 FAA

reauthorization bill known as the Airport Noise and Capacity Act or ANCA. The phase out of Stage 2 aircraft called for in ANCA was completed by the year 2000.

However, both the FAA regulatory action and the 1990 congressional action applied only to aircraft weighing more than 75,000 pounds. Noisy Stage 1 and Stage 2 aircraft that weigh less than that were not affected and many continue to fly to this day.

According to the FAA, as of last summer, there were about 1,330 Stage 1 and Stage 2 aircraft operating in the United States. These Stage 1 and Stage 2 aircraft comprise about 13.5 percent of jet aircraft less than 75,000 pounds.

Although these aircraft represent a relatively small percentage of the total U.S. fleet, the FAA noted, in a letter to the former Chairman of this Committee that "while not an issue when measured at the system level, there are a few airports where, especially when adjusted for their limited number of operations, this segment of aircraft appears to contribute **in a significant fashion** to noise exposure contours." (emphasis added)

So today, although those aircraft are small in number relative to all aircraft, many airports across the United States report that they account for a majority of noise complaints. In fact, at some airports, fifty percent or more of the noise complaints received are related to Stage 1 or 2 aircraft.

Sound Initiative was formed to address this problem.

Sound Initiative was organized by a group of airport operators who are on the front line of the aircraft noise debate on a daily basis. Across the country, airport managers must respond to the concerns of neighbors, government officials, the news media and others who want to know what they are doing about the noise that results from operations at their facilities. Some airports have installed sophisticated monitoring systems that identify aircraft and the noise they make when departing. Others have long relied on programs that try to be responsive to neighbors' noise concerns by mediating their complaints with operators based at their facilities.

But real action can only come from trying to reduce noise at its source. And the power of local airports to do this is severely limited.

That is why we call on Congress to complete the job it started in 1990 and phase out all noisy aircraft regardless of how much they weigh.

What happens at an airport when Stage 1 or 2 aircraft no longer use it? At a place like my airport, Morristown Municipal Airport, it means quieter skies for the people living and working nearby.

Located in New Jersey, the nation's most densely populated state, Morristown is among the busiest airports catering to corporate and smaller business aircraft in the New York City metropolitan area, logging an average of 210,000 departures and arrivals each year. Operations include those of based corporate tenants, transient business use, flight training and recreational traffic.

Although only one Stage 2 aircraft is based at Morristown, more than half of the noise complaints from neighbors are the result of other Stage 2 aircraft landing and taking off there.

In a recent study we reviewed the sound contour—the noise footprint—of all airplanes and jets departing Morristown's Runway 23. The study also looked at what would happen to those contours if only Stage 3 aircraft departed from that runway. The results showed a significant reduction in the noise impact to airport neighbors.

Phasing out Stage 1 and 2 aircraft is not a panacea to the noise challenges faced by airports and those around them. But, as evidenced by the study conducted at Morristown, it's an important step toward quieter skies.

On the other hand, we have the example of Naples Airport in Florida. That airport tried to work through the FAA's existing Part 161 process to phase out noisy aircraft. It spent hundreds of thousands of dollars on consultant studies to tell it what it already knew about the need to reduce aircraft noise. When the airport instituted restrictions based on the Part 161 study, the airport lost funding under the federal Airport Improvement grant program.

In the end, Naples successfully defended the lawsuits against it and did succeed in banning noisy aircraft at its airport. But it cost more than 3 million dollars, money that could have been better spent on safety or security projects. I can assure you that other airports do not have the funds to take on the system the way that Naples did. Rather than attempt to develop an airport-by-airport solution which has yet to be achieved even once by the

part 161 process, we believe a lasting, long-term and nationwide solution to the aircraft noise problem can only come from Congress.

Sound Initiative does have a proposal we would like this Subcommittee to consider to address this noise problem. Under our proposal, a copy of which is attached at the end of the written testimony, all Stage 1 and Stage 2 aircraft would have to cease operations in the 48 States 3 years after enactment. Almost all of these aircraft are close to 20 years old, most much older than that. So 3 years seems like a reasonable balance between the needs of aircraft owners to change over to quieter aircraft and the needs of airport neighbors for noise relief. And it comes more than 17 years after Congress set precedent for this type of action and 7 years after the last aircraft weighing more than 75,000 pounds operated or did so with modifications that allowed it to meet Stage 3 standards.

Our proposed legislation goes a step further, however, by recognizing that some airports, due to their location or other factors, may not have as much need for noise relief. In those cases, we propose to let airports notify the FAA that they are willing to continue to allow Stage 1 and Stage 2 aircraft to fly there.

Mr. Chairman, Congress provided noise relief to our nation's larger airports several years ago. It is now time to provide added relief to those airports and to extend the same relief to the people who live near smaller, reliever, and satellite airports.

On behalf of Sound Initiative, I urge you to include our proposed legislative language, or something similar to it, in the Subcommittee FAA reauthorization legislation.

Thank you and I would be pleased to answer any questions.

March 28, 2007

LEGISLATIVE PROPOSAL

PROHBITION IN 3 YEARS WITH OPT-OUT

Section 1. Prohibition on operating aircraft not complying with stage 3 noise levels

(a) Subchapter II of Chapter 475 of title 49, United States Code, is amended by adding at the end the following:

"Sec. 47534. Prohibition on operating certain aircraft weighing 75,000 pounds or less and not complying with stage 3 noise levels

"(a) PROHIBITION. – Except as provided in subsection (b), (c) or (d), a person may not operate a civil subsonic turbojet with a maximum weight of 75,000 pounds or less to or from an airport in the United States unless the Secretary of Transportation finds that the aircraft complies with stage 3 noise levels.

"(b) EXCEPTION. – Subsection (a) shall not apply to aircraft operated only outside the 48 contiguous States.

"(c) OPT-OUT. – Subsection (a) shall not apply at an airport where the airport operator has notified the Secretary that it wants to continue to permit the operation of civil subsonic turbojets with a maximum weight of 75,000 pounds or less that do not comply with stage 3 noise levels. The Secretary shall post the notices received under this subsection on its web site or in another place easily accessible to the public.

"(d) LIMITATION. – The Secretary shall permit a person to operate Stage 1 and Stage 2 aircraft with a maximum weight of 75,000 pounds or less to or from an airport in the contiguous 48 States in order to –

(1) sell, lease, or use the aircraft outside the 48 contiguous States;
(2) scrap the aircraft;
(3) obtain modifications to the aircraft to meet stage 3 noise levels;
(4) perform scheduled heavy maintenance or significant modifications on the aircraft at a maintenance facility located in the contiguous 48 states;
(5) deliver the aircraft to an operator leasing the aircraft from the owner or return the aircraft to the lessor;
(6) prepare or park or store the aircraft in anticipation of any of the activities described in paragraphs (1) through (5); or
(7) divert the aircraft to an alternative airport in the 48 contiguous States on account of weather, mechanical, fuel, air traffic control or other safety reasons while conducting a flight in order to perform any of the activities described in paragraphs (1) through (6).

"(e) STATUTORY CONSTRUCTION. – Nothing in the section may be construed as interfering with, nullifying, or otherwise affecting determinations made by the Federal Aviation Administration, or to be made by the Administration, with respect to applications under part 161 of title 14, Code of Federal Regulations, that were pending on the date of enactment of this section."

(b) This section shall take effect on the date that is 3 years after the date of enactment of this section.

Section 2. Conforming amendments

(a) Section 47531 of title 49, United States Code, is amended by striking "or 47530" and inserting "47530 or 47534".
(b) Section 47532 of title 49, United States Code, is amended by striking "47528-47531" and inserting "47528-47531 or 47534".

Committee on Transportation and Infrastructure
Subcommittee on Aviation

The Federal Aviation Administration's Airport Improvement Program

Testimony of

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March 28, 2007

Chairman Costello, Congressman Petri and Members of the Subcommittee –

Thank you for the opportunity to address the Transportation and Infrastructure Committee's Aviation Subcommittee at such a highly critical time in the aviation industry. As your committee addresses and acts upon the reauthorization of the programs of the Federal Aviation Administration, we need to recognize that the Airport Improvement Program's administration and funding is critical to the growth of our nation's airports, airlines and local communities.

Our aviation system is faced with continuous systemic challenges, including environmental pressures (reducing noise impacts and aircraft emissions on local communities), air traffic constraints particularly in the larger metropolitan centers, emerging global markets such as China, the continuous threat of terrorist attacks, the instability of oil pricing and U.S. airlines struggling to redefine profitable business models. Together, these factors arguably present the most significant challenge to our nation's air transportation system ever experienced.

As the Executive Director and Chief Executive Officer of the Jacksonville Aviation Authority, it is my hope and intent to stress to the Aviation Subcommittee the critical sense of urgency to enhance and reauthorize the Airport Improvement Program. The Jacksonville Aviation Authority owns and operates four airports in northeast Florida. Our primary airport within our region is Jacksonville International Airport (JAX), which

serves as the regional commercial airport for northeast Florida and southeast Georgia. JAX is classified as a medium hub airport. In 2006, approximately six million passengers traveled through the airport. Supporting JAX are seven general aviation airports within the region accounting for 491,000 annual aircraft operations.

As one of the fastest growing regions in the United States, Northeast Florida relies heavily on the continued ability to expand and improve its aviation services and infrastructure. Currently, the Aviation Authority is engaged in multiple capital improvement programs that are supported by Passenger Facility Charges and Airport Improvement Program funding which will enhance both air and landside capacity. These programs represent approximately $400 million in capital funding. The largest funding components of the capital improvements are related to aircraft apron areas, terminal expansion, and in-line hold baggage screening system enhancements.

Secondarily, the Aviation Authority is engaged in continued efforts to transition and improve Cecil Field from a military airfield to a civil general aviation airport. The Jacksonville Aviation Authority received title and operational responsibility of a significant portion of NAS Cecil Field in September 1999, through the 1993 Base Realignment and Closure Act (BRAC).

Due to tremendous population growth projected in this region over the next 10 years, it is anticipated that JAA's capital program will be in the half billion dollar range. The

following are examples of projects required over the next five years for which significant support is needed through various FAA grants and PFC dollars.

- Jacksonville International Airport

  Terminal Modification of Course B

  Construct & Rehab Course B Apron

  Construct New Air Carrier Apron

  Land Acquisition for New Runway

  Comprehensive and Environmental Planning

- Cecil Field Airport

  Construct Parallel Taxiway

  Airport Roadway Rehab

  Mid field Area Drainage Improvements

  Construct Air Traffic Control Tower

- Craig Municipal Airport

  Upgrade Airfield Righting & Signage

  Design & Rehab Runway 5/23

  Security Fencing

  Comprehensive and Environment Planning

- Herlong Municipal Airport

Design and Construct 600 ft Extension Runway 7/25

Rehab Runway 11/29

Design and Construct Turf Runway TR/25L Taxiway System

Our total projected capital program funding needs over the next five years represents almost $250 million, of which approximately $75 million would qualify for FAA funding and $40 million would be supported by PFC dollars.

The JAA believes it is extremely essential that these funding streams be maintained and enhanced in the context of the 2007 legislative reauthorization proceedings.

ISSUES FOR CONSIDERATION IN REAUTHORIZATION OF THE AIP

The Jacksonville Aviation Authority respectfully requests the committee's support for future growth of the national air transportation system by enhancing and reauthorizing the FAA Airport Improvement Program. Specifically, we urge the Aviation Subcommittee to support the following issues, all of which are essential in order for airports to be able to accommodate future growth and provide efficiencies in passenger and cargo service.

Increase Passenger Facility Charges (PFC)

We believe the maximum allowable PFC fee should be increased from $4.50 to $7.50. In addition, the FAA should have the ability to create an indexing formula that will allow for inflationary adjustments.

JAA also strongly supports revisions to update the guidelines that govern which projects qualify for PFC funding and how they are approved because the current process is too restrictive - in essence, streamlining the current application process that has become much too cumbersome and time consuming.

Local airport authorities need more latitude when making decisions on land acquisitions for future runways, creative capacity enhancement projects and noise/environmental abatement initiatives. The FAA's existing cookie - cutter approach to these types of local initiatives does not allow for the flexibility needed when dealing with unique issues at individual airports.

Maintain Airport Improvement Program Funding

Airport Improvement Program (AIP) grants from the FAA are the cornerstone of capital improvement funding at public-use airports. We strongly support the proposal to simplify the AIP funding request structure. However, we have serious concerns about the Administration's almost $1 billion proposed cut in the AIP authorization level.

This major cut will severely impact the AIP Discretionary Program and limit the resources available for letters-of-intent (LOI) for large capacity projects which are vital to the national air transportation system. It is almost certain that large and medium-hub airports will lose their passenger entitlements under the Administration's proposal. These airports are dependent on LOIs and discretionary grants to fund needed improvements and capacity projects.

Continue the Military Airport Program (MAP)

Reauthorization of the Military Airport Program (MAP) is essential to those communities which have been given the responsibility of converting closed military bases to civilian use. The Jacksonville Aviation Authority's participation in the MAP is a prime example of how this program can successfully transition former military airfields to commercial airports that help strengthen our nation's aviation system, especially in fast-growing regions such as Northeast Florida.

The Jacksonville community took ownership of the former Cecil Field Naval Air Station through the BRAC process. Cecil Field is valued at approximately $1 billion. This facility provides Northeast Florida with a significant civil aviation capacity now and well into the future. However, to realize the full benefit of this aviation asset will require continued maintenance and capital investments to improve its infrastructure. To date, through the MAP, Florida Department of Transportation, Florida's Office of Trade, Tourism and Economic Development and local matching funds, JAA has invested over $52 million in Cecil Field, of which $26 million has come via the MAP. The MAP funds received continue to be a critical element in Cecil Field's successful transition to a civilian airport.

Privatization of Public Airports

JAA supports the Administration's proposal to increase the number of slots from 5 to 15 for commercial service airports to participate in the FAA's Privatization Pilot Program. This is a critically important change in the reauthorization as local communities search

for more efficient and effective alternatives to fund large capital projects in their aviation systems.

Summary Statement

Again, I want to thank you, Chairman Costello and committee members, for allowing me to share with you some of my thoughts about the future of our commercial aviation system. As I mentioned, I have serious concerns about proposals to reduce funding for one of this country's most important assets – its airports and related aviation infrastructure. I am at the same time optimistic about the future. As I have traveled the country in my role as a member of the Executive Committee of the Airports Council International – North America, I am constantly reminded of the resourcefulness and creativity of those involved in maintaining and expanding our aviation system on both the local and national levels.

But no matter how resourceful and creative our aviation professionals are, there is only so much they can accomplish with limited funding.

A stronger and enhanced Airport Improvement Program is critical to accommodate the growth of the nation's air transportation system. I urge your consideration to the issues which I have addressed here today, as the committee moves forward with the reauthorization of the FAA's Airport Improvement Program.

Thank you.

United States Government Accountability Office

GAO

Testimony

Before the Subcommittee on Aviation, Committee on Transportation and Infrastructure, House of Representatives

For Release on Delivery
Expected at 10:00 a.m. EDT
Wednesday, March 28, 2007

AIRPORT FINANCE

Preliminary Analysis of Proposed Changes in the Airport Improvement Program May Not Resolve Funding Needs for Smaller Airports

Statement of Gerald L. Dillingham, Ph.D
Director, Physical Infrastructure

GAO
Accountability * Integrity * Reliability

GAO-07-617T

GAO

Highlights

[illegible]

Why GAO Did This Study

[illegible]

March 28, 2007

AIRPORT FINANCE

Preliminary Analysis of Proposed Changes in the Airport Improvement Program May Not Resolve Funding Needs for Smaller Airports

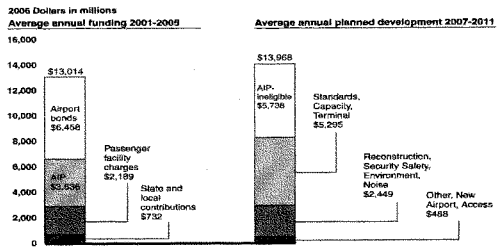
What GAO Found

ACI's estimate for planned development costs is considerably larger than FAA's, reflecting a broader range of projects included as well as differences in when and how the estimates are made. For 2007 through 2011, FAA estimated annual planned capital development costs at $8.2 billion, while ACI estimated annual costs at $15.6 billion. The estimates differ primarily because FAA's estimate only includes projects that are eligible for AIP grants, while ACI's covers all projects, including $5.8 billion for projects not eligible for federal funding, such as parking garages.

From 2001 through 2005, airports received an average of about $13 billion a year for planned capital development. This amount covers all types of projects, including those not eligible for federal grants. The primary source of this funding was bonds, which averaged almost $6.5 billion per year, followed by federal grants and passenger facility charges (PFC), which accounted for $3.6 billion and $2.2 billion, respectively (see figure below). If airports continue to attract this level of funding for planned capital development, this amount would annually fall about $1 billion short of the $14 billion in total planned development costs (the sum of FAA's estimated $8.2 billion in eligible costs and the industry's $5.8 billion in ineligible costs). Larger airports foresee a shortfall of about $600 million annually, while smaller airports foresee a shortfall of $400 million annually.

FAA's reauthorization proposal would reduce the size of AIP by $750 million but increase the amount that airports can collect from PFCs. However, the benefit from increased PFCs would accrue mostly to larger airports and may not offset a reduced AIP grants program for smaller airports. The proposal would also change the way that AIP and other FAA programs are funded. The new fuel taxes that FAA has proposed may not provide the revenues for AIP that FAA anticipates.

Comparison of Historical Airport Funding to Future Development Costs



Sources: GAO analysis of FAA, ACI, Thomas Financial, and state grant data.

Mr. Chairman and Members of the Subcommittee:

I appreciate the opportunity to testify before you today as you consider the Federal Aviation Administration's (FAA) reauthorization proposal including the Airport Improvement Program (AIP) for fiscal years 2008-2010.[1]

Once again, the nation's airports are having to cope with capacity issues. Air traffic has risen back above pre-September 11 levels, as has the level of delays. FAA operates one of the safest air transportation systems in the world, but it is also a system under strain. Already last year, one in four flights was subject to flight delays. In addition, the system is expected to absorb a variety of new and differing aircraft in the future, ranging from the jumbo Airbus A380, which can hold more than 500 passengers, to very light jets, which carry only a few passengers and could greatly increase the number of aircraft in the air. Demand for air travel is expected to reach 1 billion passengers by 2015, according to FAA estimates. The consensus of opinion is that the current aviation system cannot expand to meet this projected growth. FAA is developing a modernization program for its air traffic control system called the Next Generation Air Transportation System (NextGen) to accommodate this growth. To fund this system, FAA has proposed relying on a cost-based system using airline user fees and fuel taxes instead of passenger ticket taxes and other excise taxes that are due to expire at the end of September 2007. In regard to airports, the administration is proposing $2.75 million to fund the AIP program—which is substantially less than the current level—and changing the way that grants to the 3,400 airports in the national airport system are funded and allocated under AIP. The administration's proposal would also allow commercial airports to impose higher passenger facility charges (PFC) to pay for capital projects.[2]

[1]The FAA administers federal funds for airport capital improvements through grants awarded from the Airport and Airway Trust Fund under the AIP.

[2]The PFC Program allows the collection of PFC fees up to $4.50 for every enplaned passenger at commercial airports controlled by public agencies. Airports use these fees to fund FAA-approved projects that enhance safety, security, or capacity; reduce noise; or increase air carrier competition.

In anticipation of this year's reauthorization of FAA, you asked for an update on airports' current funding levels from our previous reports,[3] the sufficiency of those levels to meet planned development, and how the administration's proposed reauthorization will affect airports. For this update, we are providing preliminary responses to these key questions:

- How do FAA and Airports Council International (ACI) estimates of capital development compare?
- How much have airports received for capital development and where is the money coming from?
- If current funding levels continue, will they be sufficient to meet planned capital development costs for 2007 through 2011?
- What are some of the potential effects of changes in how airport development will be funded as part of the administration's FAA reauthorization legislation?

To determine how much planned development would cost over the next 5 years, we obtained planned capital development data from FAA and ACI, a key industry association. To determine the sources of airport funding, we obtained capital funding data from FAA, the National Association of State Aviation Officials (NASAO) and Thomson Financial, a firm that tracks all municipal bond issues. We obtained funding data from 2001 through 2005 because these were the most recent years for which consistent data were available and then adjusted the amounts for inflation to 2006 dollars so that they could be compared to planned development amounts, which are also expressed in 2006 dollars. We screened the planned development and funding data for accuracy and compared funding streams across databases where possible. We did not, however, audit how the databases were compiled. To compare the estimates between FAA and industry, we reconciled survey data and identified areas where the largest differences occur. We reviewed the reliability of these data and concluded that they were sufficiently reliable for our purposes.

[3]In 2003 and 1998, GAO reported on airport financing. See *Airport Finance: Past Funding Levels May Not Be Sufficient to Meet Airports' Planned Capital Development*, GAO-03-497T (Washington D.C.: Feb. 25, 2003) and *Airport Financing: Funding Sources for Airport Development*, GAO/RCED-98-71 (Washington D.C.: Mar. 12, 1998).

We conducted our work from August 2006 to March 2007 in accordance with generally accepted government auditing standards. More details about the scope and the methodology of our work are presented in appendix II.

In summary:

- ACI's estimate of planned development costs is considerably larger than FAA's, reflecting the broader range of projects included as well as differences in when and how the estimates are reported. For 2007 through 2011, FAA estimated annual planned capital development costs at $8.2 billion, while ACI estimated annual costs at $15.6 billion, a difference of $7.4 billion annually. The estimates differ primarily because FAA's estimate includes only projects that are eligible for federal airport improvement grants, while ACI's includes all projects, including those that may not be eligible for federal grants. Types of projects not eligible for federal grants include parking garages and commercial space in terminals. However, even when comparing only AIP-eligible projects, ACI's estimate exceeds FAA's by $1.6 billion annually because of differences in the definition, measurement, and timing of projects.

- From 2001 through 2005, airports received an average of about $13 billion a year for planned capital development from a variety of funding sources. This includes funding for all types of projects, including those not eligible for AIP grants. The primary source of this funding was municipal bond proceeds (backed primarily by airport revenues), which averaged almost $6.5 billion per year, followed by AIP and PFCs which accounted for $3.6 billion and $2.2 billion, respectively. The 67 larger airports, which account for 90 percent of passengers, rely more heavily on bond financing to fund their development, while the other approximately 3,300 smaller airports in the national system are more reliant on federal grants.[4]

- The total of FAA and ACI estimates of planned development for 2007 through 2011 exceeds historical funding levels by about $1 billion annually. The difference between past funding and future development plans is not the same for larger and smaller airports. The 67 larger airports averaged $9.4 billion annually in funding, as compared to $10 billion

[4]We will follow conventions established in GAO's prior report on airport finance in differentiating between larger (large and medium hub airports) and smaller (all other categories of commercial and general aviation airports). See *Airport Finance: Past Funding Levels May Not Be Sufficient to Meet Airports' Planned Capital Development*, GAO-03-497T (Washington D.C.: Feb. 25, 2003).

annually in AIP-eligible and ineligible projects—a difference of $600 million annually. All other airports, including general aviation airports, averaged $3.6 billion annually in funding, as compared to $4 billion annually in AIP-eligible and ineligible project, a difference of $400 million annually.

- The administration's reauthorization proposal would provide more money to larger airports through an increase in PFCs, but its impact on smaller airports is uncertain because these airports are more reliant on AIP, whose funding level is being reduced and whose allocation is being changed. The proposal would reduce the AIP grants program by $750 million (or more than 20 percent of its current level) but increase the amount that airports can collect from PFCs from $4.50 per passenger to $6.00 per passenger, potentially increasing larger airports' collections by $1.1 billion. For smaller airports that collect far less from PFCs, the increase in PFCs may not compensate for the overall reduction in AIP, especially for general aviation airports that have no ability to collect PFCs. As a separate issue, the administration's reauthorization proposal would also change the way that AIP and other FAA programs are funded. The new fuel taxes that have been proposed to fund AIP and other programs may not generate the amount of revenue that is anticipated and additional sources of revenue may have to be found.

The Size and Scope of FAA and ACI Airport Capital Estimates Differ

ACI's estimate of planned capital development costs is considerably larger than FAA's because it reported a broader base of projects. According to FAA's estimate, which includes only projects that are eligible for AIP grants, the total cost of airport development will be about $41 billion, or about $8.2 billion per year for 2007 through 2011. (See table 1.) ACI estimates annual costs of about $78 billion, or about $15.6 billion per year, for the same period. These estimates differ mainly because ACI's estimate includes all future projects that may or may not have an identified funding source or be eligible for federal funding and also because they are based on different estimating approaches. Projects that are eligible for AIP grants include runways, taxiways, and noise mitigation and reduction efforts; projects that are not eligible for AIP funding include parking garages, hangars, and expansions of commercial space in terminals.

Table 1: Average Annual Planned Development Costs Estimated by FAA and ACI, by Airport Type, 2007-2011

Dollars in millions

Airport Type	Number of Airports	Estimated average annual costs	
		FAA	ACI
Larger Airports			
Large hub	30	$3,414	$8,280
Medium hub	37	933	3,066
Subtotal	**67**	**4,347**	**11,346**
Smaller airports			
Small hub	72	629	1,146
Non hub	243	840	840[a]
Other commercial service	135	146	146[a]
Reliever	274	579	579[a]
General aviation	2574	1,528	1,528[a]
New airports	67	111	-
Subtotal	**3,365**	**3,833**	**4,239**
Total	**3,432**	**$8,180**	**$15,585**

Source: GAO analysis of FAA and ACI data

[a]ACI's estimate for these categories of airports is drawn directly from FAA's estimate.

Attempts to Reconcile ACI and FAA Estimates of Planned Development Costs Illustrate Differences

Several factors account for the differences between the FAA and ACI estimates of future development costs. The biggest difference stems from ACI's inclusion of projects that are not eligible for AIP grants, while FAA's estimate includes only AIP-eligible projects (see table 2). However, even when comparing just the AIP-eligible portions of the respective estimates, ACI's estimate is 20 percent ($8 billion in total or $1.6 billion annually) greater. This points to differences in how the two estimates are formed.

Table 2: Comparison of ACI and FAA Estimates of Planned Development for 2007-2011 (Dollars in billions)

Source	Total	For all airports surveyed	For large hubs surveyed	For medium hubs surveyed	For small hubs surveyed
ACI total estimate	**$78**	$51	$36	$11.3	$2.0
Less: AIP-ineligible or unknown	**29**	23	15.2	6.6	.8
ACI AIP-eligible portion	**49**	28[a]	21.2	4.6	1.2
FAA Estimate of AIP-eligible	**41**	21	15.7	3.4	1.3
Difference	**$8**	$7	$5.5	$1.2	$.6

Source: GAO analysis of FAA and ACI data.

[a]Total for large, medium, and small hub airports does not equal all airports surveyed because ACI also surveyed a few GA and nonhub airports.

One difference is the estimating approach. FAA's estimates cover projects for every airport in the national system, while ACI surveyed the 100 largest airports (mostly large and medium hub airports) and then extrapolated a total based on cost per enplanement calculations for small, medium, and large hub airports that did not respond.

Further analysis on a project-by-project level shows variances related to three other factors:

- **Definition**—FAA data are based on planned project information taken from airport master plans and state system plans, minus projects that already have an identified funding source, while ACI includes all projects, whether funding has been identified or not. For example, ACI's estimate for Washington Dulles airport includes $278 million for an automated people mover, but FAA's estimate does not because it is being funded by a PFC approved in 2006.

- **Measurement**—FAA data include only the portion of a project that is eligible for AIP, while ACI estimates the total value project cost. On a terminal construction project at Dulles International Airport, ACI estimated total costs of $1.6 billion for construction; however, only a small portion is eligible for AIP funding. FAA did not report any amount because under FAA AIP rules only a small portion ($20 million) was eligible for AIP funding and the airport had exhausted the AIP funds that could be used for

this type of project.

- **Timing**—The ACI and FAA estimated planned development costs for the same five year time period, but the estimates were made at different times—the ACI survey was completed in early 2007, while FAA's estimate is based on information collected in early 2006. Further, the ACI estimate includes projects that FAA does not believe will be commissioned during the next 5 years. At Fort Lauderdale International Airport, for example, ACI reported a $700 million runway project but FAA reports less than $200 million for the same project. According to FAA, the remaining costs are beyond 2011.

Neither the FAA nor the ACI estimates consider changes in purchasing power of a dollar, which for construction expenses have been greater than the overall inflation rate. ACI estimates that increases in construction costs will increase project costs by roughly 4 percent per year. While FAA acknowledges that construction costs that are rising faster than the inflation rate will increase future project costs, it has not estimated the percentage.

Airports Have Averaged About $13 Billion Annually in Capital Financing over the Last 5 Years and Use a Variety of Funding Sources

From 2001 to 2005, the 3,364 active airports that make up the national airport system received an average of about $13 billion per year for planned capital development from a variety of funding sources. These funds are used for both AIP-eligible and ineligible projects. The single largest source of these funds was bond proceeds, backed primarily by airport revenues, followed by AIP grants, PFCs, and state and local contributions (see table 3).

Table 3: Sources of Airport Funding, 2001- 2005

2006 Dollars in billions			
Funding Source	**2001-2005 average annual funding**	**Percent of total**	**Source of funds**
Airport bonds	$6.5[a]	50	State and local governments or airport authorities issue tax-exempt debt
AIP grants	3.6[b]	29	The Congress makes funds available from the Airport and Airway Trust Fund, which receives revenue from various aviation-related taxes
Passenger facility charges	2.2[c]	17	Funds come from passenger fees of up to $4.50 per trip segment at commercial airports
State and local contributions	.7	4	Funds include state and local grants, loans, and matching funds for AIP grants
Total	**$13**	**100**	

Source: GAO analysis of FAA, Thomson Financial, and state grant data

Note: Totals may not add because of rounding.

[a]Net of refinancing.

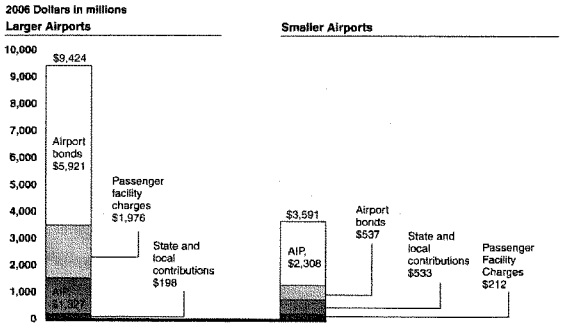
[b]AIP totaled on a fiscal year basis.

[c]Some airports use their PFCs to finance bond issues, as much as 30 percent of PFC collections by some estimates. As a result, the total amount of funds available to airports may be overstated by as much as $660 million (30 percent of $2.2 billion).

The amount and source of funding vary with the size of airports. The nation's 67 larger airports, which handled almost 90 percent of the passenger traffic in 2005, accounted for 72 percent of all funding ($9.4 billion annually), while the 3,297 other smaller commercial and general aviation airports that make up the rest of the national system accounted for the other 28 percent ($3.5 billion annually).[5] As shown in figure 1, airports' reliance on federal grants is inversely related to their size—federal grants contributed a little over $1.3 billion annually to larger airports (14 percent of their total funding) and $2.3 billion annually to smaller airports (64 percent of their total funding).

[5]As noted in Table 3, the total amount of funds may be somewhat overstated because as much as 30 percent of PFCs are used to finance bond issues. This would particularly affect the total for larger airports, which collect most of the PFCs.

Figure 1: Funding Sources by Size of Airport, 2001-2005



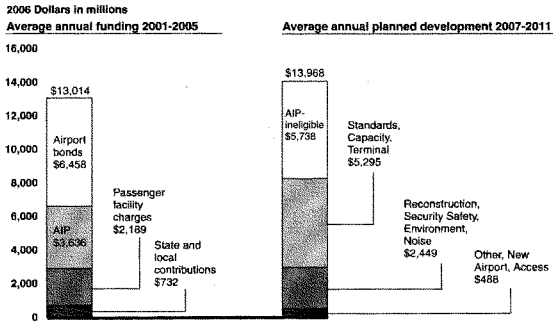
Sources: GAO analysis of FAA, ACI, Thomas Financial, and state grant data.

Note: Totals may not add up due to rounding

Total Planned Development Exceeds Past Funding Levels by About $1 Billion Annually

Based on past funding levels, airports' funding is about $1 billion per year less than estimated planned capital development costs. If the $13 billion annual average funding continues over the next 5 years and were applied only to AIP-eligible projects, it would cover all of the projects in FAA's estimate. However, much of the funding available to airports is for AIP-ineligible projects that can attract private bond financing. We could not determine how much of this financing is directed to AIP-eligible versus ineligible projects. Figure 2 compares the $13 billion average annual funding airports received from 2001 through 2005 (adjusted for inflation to 2006 dollars) with the $14 billion in annual planned development costs for 2007 through 2011. The $14 billion is the sum of FAA's estimated AIP-eligible costs of $8.2 billion annually and ACI's estimated ineligible costs of $5.8 billion annually. The overall difference of about $1 billion annually is not an absolute predictor of future funding shortfalls; both funding and planned development may change in the future.

Figure 2: Comparison of Airport Historical Funding to Future Development Costs



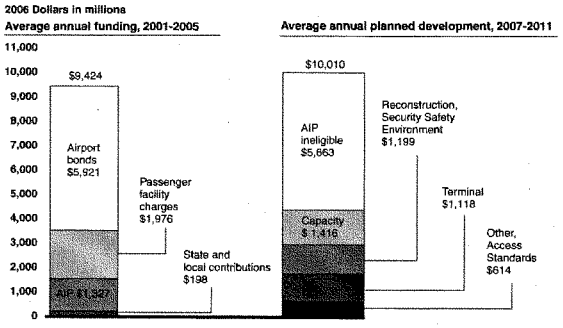
Sources: GAO analysis of FAA, ACI, Thomas Financial, and state grant data.

Note: Totals may not add up due to rounding

Larger Airports—Planned Development Costs Exceed Past Funding by About $600 Million Annually

The difference between current funding and planned development costs for larger airports is about $600 million if both AIP-eligible and ineligible projects are considered. From 2001 through 2005, larger airports collected an average of about $9.4 billion a year for capital development, as compared to over $10 billion in annual planned development costs. Figure 3 shows the comparison of average annual funding versus planned development costs for larger airports. At $5.7 billion annually, the ineligible portion of costs is 57 percent of the total planned development costs.

Figure 3: Comparison of Larger Airports' Historical Funding to Future Development Costs



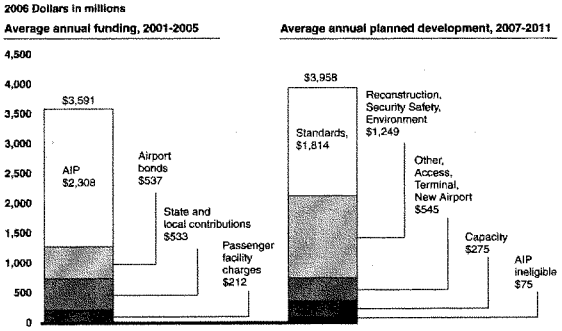
Sources: GAO analysis of FAA, ACI, Thomas Financial, and state grant data.

Note: Totals may not add up due to rounding

Smaller Airports—Planned Development Costs Exceed Past Funding by About $400 Million Annually

The difference between past funding and planned development costs for smaller airports is roughly $400 million annually. At smaller airports, average annual funding from 2001 through 2005 was about $3.6 billion a year (expressed in 2006 dollars). Annual planned development costs for smaller airports from 2007 through 2011 is estimated at about $4 billion. Figure 4 compares average annual funding to planned development costs. As the figure shows, the portion of smaller airports' project costs not eligible for AIP funding is relatively small—about $75 million annually, or about 2 percent of total planned development costs.

Figure 4: Comparison of Smaller Airports' Historical Funding to Future Development Costs



Sources: GAO analysis of FAA, ACI, Thomas Financial, and state grant data.

Note: Totals may not add up due to rounding

Financial Health of Airports Has Improved for Larger Airports

The financial health of airports is strong and has generally improved since September 11, 2001, especially for larger airports. Passenger traffic has rebounded to 2000 levels and bond ratings have improved. Following September 11, many airports cut back on their costs and deferred capital projects. However, credit rating agencies and financial experts now agree that larger airports are generally financially strong and have ready access to capital markets. A good indicator of airports' financial strength is the number and scale of underlying bond ratings provided by bond rating agencies. More bonds were rated in 2007 than 2002, and more bonds are rated at the higher end of the rating scale in 2007, meaning that the rating agencies consider them less of a risk today. Furthermore, larger airports tended to have higher ratings than smaller airports.

Administration's FAA Reauthorization Proposal Would Increase Funding for Larger Airports, while the Effect on Smaller Airports is Uncertain

The administration's reauthorization proposal for AIP would increase funding for larger airports, but its effect on smaller airports is uncertain because of the overall reduction in AIP and the proposed changes in how AIP grants are allocated between larger and smaller airports. The 2008 fiscal year budget reduces AIP funding from its past level of $3.5 billion in fiscal years 2006 and 2007 to $2.75 billion in 2008. The proposal also would eliminate entitlement, otherwise known as apportionment, grants for larger airports while increasing the PFC ceiling from $4.50 to $6 per passenger.[6] While larger airports that account for 90 percent of all passengers will come out ahead, an increased PFC may not compensate smaller airports for the overall reduction in AIP, even with the proposed changes in how AIP is allocated between larger and smaller airports. As a separate issue, the administration's reauthorization proposal would change the way that AIP and other FAA programs are funded and may not provide enough monies for these programs, even at the reduced levels proposed by the administration.

Administration's FAA Reauthorization Proposal Would Make Fundamental Changes in AIP

The administration's 2008 FAA reauthorization proposal would reduce AIP, change how AIP is allocated, and increase the PFC available to commercial airports. (Key changes in the proposal's many elements are outlined in appendix I.) Unlike previous reauthorization proposals, which made relatively modest changes in the structure of the AIP program, this proposal contains some fundamental changes in the funding and structure of the AIP program. Notably, following the pattern set by the 2000 FAA reauthorization,[7] which required larger airports to return a certain percentage of their entitlement funding in exchange for an increase in the PFC, the administration proposes eliminating entitlement grants for larger airports altogether and at the same time allowing those airports to charge a higher PFC.

The reauthorization proposal would eliminate some set-aside programs and increase the proportion of discretionary grant funds available to FAA at higher AIP funding levels. Table 4 compares AIP funding allocations under the current funding formulas to the proposed reauthorization

[6]AIP grants generally consist of two types—(1) entitlement funds that are apportioned to airports or states by formula each year based on the number of airport passengers or state population and (2) discretionary funds that FAA approves based on a project's priority.

[7]The Wendell H. Ford Aviation Investment and Reform Act for the 21st Century, Pub. L. No. 106-81 (Apr. 5, 2000).

allocations at both the current $3.5 billion level and at the proposed $2.75 billion level. Another change is to the entitlement formulas—for example, removing the funding trigger in current law that doubles the amount of entitlement funds airports receive if the overall AIP funding level is above $3.2 billion—is intended to make more discretionary funding available. According to FAA officials, their objective is to increase the amount of discretionary funding for airports so that higher priority projects can be funded; however, that is only achieved when total AIP funds are greater than the $2.75 billion budgeted by the administration. For example, at $2.75 billion in AIP, the current law would generate $967 million in discretionary grants versus $866 million under the proposed reauthorization. This reverses at $3.5 billion in AIP funding, for which the proposal generates $1.328 billion in discretionary grants versus $845 million under current law.

Table 4: Estimated Distribution of AIP Funds at $2.75 and $3.5 Billion Funding Levels under Current and Proposed Authorization Formulas

Dollars in millions				
	AIP allocations under current law compared to proposed reauthorization			
	Current law	**FY2008 as proposed**	**Current law**	**FY2008 as proposed**
	$2.75 Billion		**$3.5 Billion**	
AIP funding (after administrative and other costs)	**$2,636**	**$2,636**	**$3,386**	**$3,386**
Entitlements				
Primary airports				
Large	92	81	$184	$92
Medium	56	49	111	56
Small	131	230	262	262
Nonhub	154	269	307	307
Subtotal primary airports	433	629	864	717
Cargo	92	81	118	118
Alaska supplemental	11	19	21	21
Nonprimary entitlements	0	309	385	431
State apportionment	488	300	292	339
Carryover entitlements	432	432	432	432

Dollars in millions

	AIP allocations under current law compared to proposed reauthorization			
	Current law	FY2008 as proposed	Current law	FY2008 as proposed
	$2.75 Billion		$3.5 Billion	
Subtotal entitlements	**1,455**	**1,769**	**2,113**	**2,058**
Small airport fund				
Nonhub commercial service	123		245	
Nonprimary airports	61		122	
Small hub	31		61	
Subtotal entitlements and nondiscretionary	**1,669**	**1,769**	**2,541**	**2,058**
Discretionary				
Noise set-aside	338	211	296	271
Reliever set-aside	0		6	
Military Airports (MAP) set-aside	39		34	
Subtotal disc set-asides	377	211	336	271
Small airport discretionary fund		136		266
Capacity, safety, security, noise	442	389	382	594
Remaining discretionary	147	130	127	198
Subtotal discretionary	**967**	**866**	**845**	**1,328**
Total AIP available for grants	**$2,636**	**$2,636**	**$3,386**	**$3,386**

Source: FAA

Increasing the PFC Would More Than Offset Loss of AIP Entitlements For Larger Airports but Impact on Smaller Airports Is Uncertain

The administration's proposed reauthorization would allow airports to increase their PFC to a maximum of $6 and allow airports to use their collections for any airport projects while forgoing their entitlement funds. A $6 PFC could generate an additional $1.1 billion for larger airports that currently have a PFC in place, far exceeding the $247 million in entitlements that FAA estimates they would forego under this reauthorization proposal (see table 5).[8] However, the impact on smaller airports is uncertain because they collect far less in PFCs and are more reliant on AIP for funding. A change to a $6 PFC would yield an additional $110 million for small hub airports based on airports that currently have a PFC in place and $132 million if every one of the small hub airports had a $6 PFC. It is uncertain whether the proposed allocation of AIP under the administration's proposal would shift a greater proportion of funds to smaller airports to compensate for the overall reduction in AIP. The reauthorization proposal would also relax project eligibility criteria to allow airports to use their collections in the same way as they use internally generated revenue, including off-airport intermodal transportation projects. The application and review process would also be streamlined; as a result, FAA would no longer approve collections but rather ensure compliance with PFC and airport revenue rules.

Table 5: Projected PFC Collections with a $6 PFC

Dollars in Billions		2005 Collections if $6 PFC			
	2005 Collections	Current incidence of PFCs	Increase over 2005 collections	If all airports had a $6 PFC	Increase over 2005 collections
Large hub	$1.769	$2.594	$.825	$2.695	$.925
Medium hub	.442	.725	.283	.781	.339
Subtotal	**2.211**	**3.319**	**1.108**	**3.476**	**1.265**
Small hub	.170	.281	.110	.302	.132
Total	**$2.381**	**$3.599**	**$1.218**	**$3.778**	**$1.397**

Source: GAO analysis of FAA data

[8]This calculation assumes that the increased PFC would not affect passenger demand for air travel. GAO has previously calculated that a PFC increase could reduce passenger demand. See *Passenger Facility Charges: Program Implementation and the Potential Effects of Proposed Changes*, GAO/RCED-99-138 (Washington D.C.: May 19, 1999).

Airport Privatization

The administration's proposal would modify the current pilot program on private ownership of airports in two key ways. First, the proposed modifications will expand eligibility beyond the current statutory limit of 5 to 15 airports. Restrictions limiting participation in the pilot program to specific airport size categories would also be eliminated. Second, the pilot program would be amended to eliminate the veto power that airlines can exercise under current law to prevent privatization transactions at commercial airports. Under current law, the sale of an airport to private interests may only proceed if a super-majority of the airlines at that airport approve of the sale or lease.[9] Additionally, the airline veto power to prevent fee increases higher than inflation rates would be repealed. In place of these veto powers, the airport sponsor would need to demonstrate to the Secretary of Transportation that the airlines using that airport were consulted prior to the transaction proceeding.[10]

Congress established the Airport Privatization Pilot Program in October 1996 to determine if privatization could produce alternative sources of capital for airport development and provide benefits such as improvements in customer service. It also hoped to determine if new investment and capital from the private sector could be attracted through innovative financial arrangements. Proponents of privatization believe that the privatization of airports can lead to capacity-increasing investment in airports through the commitment of private capital, lower operating costs, and greater efficiency and that privatization can increase customer satisfaction.

Overall, there has been relatively little interest in the current pilot program. Six airports have applied for participation in the program and three of those airports withdrew their applications in 2001. To date, Stewart International Airport, located in Newburgh, New York, is the only airport accepted into the pilot program. The airport received this exemption in March 2005, but is currently being purchased back by a public owner, the Port Authority of New York and New Jersey. In September 2006, the City of Chicago submitted a preliminary application for Chicago Midway International Airport. FAA completed its review of the Midway preliminary application and determined that it meets the

[9]The law defines super-majority as at least 65 percent of the scheduled air carriers at a primary airport.

[10]At non-primary airports, the exemption would continue to be based on consultation with at least 65% of the based-aircraft owners.

procedural requirements for participation in the pilot program. Consequently, the City of Chicago can now proceed to select a private operator, negotiate an agreement, and submit a final application to FAA for exemption.

Proposed Fuel Tax Rates May Not Yield the Revenue Anticipated to Fund AIP

In addition to concerns about the level and allocation of AIP funds, another concern is that the fuel tax revenues that the administration's reauthorization proposal has designated to largely fund AIP after 2009 may not be as great as anticipated. Currently, AIP and other FAA programs are principally funded by the Airport and Airway Trust Fund (trust fund), which receives revenue from passenger ticket taxes and segment taxes, airline and general aviation fuel taxes, and other taxes. The administration's reauthorization proposal would fund air traffic control through user fees for commercial aircraft and fuel taxes for general aviation while limiting the sources of revenue for the trust fund and its uses. Under the proposal, beginning in 2009, the trust fund would continue but only to fund three programs—AIP, Research, Engineering and Development (RE&D), and Essential Air Service (EAS)—and would be funded solely by an equal fuel tax on commercial and general aviation fuel purchases and an international arrival and departure tax.

FAA officials confirmed for us that in estimating fuel tax revenues they did not take into account possible reductions in fuel purchases due to the increase in the tax rates. Although we do not know by how much such purchases would decline, conventional economic reasoning, supported by the opinions of industry stakeholders, suggests that some decline would take place. Therefore, the tax rate should be set taking into consideration effects on use and the resulting impact on revenue. FAA officials told us that they believe that these effects would be small because the increased tax burden is a small share of aircraft operating costs and therefore there was no need to take its impact into account. Representatives of general aviation, however, have said that the impact could be more substantial. If consumption possibly falls short of projections or Congress appropriates more funds for AIP, RE&D, or EAS than currently proposed, then fuel tax rates and the international arrival and departure tax would correspondingly have to be increased or additional funding from another source, such as the trust fund's uncommitted balance or the General Fund, would be needed.

In conclusion, Mr. Chairman, airports have rebounded financially from the September 2001 terrorist attacks. We expect the demand for air travel to continue to increase, the system capacity to be stretched, and airports to

increase their demand for capital improvements to relieve congestion and improve their services. As Congress moves forward with reauthorizing FAA, it will have to decide on several key issues, including how it wants to fund and distribute grants under the AIP. While some elements of the administration's proposal are to be commended—for example, simplifying the funding formulas and giving FAA more discretion to fund high priority projects—other parts of the proposal raise concerns. For example, the extent to which the administration's proposed cuts in AIP funding will affect development at smaller airports is unclear.

GAO Contacts and Staff Acknowledgements

For further information on this statement, please contact Dr. Gerald Dillingham at (202) 512-2834 or DillinghamG@gao.gov. Individuals making key contributions to this testimony were Paul Aussendorf, Jay Cherlow, Jessica Evans, David Hooper, Nick Nadarski, Edward Laughlin, and Stan Stenersen.

Appendix I: Key Changes Proposed in AIP

Feature	Current authorization for AIP	Proposed AIP reauthorization
Funding	Trust fund for all capital programs are funded by an airline ticket tax, segment tax, international departure and arrival taxes, varying rates of fuel taxes and other taxes. Funding for AIP is appropriated from the trust fund.	Trust fund is funded by fuel tax of 13.6 cents/gallon for commercial and general aviation and a reduced international arrival and departure tax. Funding for AIP is appropriated from the Trust Fund. If AIP is increased, the tax rates would have to be increased, the trust fund's uncommitted balance would have to be drawn down, or another funding source would have to found.
Entitlements	Up to 75 percent of entitlements for large and medium hub airports collecting a PFC are turned back to the small airport fund.	Entitlements for large and medium hub airports eliminated by 2010.
	If AIP greater than $3.2 billion, primary airport entitlements are doubled.	$3.2 billion trigger for doubling entitlements is eliminated except for small and nonhub primary airports.
	State apportionment is 20 percent of AIP (18.5 percent if AIP is less than $3.2 billion).	State apportionment set at greater of 10 percent of AIP or $300 million.
	Nonprimary airport entitlement of up to $150,000.	The nonprimary airport minimum entitlement of $150,000 per airport is eliminated and replaced by a tiered system of entitlements ranging from $400,000 for large general aviation airports to $100,000 for smaller general aviation airports. The 750 airports that have less than 10 operational and registered based aircraft are guaranteed nothing.
Discretionary	Reliever and military airport set asides minimum discretionary funding set at $148 million.	The set-aside for reliever and military airports is eliminated.
	Small airport fund funded by large and medium hub airport PFC turnbacks of up to 75 percent of PFC collections.	Minimum discretionary funding set at $520 million.
		Small airport fund equal to 20 percent of discretionary funds.
Project eligibility	Most types of airfield projects, excluding interest costs, nonrevenue producing terminal space and on-airport access project costs. General aviation airports may use their entitlement funds for some revenue producing activities (e.g., hangars).	Expanded to include additional revenue producing aeronautical support facilities (e.g., self-service fuel pumps) at general aviation airports.

Feature	Current authorization for AIP	Proposed AIP reauthorization
Local government share of project cost (local match)	Government share set at 95 percent for smaller airports through 2007, and 75 percent for large and medium hub airports (noise 80 percent).	Eliminates 95 percent government share except for the very smallest airports. Now maximum share will be a flexible amount with a maximum percentage of 90 percent. Airfield rehabilitation projects lowered to 50 percent maximum at large and medium hubs.
PFCs	Maximum rate is $4.50 per passenger.	Maximum rate is $6 per passenger.
	All applications subject to FAA review.	Review and approval is streamlined.
	PFCs can be used for all AIP eligible projects, but also interest costs on airport bonds, terminal gates and related areas, and noise mitigation can also be used.	Eligibility expanded to include almost any airport –related project, including off-airport intermodal projects.
		Up to 10 large and medium hub airports willing to assume the cost of air navigation facilities are allowed a $7 PFC.
Privatization	Up to five airports, one of each size, with strict limit on rates and charges and requires approval by 65 percent of airlines.	Up to 15 airports of any size, no limit on rates and charges and no airline veto, but subject to DOT review and approval.

Source: GAO.

Appendix II: Scope and Methodology

To determine how much planned development would cost over the next 5 years, we obtained planned development data from the Federal Aviation Administration (FAA) and Airports Council International-North America (ACI). To determine how much airports of various sizes are spending on capital development and from which sources, we sought data on airports' capital funding because comprehensive airport spending data are limited and because, over time, funding and spending should roughly equate. We obtained capital funding data from the FAA, ACI, the National Association of State Aviation Officials (NASAO), and Thomson Financial—a firm that tracks all municipal bonds. We screened each of these databases for their accuracy to ensure that airports were correctly classified and compared funding streams across databases where possible. We did not, however, audit how the databases were compiled or test their overall accuracy, except in the case of state grant data from the NASAO and some of the Thomson Financial bond data, which we independently confirmed. We determined the data to be sufficiently reliable for our purposes. We subtotaled each funding stream by year and airport category and added other funding streams to determine the total funding. We met with FAA, bond rating agencies, bond underwriters, airport financial consultants, and airport and airline industry associations and discussed the data and our conclusions to verify their reasonableness and accuracy.

To determine whether current funding is sufficient to meet planned development for the 5-year period from 2007—2011 for each airport category and overall, we compared total funding to planned development. We correlated each funding stream to each airports' size, as measured by activity, and among other funding streams to better understand airports' varying reliance on them and the relationships among sources of finance. We then discussed our findings with FAA, bond rating agencies, bond underwriters, airport financial consultants, and airport and airline industry associations to determine how our findings compared with their knowledge and experiences.

To determine some of the potential effects from changes to how airport development is funded under the administration's proposed FAA reauthorization legislation, we first analyzed the suggested changes to the Airport Improvement Program's (AIP) funding and allocation. In particular we analyzed the effect of various funding levels on how the program funds would be allocated. Second, we evaluated the effects of raising the passenger facility charge (PFC) ceiling, as the administration proposal suggests, by estimating the potential PFC collections under a $6 PFC on the basis of 2005 enplanements and collection rates assuming all airports imposed a $6 PFC. Third, we determined the status of FAA's pilot program

for airport privatization. Moreover, we discussed the impact of all of the proposed changes (funding/allocation, $6 PFC, and privatization) with FAA, bond rating agencies, bond underwriters, airport financial consultants, and airport and airline industry associations.

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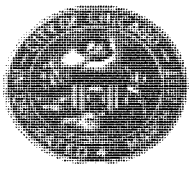

Department of Aviation

Statement of Commissioner Nuria I. Fernandez City of Chicago, Department of Aviation Before the U.S. House of Representatives Committee on Transportation and Infrastructure, Subcommittee on Aviation
March 28, 2007

Good Morning, Chairman Costello, Ranking Member Petri, and members of the House Transportation and Infrastructure Committee, Subcommittee on Aviation. Thank you for the opportunity to appear before this Subcommittee today to testify about the Airport Improvement Program and airport funding in general as it relates to the Administrations' FAA Reauthorization proposal.

Before I continue with the discussion regarding the Administrator's proposal, I would like to take this opportunity in appearing before you to thank this honorable body for your support to the Chicago Airport System on our efforts to modernize O'Hare and Midway Airports.

I am here, not only to represent the interests of the City of Chicago, and our two airports, O'Hare, and Midway, but also to represent the interests of other large airports; airports that are facing similar challenges on how to upgrade aging infrastructure and to keep pace with growing demand.

In the coming years it will take billions of dollars to maintain vital airport infrastructure and billions more to increase capacity. Now include the FAA's need to modernize the air traffic control system and you will understand that robust and dependable funding for the air transportation system is an urgent national priority.

Airport financing is a key element to meeting the needs of the growing demand for air travel. The FAA has projected that air traffic will reach the one billion enplanement-per-year level by 2015. Moreover, by FAA's own forecasts, O'Hare International Airport is expected to increase in traffic from 37 million enplanements in 2006 to 53 million in 2020. Similarly, Midway International also anticipates dramatic increases in air traffic. In 2006, Midway airport experienced 8.9 million enplanements and current forecast will double that traffic by 2020 to 16.3 million enplanements. Without the proper financing for capacity-increasing projects, it will be difficult for airports to safely and efficiently accommodate this substantial growth in air traffic. The ability of airports to find a reliable source for their capital needs will be critical to the future of aviation.

The O'Hare Modernization Program or "OMP" is a prime example of how crucial the different funding mechanisms are and how they are being used to finance capacity

enhancing projects. Over 35% of the funding for Phase One of the OMP is comprised of AIP Grants and PFC funding. As we work towards Phase Two, AIP and PFC will again play a significant role in funding the completion of the OMP.

First, I'd like to discuss the importance of the PFC provision in the Reauthorization proposal. We believe that the FAA's decision to increase the cap on the PFC to $6.00 is a step in the right direction, but it does not go far enough. We recommend that the Congress set the PFC cap at $7.50 and index it to inflation. The ravages of inflation have diminished the power of the existing PFC to fund needed airport projects and airports will need access to a source of fund that can stand the test of time.

The time value of money, along with the increase in construction costs necessitates not only an increase in the PFC, but also an indexing of the PFC in order to preserve its buying power over time. When PFC's were initially authorized in the Aviation Safety and Capacity and Expansion Act of 1990, airports discovered a new way to augment their capital financing needs. The PFC's also provided a relief in the tug of war between large airports and small airports for capital dollars.

However, in the last 17 years, inflation and the dramatic rise in construction costs have contributed to the erosion of the PFC's original impact. If you factor in the time value of money, along with the inflation in the construction industry, a $4.50 PFC in 2000 would have to be adjusted to $7.20 in order to merely preserve the buying power.

Please note that an increase in the PFC cap is merely that - a ceiling limit. It does not require all airports to adopt the $7.50 PFC, but rather, gives each airport the flexibility to decide. Market principles and agreements with the airlines will determine the level of PFC that will be imposed. Lifting the cap will only increase the flexibility of each airport's ability to tap a financing source.

We appreciate that the FAA was receptive to the concerns of airports that the existing PFC application process is overly bureaucratic and burdensome to the airports. The process was not only arduous, but also caused unnecessary delays and expenses. We are grateful the FAA has proposed new measures that will streamline the PFC application process.

Second, a balanced capital investment strategy for airports requires a strong AIP program. AIP is important to airports of all sizes. We were encouraged that the Administration included an increase in the AIP discretionary account and that all existing AIP Letter of Intent commitments will be honored.

For large airports, a robust AIP discretionary program is vitally important. These are the funds that airports such as O'Hare use to implement critical safety and capacity enhancing projects. The first phase of the OMP is applying $300 million in AIP discretionary funding to its implementation. At Midway, the vast majority of funding for the Engineered Material Arresting System (EMAS) at the end of the runways is being financed through AIP discretionary grants. AIP discretionary funds are also an important

component that fund environmental programs at airports. The residential and school sound insulation programs that make airports compatible with the surrounding communities are dependant on discretionary funding. So is the environmental grant program that helps airports fund air quality improvement projects.

Additionally, we are concerned with the potential decrease in the AIP match percentage for certain airport projects. FAA's required contribution percentages should be maintained. This will provide better incentive to protect from future unfunded or minimally funded federal mandates.

Contained in the Administration's proposal are two provisions that Chicago has concerns with. They both pertain to federal control of access to airports. In the Administration's proposal to introduce a user fee system there are provisions to charge higher fees for aircraft operating at hub airports. This proposal requires the FAA to consult with the airlines but no specific language requiring the consultation of the airport. Airports work hard to control costs so that they remain cost competitive. Airport fees structures are managed by local officials that are trying to strike the proper balance charging fees that can attract additional air service while still maintaining airport facilities that enhance the travel experience. With this proposal, the federal government will now have significant influence on the economics of an airport and could potentially throw airport financing and competition out of balance.

The same issues are repeated in the Administration's proposal for congestion management. The Administration's proposal calls for a "pilot" program whereby airports can implement congestion management or the FAA can force congestion management onto an airport. Any congestion management scheme has to be given serious consideration before it is implemented and the final determination on if and how it is implemented absolutely must be a decision of the local airport operator.

Market-based mechanisms such as congestion pricing schemes or auctions can be anti-consumer, anti-competitive, and can hurt the ability of the airport to control the pricing for its landing fees. Small communities are particularly at risk for negative impacts because they are abandoned for more lucrative, larger markets when slots become valuable, scarce resources. The City requests that the airport retains control over any congestion management program and that proceeds from the program go directly to the airport for use in capacity enhancing projects.

We fear that the future growth at airports may be stunted by congestion constraints. As it is today, O'Hare is constrained by flight caps, which only serve to make slots a scarce commodity, which can be sold by the airlines and practically act as a barrier to entry for new airlines in the O'Hare market.

The existing rule capping flights at O'Hare will expire just prior to the commissioning of the first new runway at O'Hare in 30 years. We expect that the flight caps will not be renewed by the FAA for once the north runway is commissioned; O'Hare will see a reduction in delays and improve the airport's on-time performance. We plan on returning

to an open aviation market that reinvigorates competition and provides unrestricted access to economic growth for the Chicago region.

Again, I would like to express my gratitude to this Subcommittee for the opportunity to share my views on these important issues. I would also like to acknowledge the FAA for being responsive to the needs of airports, and look forward to working further with Congress and FAA officials on a plan that would help airports meet the financing needs to be prepared for the future air travel demand.

STATEMENT OF

THE HONORABLE JAMES D. HEALY
COUNTY BOARD MEMBER
DUPAGE COUNTY, ILLINOIS

ON BEHALF OF THE
NATIONAL ASSOCIATION OF COUNTIES

ON
AIRPORT IMPROVEMENT PROGRAM

BEFORE THE
SUBCOMMITTEE ON AVIATION
COMMITTEE ON TRANSPORTATION AND
INFRASTRUCTURE

MARCH 28, 2007
WASHINGTON, D.C.

Mr. Chairman:

Good morning. My name is James Healy and I am a County Board Member from DuPage County, Illinois. Today I am representing the National Association of Counties (NACo), which represents America's 3100 urban, suburban and rural counties.

I am pleased to be here today to provide the House Subcommittee on Aviation with NACo's views on the Airport Improvement Program (AIP), a very important program for our members. Counties own about one-third of the nation's commercial and general aviation airports. This includes some of the largest commercial airports in the United States, including those hubs in Miami, Las Vegas, Cincinnati, Milwaukee, Fort Lauderdale, and Orange County, California. We also own, or have county reprcsentatives on airport authorities, at many small airports with commercial service, such as the Williamson County Regional Airport in Illinois and the Outagamie Regional Airport in Wisconsin. And of course, counties operate hundreds of general aviation (GA) airports, including the facility owned by my county, the DuPage Airport, the fourth busiest airport in Illinois and a reliever for O'Hare.

NACo adopted its policy earlier this month at its Legislative Conference on the Reauthorization of the Federal Aviation and Airport Program. Much of the policy related to the AIP program. Airports are going to become substantially more congested, with more enplanements, and the existing infrastructure, both airside and landside, will be strained by that increased usage. For instance, Williamson County Regional Airport has a five-year $6.6 million capital improvement plan. Our experience is that capacity has infrequently been overestimated and has frequently been underestimated or suffered from lack of investment.

To that end, we recommend that the AIP program be funded at a level of no less than $4 billion annually during the reauthorization period of the next aviation bill. Further, we support guaranteed funding of the AIP program through the existing point of order

provisions or an even stronger guarantee. We note that the House Budget Resolution assumes AIP funding that averages about $4 billion per year over the next four years. The AIP program has increased from $1.9 billion in 2000 to $3.5 billion in 2007 and the need for that increase was apparent. Certainly one way to help ensure that higher funding occurs is to index the revenue sources of the Aviation Trust Fund, such as the ticket tax and fuel taxes, and adjust them annually. NACo believes the current revenue structure, in place since 1970, and revenue sources for funding the AIP program have worked. We also note that the Federal Aviation Administration's (FAA) proposed funding of the Trust Fund would come from a 13.6 cent fuel tax and is likely to lead to a substantially smaller AIP program. Also, an unknown is whether the proposed 70 cent fuel tax on GA may lead to lower consumption and hence less revenue.

In this context, NACo would oppose a user fee based on air traffic control usage imposed on General Aviation as this would be counterproductive and lead to lower usage of those county-owned facilities. In many cases this would mean less revenue for the airports. This would undermine the investments that county governments have made in such facilities.

In connection with revenue raising, NACo does support allowing local sponsors to increase the Passenger Facility Charges (PFC) to a level of no less than $6.00. Of course, if this happens we cannot accurately predict how many airports will take advantage of the increase and how much revenue will be generated.

Airport sponsors must have the flexibility to invest AIP and PFC funds. In particular, the AIP program, which is the less flexible of the two, should allow for more investment in landside and off airport capital projects that are closely related to the operation and success of an airport. That includes roads, interchanges and public transit that are integral components to the growth and sustainability of the airport. The priorities of the owners of the airports must be recognized. As elected officials and consumers we all know that easy and fast access to airports, particularly commercial airports, is an important part of the overall flying experience. Without diminishing the need for

improvements to runways and taxiways, as a county official responsible for finding funds to pay for all projects to improve service for users of our airports, we need to pay attention to funding all projects related to airport development. While passengers need to be assured of the dependability of their flights, they also need to feel they can get to the airport easily and on time. This is especially true given all the extra time passengers need at airports for security procedures. In federal transportation policy in general, it is also important to begin moving away from the silo approach to mobility and begin to think of a comprehensive system for moving our citizens.

NACo members, particularly those owning and operating GA airports, are running into certain restrictions being imposed on what can be funded with AIP dollars. At DuPage Airport, our application for funding for a larger emergency response vehicle more appropriate for our fleet mix has been denied. While such vehicles are eligible by statute for AIP funding, the FAA has stated that funding our request would set a precedent for funding all GA airports requests for firefighting vehicles. While not a commercial airport, we have large corporate aircraft using our airport equivalent in size to regional jets now routinely utilized by commercial airlines, and we need increased emergency response capacity. Allowing us to use AIP funds for these purposes does not tie FAA into doing so at every small GA airport. We also need to be able to use AIP funds for better security, such as the purchase of automatic access control systems. Again, we are a large GA airport in the Chicago metropolitan area and we need to address the security issues of the post-9-11 era. If AIP funds cannot be used for such projects, a new federal program for GA airports needs to be created and funded.

Outagamie County, Wisconsin is a member of NACo and operates the Outagamie County Regional Airport, a commercial airport in Appleton, Wisconsin. The AIP program has allowed this facility to expand and better serve a region of 400,000-500,000 people. The county is currently involved in a $7.2 million parking/access project but is unable to use AIP funds for a new road into the airport and other related expenses.

We have received feedback from some of our members regarding the eight-state AIP block grant program. In summary, it simply imposes another unnecessary administrative layer between the airports and the FAA and the state aviation agencies often provide a lower level of service than the FAA. We recommend the elimination of this program and permit airports to work directly with the FAA. Where smaller GA airports don't have the expertise to prepare grant documentation, nothing prevents them from getting the technical assistance of the state agencies.

Finally, we urge the subcommittee to look for ways to minimize the delays in the environmental permitting process for AIP, PFC and other capital projects. There needs to be better coordination between agencies and a more concurrent approval process.

This completes my testimony and I would be happy to answer any questions that members of the subcommittee may have.

Statement of
Douglas S. Kimmel, Airport Manager
Williamson County Regional Airport

Regarding the
Federal Aviation Administration's
Airport Improvement Program

Before the
Transportation and Infrastructure's
Subcommittee on Aviation
March 28, 2007

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INTRODUCTION

Chairman Costello, Representative Petri and members of the Aviation Subcommittee, I am honored to appear before you today to discuss the Airport Improvement Program (AIP) and its significance to Williamson County Regional Airport. I would like to thank each of you for this opportunity to review certain issues that pertain to the proposed Federal Aviation Administration (FAA) Reauthorization Bill and the impact each has on AIP and smaller airports throughout the country.

AIRPORT OVERVIEW

Williamson County Regional Airport is a non-hub, primary commercial service airport located in Southern Illinois. Scheduled flights include daily service to St. Louis by American Connection, and to Chicago-Midway by Mesa Airlines. Flights to St. Louis are reliant upon funding provided under the Department of Transportation's (DOT) Essential Air Service (EAS) program, while flights to Chicago have recently commenced under an air service development program funded by the State of Illinois. Passenger enplanements for scheduled air carrier service at our airport in 2006 were approximately 12,000.

In addition to scheduled airline service, our airport accommodates a variety of other aviation activity, including: Scheduled air cargo operations; air taxi/charter service operations; military and civilian flight training; local and itinerant business aviation flights; large air carrier charter operations; air ambulance flights; and numerous other commercial and private general aviation flight activities.

On average our airports accommodates 50 based aircraft and approximately 30,000 annual operations. A vast majority of these operations are handled safely and efficiently through the services of our federally contracted air traffic control (ATC) tower operated under DOT's contract tower program. Though operations are currently on the upswing, a decline over just the past few years will likely result in the airport paying a local share in the coming year under the cost-sharing provision of this program in order to maintain these critical ATC services.

The airport's services and benefits are not limited to aviation alone. We currently accommodate 3 non-aviation businesses in the airline terminal, 10 non-aviation business developments in the airport business park, a county fire protection district station, storage facilities for state and local emergency services equipment, farming operations, and Illinois National Guard armory. When combined, businesses located at the airport account for approximately 250 jobs in our region.

Available business park lots and industrial sites on airport property also provide an attractive location with incentives for existing or future businesses to locate or expand. In March of 2000, a report entitled the Economic Impact of Illinois Airports produced by the Illinois Department of Transportation concluded that our airport's total economic

impact to the region was in excess of $10 million. Given the positive growth our airport and region have realized since that time, it would be a fair assessment to say that figure has most likely doubled.

Though the services and benefits our airport provides to the surrounding region are significant, so too is the reality of the challenges we face financially in order to sustain the necessary capabilities to operate, maintain, and develop the facility. In any given year, operating revenue received from rents, fees, and real estate taxes can only be expected to cover the costs of operating and maintaining the airport facilities. Capital improvements such as runway, taxiway, and ramp projects, land acquisition, certain equipment purchases, or security and safety improvements can only be accomplished with the federal financial assistance provided through AIP.

AIRPORT IMPROVEMENT PROGRAM

Since 1982, the AIP grant program has been a major component of airport planning and capital funding providing for important safety, security, capacity, and environmental projects at airports across the country. In fact, for smaller airports, AIP is relied upon and remains the primary source of capital funding. According to the FAA, AIP funding accounts for approximately 90% of capital expenditures for our nation's smaller airports.

In recent years, Williamson County Regional Airport has relied on AIP funding in order to extend our primary runway to meet demand, acquire property to ensure future development capabilities, remove obstructions to provide for safe operations, maintain and expand aircraft parking and taxiway areas for current and future operations, and acquire Aircraft Rescue and Fire Fighting equipment to meet increased federal airport certification requirements. These projects are not opulent undertakings, but rather represent the necessary investments and improvements that such a facility requires, and that we as administrators of public airports are obligated to plan for and provide.

Unfortunately, under the current FAA funding proposal, AIP would be cut by almost $1 billion from existing authorized levels. This, at a time when the FAA's own forecast calls for an increase in the need for AIP project funding from 2007 to 2011 (an amount of approximately $8.24 billion per year) is troublesome to say the least. Over the next five years alone, Williamson County Regional Airport has identified project needs in excess of $6.6 million in AIP funding. With airport demands continuing and/or increasing, along with inflation and the cost of construction increasing, how can we as an industry be expected to keep up year after year while we consistently struggle to maintain historical levels of funding - let alone realizing justifiable increases?

Mr. Chairman and members of the Subcommittee, your continued oversight and support of AIP will be critical to putting an end to such reversionary funding proposals. Specifically, I would ask that you account for the capital development needs of our

nation's airports by supporting the following funding levels:

FY08 $3.8 Billion **FY10 $4.2 Billion**
FY09 $4.0 Billion

General Fund Contribution: Certainly a key component of what funds the FAA and ultimately what is available through AIP is the general fund contribution. Historically this contribution has been as high as 48%, but has averaged 27%. In FY08 the FAA reauthorization proposal calls for an 18.6% general fund contribution, and unfortunately once again, declining amounts proposed for FY09 and FY10.

Mr. Chairman we have an opportunity now to set a standard for funding in the years to come – one that will provide stability and a sense of purpose to the planning, development, and implementation of improvement projects at our nation's airports. A consistent approach to funding needs to be in place in order to achieve this. As such, I would ask that a minimum level of 25% is established as the general fund contribution for each year of the reauthorization period.

Federal Match: Another aspect of the proposed reauthorization that would have a significant negative impact on smaller airports is the reduction of the federal share for certain airport projects from 95% to 90%. Though the increased federal participation implemented through Vision 100 may have been intended to be temporary, unfortunately many of the post 9/11 changes that have impacted the industry are not. In addition, if adequately funded as noted above, AIP funding levels can support the 95% federal matching share currently in place.

Increasing smaller airport's contributions to 10% will very likely prevent some airports from being able to move forward in a timely manner with planned construction projects. A $500,000 airport improvement project which has a local share that increases from $25,000 to $50,000 is significant to a smaller organization. It should also be noted that many state transportation agencies have become reliant upon the higher federal share, and there are likely to be instances in which state funding would not be available to meet an increased percentage of matching funds.

Increasing the PFC Cap: Since 1990, airports have been allowed to impose Passenger Facility Charges (PFC) as a local fee on passengers that board commercial aircraft at their facilities to augment AIP and other sources of airport revenue. In 2000 the amount airports were allowed to collect was raised from $3 to $4.50. Unfortunately, without taking into account inflation and increased construction costs, the value of a $3 PFC from 1990 has been estimated to be worth approximately $1.86 in 2007.

While the reauthorization proposal calls for an increase in PFC collection authority to $6 per passenger, I would concur with the recent testimony submitted by Charles Barclay, A.A.E. representing the American Association of Airport Executives in asking that the PFC cap be raised to at least $7.50. As discussed, this would be an amount suitable to provide for the increases in inflation and construction costs over the

next three years. Beyond this period however, a provision should also be created to index future PFC levels to account for ever increasing costs.

An increase of the PFC cap to $7.50 would allow Williamson County Regional Airport to increase its revenue under this program from collections of approximately $43,000 in 2006 to nearly $82,000. Though paling in comparison to the amount of revenue generated at larger airports, this capability will continue to be significant to smaller airports that must also be creative in funding airport improvements to the maximum extent practical.

Small Airport Fund: Specific to smaller airports within the reauthorization proposal is the elimination of the Small Airport Fund and creation of a new Small Airport Set-Aside Fund. The existing small airport fund is supported by returned large and medium hub airport entitlements. With the proposal's elimination of passenger entitlement funds to these airports in FY10, the funding source for small airports would be eliminated.

As a result, the proposal would establish a separate set-aside based upon a percentage of discretionary funds to maintain funding for smaller airports. At proposed funding levels it has been estimated that the new formula could in fact reduce small airport funding by $430 million. Even at a sustained AIP funding level of $3.5 billion, the new set-aside formula has the potential of reducing small airport funding by $69 million.

Though there is general consensus about the reliance of smaller airports on AIP, we must be very cautious with regard to funding formula changes without a clear picture of what impact such changes could ultimately have on funding amounts for small airports across the board.

User Fees: Discussion regarding AIP must also take into consideration the proposal's sources of funding and how those realistically can provide for AIP in the years to come. A key component of these proposed funding sources, one that could have dire consequences at our nation's smaller airports, is user fees.

Citing the need to fund the Next Generation Air Transportation System (NGATS) in a more equitable manner, the reauthorization proposal would replace the current excise taxes that comprise the aviation trust fund with a new cost-based user fee system. Specifically, the proposal eliminates the 7.5% domestic passenger tax and flight segment fee, while increasing general aviation fuel taxes from approximately 20 cents per gallon to 70 cents per gallon.

Though I should not be as bold as Congressman Ehlers to offer that such a financing proposal should be "dead on arrival," I do feel it appropriate to express as you recently did Mr. Chairman that I have "major reservations" about a proposal that could very well bring in less revenue at such a critical point in funding our nation's air transportation system. At the same time I feel it appropriate to reiterate the findings of the Congressional Budget Office in September of last year when it was reported to the

Subcommittee that the uncommitted balance of the aviation trust fund is expected to grow to approximately $19 billion by 2016. When coupled with a consistent general fund contribution, the revenue and interest from the existing trust fund should in fact be enough to pay for NGATS.

None-the-less, fairness with regard to who generates the funds for the system has been a focus behind the user fee proposal. Yet I would offer that by its own admission, the FAA has indicated that the airline industry will be a primary benefactor of NGATS. Implementation of NGATS is expected to save the airline industry millions of dollars in fuel efficiencies alone. When the airlines benefit from these and other improvements on such a broad scale, so too should their passengers, and the balance of fairness among all users remain equitable.

General aviation is a very broad term and it consists of a myriad of operators providing a variety of services within our air transportation system. It consists of flight training operations that teach our next generation of airline and military pilots how to fly, it is the air ambulance provider that saves lives by making a two and half hour ambulance ride a thirty minute flight, and it is the air taxi provider that shuttle business men and women from point to point on a daily basis and actually help relieve congestion at larger airports.

These and many other smaller operators and private aircraft owners will always be far less capable of absorbing an increase in costs as substantial as what has been proposed. If such a proposal were to be implemented the net effect would be fewer operators, providing fewer operations at smaller airports, and fewer services to the public across the country.

ESSENTIAL AIR SERVICE PROGRAM

Though not a direct component of the AIP grant program, I feel it is imperative to also discuss from a small airport perspective matters pertaining to the Essential Air Service (EAS) program under the FAA reauthorization proposal.

Unfortunately once again, the current proposal would limit funding for EAS to just $50 million per year - $60 million less than the amount Congress approved for FY07. Under this proposed funding level, approximately 73 of the 147 communities that participate in the program – including Williamson County Regional Airport – would be dropped. Given the discontinuation of air service at regional airports across the country that would likely result, this would be an unprecedented tragedy in federal aviation policy.

In testimony submitted to Senate Transportation Committee in March of 2003, the General Accounting Office described the federal government's role in subsidizing air service to eligible communities as follows, "The assumption underlying these efforts is that connecting small communities to the national air transportation system is both

fundamental for local economic vitality and is in the national interest." As an airport that is reliant upon EAS to provide adequate air transportation for an entire region of communities we couldn't agree more.

This is not to say however, that our present reliance constitutes settling for permanent dependence. On a daily basis we put forth efforts to promote the existing air service with the realization that its success will be the primary factor in our ability to attract and sustain additional service as well. These efforts include working with our regional Chambers of Commerce in addition to the airline in order to achieve the greatest results. The ultimate goal is to develop the market potential we feel exists for any carrier to make a profit and operate without federal subsidy.

Williamson County Regional Airport maintains contact with the Regional Aviation Partners organization which represents small community air service airports across the country. Among its member recommendations that are currently being put forth regarding improvements to EAS, I would like to note and recommend the following be implemented:

- Establish an adequate and permanent funding source for EAS.
- Target funding to EAS provisions directed at improving service and increasing carrier interest, including the Marketing Incentive Program and Section 402 to account for significantly increased costs.
- Adjust the $200 per passenger subsidy cap to account for inflation which has not been adjusted since the cap was established in 1989, and index future levels to account for ever increasing costs.

Small Community Air Service Development Program: It is also disappointing from a small airport perspective that the reauthorization proposal does not include funding for the Small Community Air Service Development Program. This has been an innovative program that has understandably received great interest among airports. Last year alone there were 75 proposals from airports and communities in 37 states requesting more than $32 million to support air service development initiatives. As could be expected, the demand for funding under this program far exceeded the $10 million appropriated in FY06.

Williamson County Regional Airport was able to receive a grant of over $200,000 under this program in 2002. A majority of this funding went toward advertising efforts to promote our existing service, while the remainder was applied toward hiring a consultant in an effort to contact other airlines in hopes of attracting additional service. The results since that time show that enplanements have increased we believe in part due to the greater awareness of the service that exists in our market through advertising. In addition, we do now have a second carrier providing service. Though this additional service is primarily a result of a two year revenue guaranty provided by the State of Illinois, we feel that our previous contact with the airline through our consultant also

played a significant role in the carrier's awareness and interest of our market potential.

Given the number of communities and airports that have a need and potential for improving air service in their markets, I would ask that you authorize $50 million per year for the Small Community Air Service Development Program. One of the key aspects that we found during our involvement with the program is that it truly focuses efforts on what can make improvements at individual airports by allocating resources directly to those who are most familiar with their market needs.

FAA CONTRACT TOWER PROGRAM

An additional component of the reauthorization proposal that inherently has great significance to smaller airports is the FAA's Contract Tower Program. The Contract Tower Program is a vital safety and economic asset to smaller airports such as ours throughout the country. Currently, the program includes 233 FAA contract towers in 46 states, accounting for approximately 25 percent of control tower aircraft operations nationwide.

As a result of this 25-year government/industry partnership, the Contract Tower Program has helped smaller airports retain and develop commercial air service and general aviation operations; enhanced aviation safety at airports that in many cases would not have a control tower; promoted economic development and created jobs locally; and consistently received high praise for customer service from pilots, airlines, FBOs, flight schools, and corporate flight departments.

Williamson County Regional Airport is very active with the American Association of Airport Executives in enhancing the Contract Tower Program for both fully funded and cost-share towers. As such, we ask that the subcommittee consider making the following changes to the program as part of your consideration of the FAA Reauthorization Bill:

- Change the timing of the B/C calculation: Airports with a B/C above 2.0 for 3 consecutive cycles, retroactive to 2002, are not subject to review for another 3 consecutive cycles. Airports that fall below a B/C of 1.0 have a minimum of 1 additional cycle to either increase traffic, or budget for the cost-share program.

- Apply discontinuance B/C ratio, not establishment criteria, to operating non-federal towers to determine the B/C ratio for inclusion in the program.

- Broaden AIP eligibility for contract tower construction and equipment and increase maximum federal participation in new contract tower construction to $2.5 million per tower.

- Authorize $8.5 million for FY/08 for the program, with $500,000 increases in each subsequent fiscal year.

- Include language allowing FAA to use fully funded tower appropriations to pay for cost-share towers if necessary and vice versa.

- Establish uniform standards and requirements for contract tower safety audits.

Williamson County Regional Airport is reliant upon the contract tower program, and as mentioned earlier, will likely be dependent in the short-term on the cost-sharing provisions to maintain these services. In our operating environment, which among other operations consists of a mix of student pilot training from nearby Southern Illinois University's flight program and our scheduled air carrier flights, maintaining ATC services is essential to safe operations.

In our region alone, neighboring airports in Carbondale and Paducah, Kentucky are also reliant upon the contract tower program. Barkley Regional in Paducah is also dependent upon the cost-sharing provisions of the program, and in recent discussions indicated adequate funding for this portion of the program as their top priority.

The changes proposed above, and your continued support, will be critical to making a good program even better, to the benefit of the traveling public and the small communities that depend on these federally funded towers to improve safety and accessibility to their airports.

CONCLUSION

Mr. Chairman and members of the Subcommittee, I began my career in aviation in 1993. Within that period of time I have seen a number of initiatives and proposals come and go, some that have resulted in successful improvements for our industry, and some that have not. The one constant however, year after year, has been the challenge to adequately fund our nation's airports through AIP.

Ironically, in those early years I seem to recall the main theme of discussion between airports and Congress being the surplus in the aviation trust fund and allowing airports to access and utilize the funds for which they were intended. Since the events of 9/11 we have seen that surplus dwindle due in large part to the utilization of AIP funds to meet increased security requirements. The aviation industry as a whole however, continues to evolve and improve since the events of that day not so long ago. In time, under the existing funding mechanisms in place, I am confident that we will find that the aviation trust fund remains capable of adequately funding our system.

With the FAA reauthorization proposal before us, we are at a critical point in aviation, and I am truly excited to see how our decisions now will help shape the success of our industry in the years to come. It is a fundamental responsibility of government to invest in its nation's transportation infrastructure. In our developed society and an ever increasing global economy, airports have become a cornerstone of that transportation

infrastructure. We must however change the current funding paradigm of our nation's air transportation system to realize that adequate airport funding is in fact the foundation from which everything else is achieved. Without a well planned, operated and maintained system of airports throughout our country, any other improvement in aviation has little significance.

Thank you, Mr. Chairman, for this opportunity to present my views on the Airport Improvement Program. I am honored to be a part of this process, and to that end, I will be more than happy to provide any additional information now or in the future that you may require.

TESTIMONY

BEFORE

COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE'S

SUB COMMITTEE ON AVIATION

FOR

FEDERAL AVIATION ADMINISTRATION

AIRPORT IMPROVEMENT PROGRAM

AND

RELATED ISSUES

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March 28, 2007

Statement of
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Southwest Oregon Regional Airport
and the President Elect of the
Oregon Airport Management Association
Before the
House Transportation and Infrastructure Committee, Sub Committee
on Aviation of the
U.S. House of Representatives

March 28, 2007

Chairman Costello, Ranking member Petri, Congressman DeFazio and members of the House Aviation Sub Committee, thank you for inviting me to appear before your sub committee to discuss the reauthorization of the Federal Aviation Administration's (FAA) Airport Improvement Program (AIP). I am testifying on behalf of the Coos County Airport District, owner and operator of the Southwest Oregon Regional Airport, a non-hub commercial service airport on the coast of Oregon and the only elected independent airport authority in the Pacific Northwest.

As a small non-hub commercial service airport, our planning and capital needs for new development and renewal and replacement of aging infrastructure are all met through the AIP and Passenger Facility Charge (PFC) programs authorized by the Congress. Unlike our larger airport brethren, our revenue stream is not sufficient to demonstrate feasibility for the sale of revenue bonds as a source for our capital funding needs. The truth is few non-hub airports can. We must rely almost exclusively upon AIP entitlement funding, PFC authority as a match and the rare discretionary and or State grant. So Federal AIP reauthorization is always an anxious time for us.

Increase AIP Funding:
Operating margins are much tighter for non-hub airports, but growth in the form of increasing demand upon our facilities, inflation and increasing construction costs are just as real as they are at the larger airports. The Administrations request for $2.75 billion of AIP in FY 08 is about $1 billion less than what the Congress has authorized for this current Fiscal Year. Even the highest proposed level for FY2010 of $3.05 billion would be less than the amount that the Congress authorized for AIP six years ago. The proposal would also reduce the total entitlements for non-hub airports like the Southwest Oregon Regional Airport from $307 million to $269 million, a $38 million reduction year over year. It also appears as if the Administration's proposal to replace the small Airport Fund with a new Small Airport Discretionary Fund could cost small airports collectively a total of about $430 million next year. Like our colleagues we urge this Congress to increase

AIP funding so that the program can at least keep pace with increasing construction costs and that you protect small communities like ours from penalties being imposed by proposed formula changes for the distribution of AIP funding.

In earlier testimony, several airport representatives have expressed concern over the Administration's proposed reduction of the Federal share for AIP projects. According to the FAA's own records, AIP funding accounted for 94% of all capital expenditures for non-hub airports in FY 03. This new proposal would decrease the eligible share for a qualified AIP project at a small or non-hub airport from 95% to 90%. For a typical $5 million runway overlay, this project would require $500,000 in matching funds. In our case, PFC's are used for AIP match and at the Southwest Oregon Regional Airport the maximum PFC's that can be collected are about $163,000 in any given year. Our working capital and reserves are an additional $300,000 collectively so that one can see that a simple renewal and replacement project like a runway overlay becomes impossible without some other source of supplemental income. Given the growth that our airport is experiencing, a 5% increase in matching fund requirement now would prevent us from moving forward with many of our planned construction projects.

Increase the PFC Cap:
This brings me to the issue of PFC's. According to research performed by the American Association of Airport Executives (AAAE), after considering the effects of inflation and increases in construction costs, the PFC has been eroded considerably since The Aviation Safety and Capacity and Expansion Act of 1990 enabled the $3.00 PFC. A $3.00 PFC in 1990 is expected to be worth only $1.73 in 2007 and a $4.50 PFC enabled by AIR-21 in 2000 is expected to be worth only $2.86 in 2007. AAAE's analysis goes on to project that a $4.50 PFC in the year 2000 adjusted for inflation and increased construction costs would need to be $7.20 in the year 2007.

The Administration's proposal to raise the cap on PFC's to $6.00 although encouraging, is not enough to overcome the effects of inflation and increasing construction costs. We therefore, join our airport colleagues in asking the Congress to raise the PFC to at least $7.50. This increase will offset inflation and the construction cost increases that are currently being experienced and prevent further erosion of our ability to complete our capital programs. We also would support the inclusion of a provision that would index PFCs to account for future increases in inflation and the overall cost of construction. Given our hypothetical $5,000,000 runway scenario above and applying the 5% match along with the higher PFC authority one can see that the project becomes feasible. Airports like ours routinely operate on the thinnest of margins.

Stable Funding Source for AIP:
We believe that it is important to ensure that there is a stable source of funding to pay for the Airport Improvement Program and we are concerned about the Administration's proposal to increase general aviation (GA) fuel tax to pay for AIP. The Administration's proposal would increase the GA taxes from about 20 cents per gallon to 70 cents and risk crippling Fixed Base Operators (FBOs) at smaller airports that depend on the GA owner/operator for service and fuel sales. It is difficult for us to accept the premise that

the tripling of general aviation fuel taxes will provide the stable funding stream for AIP that is necessary for airports to maintain safe and secure facilities. Exchanging excise taxes for new user fees is an issue beyond our ability to properly analyze at the local level, but one that we would hope that this Committee and the Congress would not approve without guaranteeing the integrity of the Trust Fund System. Sometimes the best intentions have unforeseen consequences. In this case, we believe that a large increase in general aviation fuel taxes has the potential to devastate the segment of our industry that manufactures, sells and services smaller piston powered GA aircraft. We of course have no way of substantiating that, but honestly do not think that the current system is defective and we are reluctant to bet one of our lines of business on the outcome.

Small Community Air Service Development Program:
Small and rural communities with Non-hub airports like ours have struggled since deregulation. There is a very deliberate trend toward fewer flights to these communities even though overall passenger levels are continuing to increase across the country. Congress and the Administration should work together to ensure that these small and rural communities can continue to have access to our national aviation system. The Southwest Oregon Regional Airport was fortunate to be the recipient of a Small Community Air Service Development Grant this last year and is currently in negotiations with Sky West Airlines, a United Express carrier for non stop service to San Francisco from Coos Bay, Oregon. Without this grant, we would continue to be tied to a monopoly carrier with high fares and inadequate service. It is disappointing that the Administration's proposal does not include funding for this vital program. Over 150 grants have been awarded to small communities like ours over the last four years and it is safe to say that the annual applications for this type of assistance far exceeds the amount of money that has been available in past programs. We urge this committee to restore this program and authorize up to $50 million for the Small Community Air Service Development Program per year.

Contract Tower Cost Share Program:
The FAA Contract Tower Program has provided air traffic services at small airports since 1982. Currently 233 airports in 46 states participate in the program. This represents 45% of all control towers in the United States. As a result of this program, the FAA Contract Tower Program has helped smaller airports retain and develop commercial air service and general aviation; enhance aviation safety at airports that in many cases would not otherwise have a tower; promote economic development and create local jobs, and consistently receives high marks for customer service from aviation users. The Southwest Oregon Regional Airport has seen a dramatic transition in recent years with its aircraft mix changing from the more traditional small general aviation piston powered aircraft to a predominance of much larger jet transports. This in part has been due to the opening of the world renowned Bandon Dunes Golf Resort just 20 minutes south of our airport bringing a huge influx of private and corporate jet traffic. Our facility is one of the last uncontrolled commercial service airports on the west coast and thanks to Congressman DeFazio's efforts, we are currently constructing a new Air Traffic Control Tower. AIR-21 included a Contract Tower Cost Share Program for airports like ours that fall slightly below the eligibility criteria for full participation in the Contract Tower

Program. There are 26 airports that fall into this category and our pending application will probably make us number 27 in that queue. It has been estimated that an additional eight airports will enter the program by the end of FY 08. We urge this subcommittee to continue the authorization of this very important program by authorizing $8.5 million in FY08 for the Contract Control Tower Cost Share Program with an increase of $500,000 per year there after.

Conclusion:

Chairman Costello, Ranking Member Petri, Congressman DeFazio and members of the House Transportation and Infrastructure Subcommittee on Aviation, thank you for inviting me to appear here today and allowing me to comment on the Administrations Federal Aviation Administration reauthorization proposal. It is clear that the FAA and the Department of Transportation (DOT) have spent a great deal of time on their Next Generation Air Transportation System (NextGen). Certainly, the task before you is not an easy one, but this Sub Committee has a reputation and strong record of supporting the airport and aviation industry as relates to capital development and the protection of a stable funding source for the Aviation Trust Fund. We urge you to continue this support by reporting out a reauthorization bill that will continue to improve safety, increase capacity of our National Aviation System Plan and reduce delays for our passengers.

Statement of Greg Principato
President, Airports Council International – North America
And
Fredrick J. Piccolo
Chairman, Airports Council International – North America
CEO, Sarasota-Bradenton International Airport
Before the
House Transportation and Infrastructure Subcommittee on Aviation
"FAA's Airport Improvement Program"

March 28, 2007

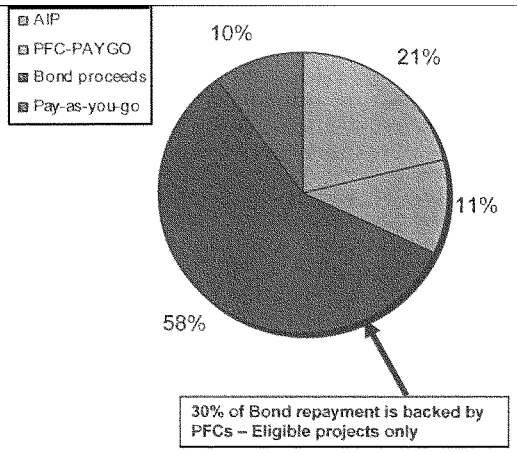
Chairman Costello, Ranking Member Petri, and members of the subcommittee, thank you for the invitation to appear before the subcommittee today to offer the views of America's airports on the Administration's FAA reauthorization proposal (the *Next Generation Air Transportation System Financing Act of 2007 (NextGen))* and the future of the Airport Improvement Program (AIP). As the President of Airports Council International – North America (ACI-NA), I am testifying today on behalf of the local, regional, and state governing bodies that own and operate commercial service airports in the United States and Canada. ACI-NA member airports enplane more than 95 percent of the domestic and virtually all the international airline passenger and cargo traffic in North America. Nearly 400 aviation-related businesses are also members of ACI-NA.

We commend you Mr. Chairman for holding these series of hearings on the Administration's *NextGen* proposal. Given the current challenges of funding FAA obligations, the scope of the Administration's *NextGen* proposal, and the upcoming September 30 expiration of the authorization (and the taxes and fees that support it), it is time that the aviation community and members of this subcommittee work collaboratively for solutions that serve all segments of our vital industry. In order to avoid significant disruption to the operation, maintenance, and development of our aviation system, it is imperative to all aviation users and the many indirect beneficiaries in the economy that a reauthorization bill be signed into law before the end of the fiscal year.

A Renewed National Commitment to Aviation Infrastructure Investment

Financing Capital Development

The stakes are particularly high this year, as all available data and forecasts indicate that passenger growth is back and we are looking at the prospect of adding three hundred million new passengers – the current population of the United States – to the system in the next ten years. As airports plan capital development programs to meet those needs, they employ a variety of strategies and tools including bond financing, Passenger Facility Charges, Airport Improvement Program funding, and airport-generated revenue, as shown in the following chart.



Sources: FAA, US Treasury, Thomson Financial Data Services, ACI-NA for the period 2000-2004

To date the use of bond financing for airport capital projects has been essential and extremely successful. This keystone strategy is even more important with the outlook for future traffic growth and limited availability of funds today. For a variety of reasons, ranging from the impact of construction cost inflation to an outdated PFC cap to unfavorable tax law treatment for airport bonds to the annual fight over proposals to cut AIP, it is becoming increasingly difficult for airports to meet growing needs. For these reasons, airport operators believe that any successful proposal for reauthorization must give local airports maximum capacity, authority, and flexibility to manage their capital development programs to balance the diverse sources available to them.

Airport Capital Needs

ACI-NA's latest *Capital Needs Survey* estimates over $17.5 billion in annual airport capital needs (survey results are currently being finalized). With the return to record enplanement levels, and with the dramatic increases in construction costs over recent years, this is a 22.2% increase over the $14.3 billion estimate of just two years ago. ACI-NA's survey is the most comprehensive of any survey conducted, estimating all airside and landside needs, and accounting for all funding sources that are applied against those needs (e.g., AIP, PFCs, revenue bond financing, state and local government assistance, and use of retained earnings). Given that the current federal contribution toward these needs is $3.515 billion (the final FY 2007 AIP appropriation), the reliance of the airport industry on locally generated funds—including PFCs and revenue bond financing that is often backed by future PFC revenues—is inescapable.

This industry-wide summary, however, should not overlook the very different roles that AIP plays within the capital plans of individual airports. According to FAA data presented in its stakeholder package distributed in 2006, in advance of releasing the *NextGen* proposal, the percentage contribution AIP makes to an airport's capital program is inversely related to an airport's size:

Airport Class[1]	AIP% of Capital Program	Traffic Rank
Large Hubs	16%	1-31
Medium Hubs	29%	32-68
Small Hubs	51%	69-137
Non-Hubs	94%	138-382
Non-Primary	89%	383-517

There are two reasons for the variation among airport size categories. Larger airports collect more local revenue from PFCs and from aeronautical and non-aeronautical airport sources and, therefore, AIP funds represent a smaller share of their overall program. With available local sources, the larger airports have enhanced ability to access the financial markets and issue revenue bonds. These bonds are backed by a wide variety of airport aeronautical (e.g., landing fees) and non-aeronautical (e.g., parking lots, concessions) revenues. PFC-backed bonds are also issued—typically with other commingled revenue sources and also pledged to repay the bond's principal and interest payments—although only for those projects that are PFC eligible and approved by FAA.

Because smaller airports have fewer passengers, collect less PFCs, and generate less local revenue, these airports are viewed as less creditworthy in the capital markets, making it more challenging (sometimes impossible) to finance projects through the issuance of bonds. The result is that AIP is their capital program's lifeblood for many of these airports, making them highly dependent on it for safety and capacity improvements.

Clearly, the industry needs the full array of tools at its disposal to finance the capital development needed to support a strong, competitive and growing air transportation system. For these reasons, the airport community is advocating policy changes to permit greater airport access to local sources of capital, combined with continuing and stronger federal support for airport development, so that our members can make the necessary investments in airside, terminal, and airport access projects. The ability to make those investments on behalf of our air transportation system requires that we achieve four complimentary goals:

1. Airports require the local authority to raise the passenger facility charge (PFC) ceiling to $7.50 and permit airports to choose their own rate level for PFCs within this ceiling, preferably in $.25 increments. The adjustment of the ceiling will allow airports to recover the PFCs lost value and to fund critical projects and the freedom to work at rate levels within this ceiling will give airports greater flexibility. We urge Congress to index the PFC to project-cost inflation so that PFCs retain their purchasing and financing powers in future years. We also strongly support *NextGen's* recommendations to make

[1] Large-hubs have over 1% of annual system boardings; medium-hubs between 0.25% and 1%; small-hubs between 0.05% and 0.25%; non-hubs have more than 10,000 boardings but less than 0.05%, and non-primaries have up to 10,000 annual boardings.

legislative changes in the PFC program that recognize the more than 15 years of success of PFCs, first addressed here in 1990.

2. Airports, the FAA, and the entire aviation community find it essential that the Airport and Airway Trust Fund (AATF) together with a proper and equitable level of financial support from the general fund—in order to reflect the benefits of the system throughout the economy—are both needed to provide the necessary support for FAA's capital accounts, including F&E and AIP.

3. Airports require strong AIP support, especially for those airports that rely on federal grants for their principal source of capital. We also need a strong AIP discretionary program and support for FAA's successful but undersized Letter-of-Intent Program for safety and capacity projects, since these AIP program elements underwrite local airport projects essential to supporting a system having national interest but local ownership.

4. Airports require that Congress reform the tax treatment of airport bonds, recognizing that they are by their nature governmental, not private purpose. Removing the taxation of interest under the Alternative Minimum Tax (AMT) from the more than 60% of airport bonds issued would provide airports with more funding capacity and enhance their ability to refinance their debts. In particular, airports need relief to allow projects eligible for AIP funds or PFCs paid by the public to be financed as governmental bonds, not private activity bonds.

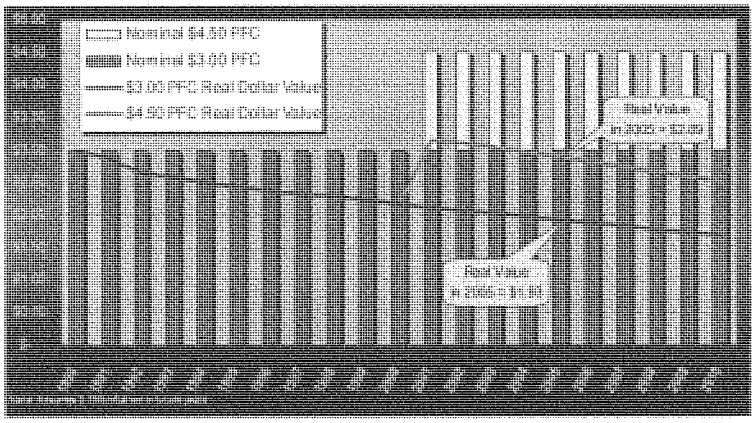
If Congress provides this leadership and adopts these goals, you will have gone a long way to help airports meet current and future demand, the changing infrastructure needs of airports, and our passengers' justifiably high expectations about airport service levels. Given their role and responsibilities, airports must plan and make these investments at a time when the industry continues to undergo significant changes. Enhanced security requirements, airline restructurings and bankruptcies, new air carrier fleet mixes, loss of service and frequencies to some communities, and congestion and delay at other communities are among the many challenges faced by airport operators today. Through these last eventful and challenging years, airport operators have repeatedly made the right decisions for their facilities, communities, and the larger aviation system.

***NextGen* and PFCs**

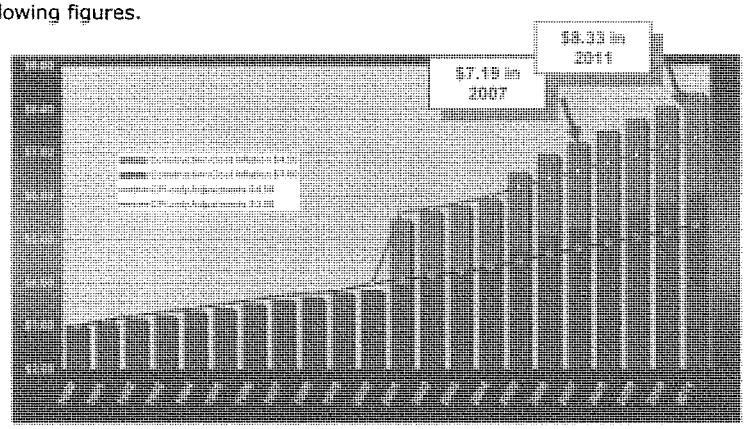
There is perhaps no greater evidence of the ability of the airport community to make prudent decisions for the benefit of the traveling public than the way in which airports have utilized Passenger Facility Charges and project finance concepts to add and modernize capacity. PFCs are clearly a tool that works; having proven itself over a period of over 15 years. PFCs are a critical airport infrastructure financing tool, well regarded by the financial community and used responsibly by the nation's airport community to expand capacity.

As members of the subcommittee are well aware, the PFC program's objectives are to (1) preserve or enhance the safety, capacity, or security of the national air transportation system, (2) reduce noise or mitigate noise impacts resulting from an airport that is part of such system, and (3) furnish opportunities for enhanced competition between or among air carriers. By these measuring sticks, and the over $50 billion in airport capital projects that PFCs have supported, the PFC program has been tremendously successful.

The PFC Ceiling: ACI-NA recommends that the current PFC ceiling be set at $7.50 and adjusted annually for changes in project-cost inflation. While the Administration's $6.00 recommendation is a useful first step, it is not sufficient to offset the (1) deflated value of the current PFC, (2) the proposed mandatory phase-out, then elimination of AIP entitlements for large and medium-hub airports, and (3) the increased capital needs of airports to accommodate growth and relieve congestion. The current $3.00 and $4.50 PFC ceilings have not been raised since 1990 and 2000 respectively. These two PFC rates, each having different regulatory requirements, are in 2007 worth much less in real terms when deflated using the Means Construction Cost Index.

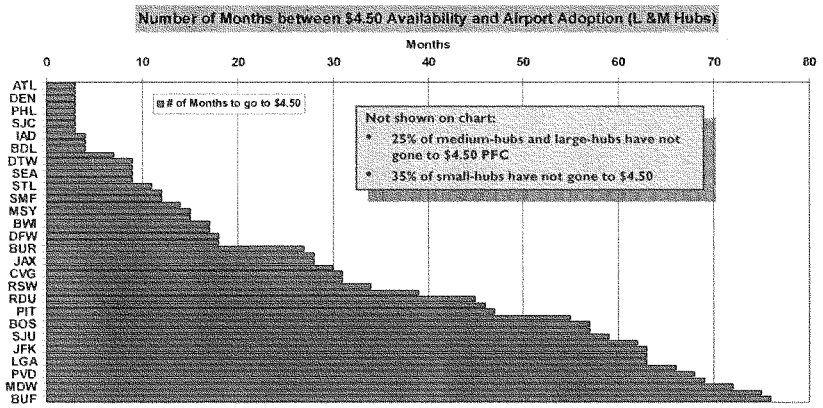


To correct for construction cost inflation, the PFC ceiling would need to reflect the following figures.



Further, raising the PFC ceiling, and indexing it for inflation, will allow airports to make local decisions about when and by how much to adjust their PFC. All airports

are different and one size does not fit all. As noted in the following chart, airport responsibly use increased PFC authority over time to adjust to local needs, with local support and when it is appropriate for them to do so.



These different levels are a product of airports, in consultation with airlines serving their facilities, determining the best way to pay for airport infrastructure. A project-cost inflation-adjusted ceiling of $7.50 PFC, with alternative rate levels within this ceiling, and strong AIP entitlement and discretionary funding levels will empower airports of all sizes to meet their capital need challenges.

PFC Streamlining: ACI-NA strongly supports *NextGen's* reforms to modernize the PFC project application process and streamline the program's eligibility criteria. Changing PFC eligibility requirements to better track FAA rules that govern the use of airport revenue will simplify significantly the work of airports putting together their capital plans and developing needed infrastructure, and would also reduce FAA's cost of administration. Rather than requiring airports to comply with yet another set of rules governing local revenue, the *NextGen* proposal moves in the correct direction by appropriately treating PFCs like the local revenue they are, while retaining protections for air carriers and passengers by placing their eligibility rules under the familiar regulatory structure. The *NextGen* proposal parallels the way FAA approached approving PFCs for the new Denver International Airport in the early 1990s, which was the most successful airport development project in decades. The FAA's approach was essential in building Denver International Airport and in making its bond financing feasible and well received by the capital markets.

For larger airports, it is ACI-NA's priority to make all parts of airport passenger terminals PFC eligible. This reform would materially help reduce the complex and lengthy review process associated with obtaining FAA approval for passenger terminals. As you know, Mr. Chairman, airline gates and other terminal infrastructure are indispensable to serving existing and potential new air carriers and promoting competition. For many small-hubs, and smaller airports, new eligibility for a broader range of capital projects on the airport (that comply with revenue use laws), would better allow these airports to effectively manage their capital programs, and allow them to promote increased price and service choice for their customers.

Tax Treatment of Airport Bonds: For the airport industry, the largest source of funding for capital projects is airport bonds. Over the last 10 years, airports have issued well over $50 billion in new money airport revenue bonds to fund capital projects. Despite the public nature of most airport facilities, expansive federal regulation of how airports can use their revenue, and numerous public benefits derived from the use of bonds, over 60% of airport bonds currently can only be sold as Private Activity bonds (PABs), rather than as government purpose bonds, which is the tax status for most bonds issued by state and local government entities.

Because interest payments of PABs are subject to the Alternative Minimum Tax, issuers are charged with interest rate premiums of between 10 and 40 basis points (0.10% to 0.40%). This unnecessarily and unfairly raises the cost of airport projects and limits the potential funding capacity of airports. ACI-NA will continue to press the committees of jurisdiction to make airport bonds government (non-AMT) if they are for projects that would be eligible for AIP or PFC funding. This would better recognize the inherent public nature of these investments. It also would make these bonds refundable (thus allowing airports to take advantage of lower interest rates and reducing their capital costs still further).

Federal Programs: The AATF, General Fund and FAA Obligations

ACI-NA member airports are committed to solutions that authorize funding for critical FAA programs and provide solid and sustainable financing for all FAA obligations for this authorization period and beyond. In order to accomplish these goals, we must ensure that (1) the AATF and general fund contributions to FAA programs are both sufficient and (2) the commitments we make in this authorization cycle can afford to be kept in subsequent years.

Unfortunately, as you know Mr. Chairman, under Vision 100 the FAA's capital accounts—including AIP and especially the Facilities and Equipment (F&E) accounts—have not been appropriated to the legislation's authorized levels and we have collectively fallen behind in modernizing our system.

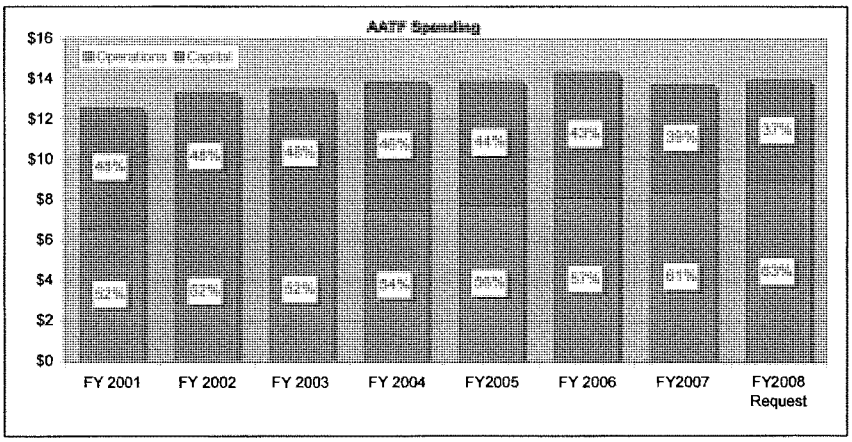
The airport community shares the Administration's concern about the long-term financing of the FAA and its capital programs. ACI-NA's research shows, based on historical trends, there is a significant risk that there will not be enough AATF funds to pay for future investments to modernize our air traffic system, particularly with a continued shortfall in contribution from the general fund and pressure from FAA's operating expenses. Projecting the future balances of the AATF and the revenues available for spending is a difficult task as the Government Accountability Office (GAO) and the Department of Transportation's Inspector General (DOTIG) have noted. ACI-NA has examined many of the other estimates of the AATF's financial capacity and we have found that they assume uninterrupted and strong growth in the nation's economy and in the highly cyclical aviation industry, continued large increases in ticket prices for the next decade, and slow annual growth in the FAA's Operations Account (which has in recent years been outpacing the growth of both inflation and the other FAA capital accounts).

Instead of modeling the scenarios that result in only optimistic predictions about the AATF's future, ACI-NA has modeled a variety of scenarios, including optimistic, pessimistic, and ones that track historic averages for revenues and costs. We would be pleased to brief subcommittee members and/or staff on our dynamic model. ACI-NA's model generates "sensitivity analyses," showing what would happen to AATF revenues if assumptions about the nation's economic growth or the performance of

the aviation sector are varied. Unlike the other models that we have studied, it has the ability to input any set of revenue or spending assumptions (including the optimistic ones noted above), and modify any of the variables to determine the viability of the financing system under a variety of circumstances.

Mr. Chairman, we believe establishing a financially viable structure should be our first and most important goal. Instead, what we have often witnessed over the past year are groups dedicating their arguments as to which mix of user fees and excise taxes are appropriate to assess the system's users. While concern over costs is understandable and has to be addressed, we should all remember that however the revenues are generated, that they provide the infrastructure and support that enables our industry to be the world's best. Let us all commit to a process and reforms that place FAA funding of capital programs on a more sound financial footing than is the case today. Such changes would also help return the AATF to its original purpose—providing support for air navigation facilities and airport infrastructure.

As illustrated by Chart 1 below, trends reflect the fact that the AATF has increasingly been used to pay for operational expenses rather than capital priorities.

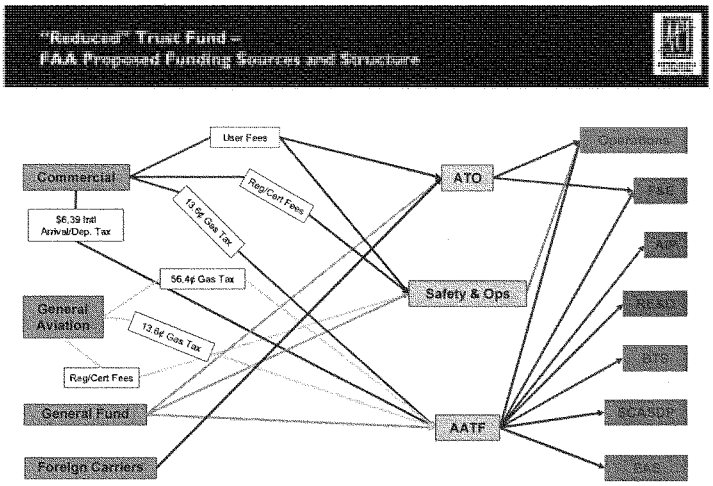


As FAA obligations for its Operations Account have increased over time and as relative general fund contribution have decreased, the Operations Account has gradually accounted for a higher share of AATF revenues. FAA's capital accounts (F&E and AIP), in contrast, have received less and less support. Unless the trend is reversed, capital investments will receive diminishing future shares of AATF revenues. Fixing the historic anomaly that allows for this diversion of investment capital contributed by system users is critical for assuring steady capital investments in modernizing our air traffic control system and upgrading our airport infrastructure.

***NextGen* and Air Traffic Modernization Funding:** While *NextGen* has the headline goal of increasing long-term support for modernization, the Administration's FY 2008 Budget does not immediately signal significant new capital or procedural investments in air traffic control. Airports and airlines are in complete agreement that air traffic modernization needs to receive a higher priority from policymakers.

This means a program of stable and sufficient funding and the FAA clearly articulating to Congress and the aviation community the schedule and benefits of future investments. On the airport side, programs such as ASDE-X, ADS-B, and research into problems such as wake vortex detection, can improve safety and capacity performance today if investments are made and deployments occur expeditiously. In addition, future breakthrough concepts such as realizing the full benefits of performance based navigation—that will determine if the industry can actually accommodate the future traffic and passenger levels predicted for it—may be a decade or more away, but small annual steps, proposed by the Administration and funded by Congress, have to be taken in the interim to begin the process.

***NextGen* and AIP Funding:** While the Administration deserves credit for submitting a comprehensive proposal that it believes addresses many of these issues, we believe that the *NextGen* funding structure for AIP will provide insufficient funding for AIP. Chart 2 provides a graphic representation of *NextGen's* proposed changes to the AATF.



NextGen's financing structure would straitjacket the sources of AIP funding to just two fees: a 13.6 cent fuel tax and a $6.39 international fee per passenger. We understand the FAA's proposed role for the general fund in the AATF is not intended to be used for AIP support, and would accomplish this by walling-off access to general funds from AIP. Instead the general fund in the AATF would be dedicated to specific purposes identified in the *NextGen* bill (i.e., the Air Traffic Organization, Safety and Operations and research). This has the effect of directly tying spending available for AIP in the new, "reduced" version of the AATF exclusively to the two taxes discussed above.

What does this mean? It means that even funding AIP at current Vision 100 authorized levels (or including future project-cost inflation increases in the new authorization levels) will rely on raising these taxes higher than *NextGen's* recommendations. From our point of view, this structure is not workable because it would (1) artificially constrain AIP funding, (2) have the effect of pitting airports

against other segments of the aviation industry, and (3) leave airports critically short of capital funding.

If Congress determines that the *NextGen* structure should be used as the basis for reforming the AATF and funding AIP, we recommend (1) sufficient funding to achieve our recommended AIP levels (see below), (2) more appropriate funding sources (e.g., the current segment fee that charges on the basis of airport operations), and (3) greater airport access to general fund dollars.

***NextGen* and AIP**

Funding Recommendations: The Administration's recommended AIP funding levels—$2.75 billion (FY 2008), $2.90 billion (FY 2009) and $3.05 billion (FY 2010)—are very disappointing to airports. At these funding levels, AIP will not provide adequate funding for smaller airports nor will they provide sufficient new funding for nationally important airport projects. As FAA Administrator Marion Blakey noted in the just released *FAA Aerospace Forecasts for Fiscal Years 2007-2020*, the industry is returning to growth and over time "is expected to grow significantly." It is difficult to understand how a 22.8% recommended reduction in AIP funding (compared to FY 2007) will meet either the future requirements implicit in the FAA's Forecast or the 22.2% increase in airport needs identified by ACI-NA's *Capital Needs Survey*.

In contrast, ACI-NA's funding goals for AIP adopt the Vision 100 authorization levels and adjust them to include the effects of construction cost inflation, thus tying them directly to the real-dollar cost of developing needed infrastructure.[2] In the last three years, airports on average have experienced an annual 7.5% increase in construction cost inflation, well above the CPI. Using the Means CCI to project needed AIP funding levels results in a reauthorization recommendation of FY 2008 ($3.8 billion), FY 2009 ($4.0 billion), and FY 2010 ($4.1 billion). These levels will make sure that our nation's airports will not suffer a real decline in the value of their AIP funding solely due to price changes in the greater economy. These levels will also provide FAA with the discretionary dollars for nationally critical safety and capacity projects through Letters-of-Intent and other means.

The airport community hopes that members of this subcommittee will continue your long-term commitment to AIP. We would also point out that by recommending a $2.6 billion contribution from the general fund to FAA obligations, the Administration is recommending a level of 18.5 percent, well below last year's 21.5 percent contribution and the 25 percent general fund contribution that our industry has received and is seeking. More appropriate general fund contributions would go a long way to offsetting the Operations growing share of the AATF and help AIP.

AIP Large-Hub and Medium-Hub Entitlement Phase-out: *NextGen* proposes to phase-out all large and medium-hub entitlements by FY 2010. At the Administration proposed $6.00 PFC level, the trade-off between the proposed PFC adjustment and the eventual elimination of all AIP entitlements will weaken capital development for many medium-hub airports. This reflects the fact that *NextGen* would—we believe inappropriately—treat all large-hub and medium-hub airports as a single class of

[2] The Means' Construction Cost Index (Means' CCI) is an average of the construction cost indexes for 30 major cities, which is a much more tailored assessment of capital project price trends than is the Consumer Price Index (CPI), the most frequently cited index for consumer prices in the domestic economy. Information on our calculations is available from ACI-NA upon request.

airports—from the nation's busiest large-hubs (e.g., Hartsfield-Jackson Atlanta Airport and Chicago O'Hare) down to the smallest medium-hubs (e.g., Norfolk International Airport and Omaha's Eppley Field). Rather than phasing out all entitlements—whether or not an airport chooses to raise their PFC—ACI-NA urges Congress to retain an airport's discretion to decide if they would prefer higher AIP entitlement funding or a higher PFC level. However, we do not believe airports should be forced to make this choice with a PFC rate level at $6.00 or lower. We believe medium-hub airports would more likely accept the Administration's concept of foregoing AIP passenger entitlements if the PFC ceiling were raise the $7.50 level that ACI-NA advocates.

AIP Discretionary: ACI-NA applauds the increase in discretionary resources that would be made available under *NextGen*. The discretionary account provides support for major airport capacity projects such as those currently underway at Chicago O'Hare and Washington's Dulles International Airport. Under the FAA's Letters-of-Intent, the FAA is able to pledge (subject to appropriations) multi-year grants to airports that provide important financial support and recognize the federal government's commitment to important projects. In FY 2008 alone, the FAA is poised to meet funding provisions of 25 Letter-of-Intent agreements to airports totaling close to $300 million. About 77% of this money is discretionary, with the remaining amounts being pledged airport entitlements. Letters-of-Intent have become critical to the FAA and industry's goals of reducing congestion and delays and improving service levels and ACI-NA hopes the subcommittee will strongly support a more robust discretionary account that would significantly enhance FAA's ability to issue and administer the very successful Letter-of-Intent Program.

$3.2 Billion Trigger: ACI-NA supports the initiative that eliminates the "$3.2 billion trigger," which means primary airports would no longer annually face the risk of a 50% reduction in entitlements and non-primary airports would not lose all entitlements if the appropriated level of AIP fell below $3.2 billion in any year. Elimination of this provision would help (1) airports better plan their capital programs (2) minimize the possibility of unanticipated and unpredictable events that would cause costly project interruptions and (3) provide this protection for the airports that can withstand negative financial events the least.

***NextGen* and Other Airport Proposals**

Small Community Air Service Development Program: ACI-NA is disappointed that *NextGen* does not include funding for this competitive, innovative and successful program. We urge members of the subcommittee to authorize the program at a level of $50 million per year. Sarasota-Bradenton International Airport, for example, used a $1.5 million grant received in August 2004 to be used as a revenue guarantee to attract AirTran Airways to the airport. Together with other local incentives, the grant proved enormously successful, increasing passenger traffic 18% in one year, adding five new daily non-stops the first year, and eventually attracting another airline that saw the potential of the market.

Pilot Program for Market-Based Mechanisms: ACI-NA supports this initiative that would allow up to 15 airports, with approval of the Secretary, to use auctions or congestion pricing to manage congestion. We support the program's recognition that airports should have the primary responsibility for employing market-based mechanisms. We continue to believe that airport operators are best positioned to be the "first line of defense" in establishing economic solutions to govern access to their facilities and to ensure that excessive congestion and delays do not burden

sound operation of facilities and passenger service levels. The program would require any "surplus revenue" to be placed in an escrow account for airport-related projects thus tying the additional premium to projects will increase capacity and, in many cases, obviate the need for the mechanisms in the future. If, for whatever reason, airport operators could not make decisions to deal with congestion, this proposal would permit the Secretary to do so if delays impacted the national system.

Airport Privatization Pilot Program: ACI-NA supports the proposed changes included in *NextGen* for this initiative, and supports its continued status as a pilot program rather than permanent, universal authority. Based on ACI-NA's assessments of the pilot program today, it is clear that, in a variety of ways, the original program design was flawed. As a result, the federal government, airport sponsors, and all industry stakeholders have not learned about the level of interest or the possible effects—favorable or unfavorable—of privatization options that airport operators may want to explore. The City of Chicago plans has commenced a privatization initiative for Midway Airport and we believe other commercial service airports would be willing to explore this option for various reasons. ACI-NA recognizes that there is evidence of ample capital to invest in airports through various privatization concepts and believes the pilot program should help the industry tap these sources while protecting the public interest, but before any consideration of making such a concept permanent and available industry-wide.

Airport Cooperative Research Program (ACRP): ACI-NA supports the initiative that would establish a permanent authorization for ACRP. We are especially pleased that at least $5 million would be targeted to research related airport environmental issues. This program, which was originally established as a pilot under Vision 100, is well supported by airports and FAA for its important work to enhance airport research and development. Just last week, ACRP published a comprehensive study on innovative financing for airports, exploring alternative financing options and revenue sources currently available or that could be available in the future to airport operators, stakeholders, and policymakers in the United States. Additionally, research is underway on more than 60 other projects to address aircraft overruns with runway safety areas, assist in managing runoff from aircraft deicing operations, better interpret data on aircraft gaseous and particulate emissions and enhancing land use compatibility for noise mitigation, among other important topics.

Conclusion

Mr. Chairman, this reauthorization effort is the most important in at least a decade. Given the length of time required to build new airport capacity and to modernize our air traffic control system, it is not an exaggeration to say that the decisions we make this year will help decide whether we will meet the challenges of accommodating future demands on our system, or whether we will fail to do so and preside over an industry where delays and congestion become commonplace and the system fails to reach its potential. The members of ACI-NA and I thank you for inviting me to testify today and we are at your disposal to help contribute to a successful resolution of this effort.

Thank you and I'll be pleased to address any questions you might have.

Statement of
Karen S. Ramsdell
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Statement of
Karen S. Ramsdell
Airport Director
Santa Barbara Municipal Airport
Before the
Subcommittee on Aviation
Committee on Transportation and Infrastructure
U.S. House of Representatives
March 28, 2007

Chairman Costello, Ranking Member Petri and members of the House Transportation and Infrastructure Subcommittee on Aviation, thank you for inviting me to participate in this hearing on the Administration's proposal to reauthorize the Federal Aviation Administration's Airport Improvement Program. In addition to serving as airport director at the Santa Barbara Municipal Airport, I am an active participant in the American Association of Airport Executives (AAAE) Airport Legislative Alliance.

The Santa Barbara Airport (SBA) is a small hub airport located on the California coast about 100 miles north of Los Angeles World Airport. Santa Barbara Airport's primary market is Santa Barbara County with a population of about 400,000 residents. The Airport is comprised of 952 acres of land, almost half of which is an ecological reserve and not available for aviation use. The remaining land dedicated to aviation use is in the California Coastal Zone. I mention this because it ties directly to the cost and time it takes to construct a project which also relates to rising construction costs.

Santa Barbara's Airline Terminal was last expanded in 1976 to its current building size of 20,000 square feet. At that time passenger enplanements totaled 200,000. Although the building size has not increased the number of passengers has grown.

Santa Barbara had 414,000 enplanements in CY 2006 which ranks in the top quarter of the Nation's Primary and Non-Primary Commercial Service Airports. The FAA is predicting that enplanements will increase from approximately 740 million in 2006 to more than one billion passengers in 2015 and more than 1.2 billion by 2020 at average annual increase of 3.5%. According to the FAA's Terminal Area Forecast, passenger enplanements at Santa Barbara are expected to increase from approximately 414,000 in 2006 to approximately 601,000 in 2020 – a 45.2% increase.

The current Teminal facilities have outlived their useful life and do not meet current needs, let alone meet the needs for forecasted 2020 enplanements at the 600,000 level.

In 2002, the Airport's Master Plan and environmental documents were approved after many years of environmental hurdles. The Master Plan includes two major projects: constructing standard FAA runway safety areas on the main commercial runway by re-routing a creek and shifting the runway 800 feet to the west; and construction of a new 67,000 square foot airline terminal.

Santa Barbara's only sources of funding for airfield infrastructure and terminal improvements is AIP Entitlement and Discretionary funds, Passenger Facility Charge revenues, and debt financing. We use a portion of the PFC revenues to provide the local match for AIP grants.

Over the past two decades Santa Barbara has received $71 million in entitlement and discretionary grants. These grants have funded mostly airfield infrastructure projects that improve airport safety, compliance with new FAA standards for lighting, signage, etc. and replacement of aging infrastructure.

The proposed five-year ACIP for FY 2008-2012 totals **$61 million.** The projects in the ACIP are related to airfield safety and to accommodate capacity for passenger growth at the Airline Terminal.

The **Airfield Safety Projects** are three projects that are in direct response to national safety priorities to provide standard safety areas at runway ends and to reduce the risk of runway incursions. The total cost of these projects is $35 million and is funded by AIP Entitlement and Discretionary grants with the $1.75 million local match coming from PFC revenue.

Santa Barbara's top priority project is to extend the safety areas at each end of the main commercial runway to current FAA standards. The first phase of the Runway Safety Area Project was constructed last summer and, with approval of our FY 2007 grant request, we will complete the second phase of construction this summer.

The remaining two projects address runway incursions issues at Santa Barbara by constructing a new general aviation taxiway and realignment of an existing general aviation taxiway.

The **Airline Terminal Expansion Project** is a long overdue replacement of a 67 year old Terminal which was last expanded in 1976 to its current 20,000 square feet. Santa Barbara's passenger enplanements have increased over 100% since 1976. The project cost is estimated to be $63 million. This project will be funded from AIP Entitlement grants, debt financing, and PFC revenue to back the project bonds. Since the Project's significant cost will draw heavily on Santa Barbara's financial resources we had originally planned to allocate only 80% of PFC revenue for this project leaving the remaining 20% to be allocated to other airfield infrastructure projects in our ACIP over the next 10 years.

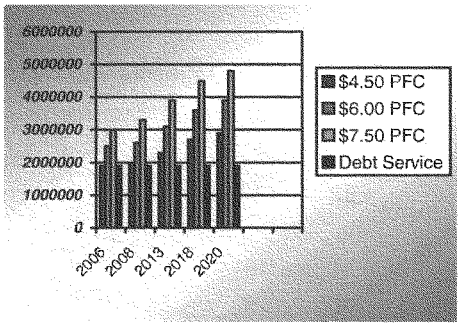
In order to accommodate increasing passenger levels at Santa Barbara and at airports around the country, it is imperative that Congress:

Increase the Passenger Facility Charge to $7.50 with Indexing for Increased Construction Costs:

The local Passenger Facility Charge is an important tool available to airports to address critical infrastructure needs. Since Congress last increased the federal cap on PFCs in 2000, capital needs have grown at airports across the country and skyrocketing construction costs have greatly eroded the purchasing power of PFCs, necessitating an increase in the cap to $7.50 and a mechanism for further adjusting that level based on increased construction costs. The Administration's FAA reauthorization provides a step in

the right direction with a request for an increase in the PFC to $6. Airports believe that figure should be higher given increasing traffic levels and unmet capital needs that exist at airports across the country.

The chart below illustrates PFC revenue produced for Santa Barbara based on forecasted passenger enplanements through 2020 at the current PFC level of $4.50, the Administration's proposed $6.00, and AAAE's requested $7.50. Also included in the chart is the annual debt service for the Terminal project that is scheduled to be paid with PFC revenue.



Because construction costs for the Airline Terminal Project have increased significantly, all annual PFC revenues are now scheduled to be applied to debt service.

With continued rise in construction costs the additional revenue above what is needed for annual debt service will have less purchasing power for Santa Barbara's other eligible capital needs. At the $4.50 level, if Santa Barbara's PFC revenue is growing about 3.2% per year consistent with the forecasted growth in enplanements and if it is assumed (for simple illustrative purposes) that construction costs continue to increase at an annual rate of 5% or greater, the purchasing power of those revenues is seriously eroded.

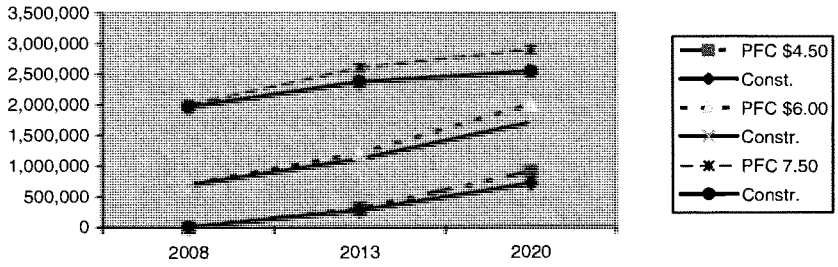
At Santa Barbara the current $4.50 PFC level will generate just enough revenue in 2008 to pay the annual debt service on our Airline Terminal Project. So each year that PFC revenue exceeds the amount needed for debt service those funds can be directed towards the Airport's other eligible capital needs and the local match for AIP grants. At the $4.50 level it will be 2013 before Santa Barbara sees a modest increase of $300,000 in PFC collections above the amount dedicated to debt service and 2020 before it reaches a significant level ($900,000) above debt service. Applying the increased cost of construction will reduce the purchasing power of the $900,000 to about $702,000.

With both the proposed $6 and $7.50 PFC levels, Santa Barbara would exceed the amount needed for debt service in 2008. By 2013 $1.2 million and $2.6 million respectively would be collected above the amount needed for debt service. And by 2020 the collections above the amount needed for debt service would be $2 million and $2.9 million respectively. Even though there will be erosion of the purchasing power of these dollars it is mitigated by the increased PFC collections. Again, the PFC collections above

the amount Santa Barbara will need for annual debt service on the Airline Terminal will be directed towards the AIP match and funding for other eligible capital projects.

The chart below illustrates PFC revenues for Santa Barbara generated above the annual debt service through 2020 at the $4.50, $6.00, and $7.50 levels. Santa Barbara's PFC revenues track with the annual passenger count. Using the annual forecasted enplanement growth of 3.2% and, for illustrative purposes, an estimated annual increase in construction costs of 5%, the purchasing power of the PFC dollars is eroded by 1.8% per year. Inflation costs which have not been factored in would just further erode the Airport's purchasing power.

Erosion of PFC Value Due to Increasing Construction Costs



Below is an example of the rising cost of asphalt for airfield construction. It further demonstrates the skyrocketing cost of construction that reduces the purchasing power of the federal dollars received by the airport.

The chart compares the unit cost increases for asphalt at Santa Barbara Airport from 2001- 2007. During this period asphalt unit costs have risen 36% while inflation has risen 18%. Santa Barbara's AIP Entitlement dollars have increased only 3% over that same period of time.

Runway and Taxiway Construction Cost Increase

June 2001	Feb 2005	July 2005	March 2007	% Increase
Taxiway A Overlay	**Runway 7-25 Overlay**	**Taxiway M Construction**	**Taxiway B/Runway 7-25 Relocation**	
$58/ton	$71/ton	$75/ton	$79/ton	36%/ton of asphalt
CPI June 2001 178.9			CPI June 2006 211.1	17.99%

Increased Funding for AIP:

The Airport Improvement Program was authorized at $3.7 billion for fiscal year 2007. In order to keep up with increasing demands and construction costs, it is critical that Congress provide additional funding for AIP beyond the $3.7 billion level that was authorized for FY 2007. Specifically, airport executives encourage Congress to increase funding for AIP as it has in the previous two FAA reauthorization bills. At the very least, funding should be increased to keep up with increased construction costs. Doing so would translate into $3.8 billion for AIP in FY 2008, $4 billion in FY 2009, $4.1 billion in FY 2010, and $4.3 billion in FY 2011. Congress should also continue the budget protections that help ensure that the program is funded at the fully authorized amount.

The Administration's FAA reauthorization proposal calls for only $2.75 billion for AIP, nearly $1 billion below the authorized level for FY 2007. That figure is woefully inadequate given the vast needs that exist for capital improvements at airports across the country.

At Santa Barbara additional resources are critical and would be used to complete construction of the Runway Safety Area Project ($15 million) and for the Airline Terminal Project ($63 million) to increase funding of eligible portions of the project. Additional funding for the Project will decrease the amount of debt the Airport will incur.

Any reduction in AIP Entitlement dollars can dramatically impact a project for a small airport. In the case of Santa Barbara's Airline Terminal Project we anticipated the use of $11.6 million of AIP Entitlement over the next 5 years. If our Entitlement is reduced by 13% in fiscal year 2008 as would be the case if the Administration's reauthorization plan were adopted, Santa Barbara would lose $300,000, which would have a significant impact on this project. We have used every revenue source available to the Airport and have cut the project building size because of the inflationary cost of construction. If we reduce the project building size any more we will not have a project. That does not serve our community or the nation's air transportation system.

Specific Issues of Concern in Administration's FAA Reauthorization Proposal

The Federal Match for AIP Projects:
Vision 100 included a provision that increased the federal share for small hub and smaller airports from 90 percent to 95 percent through FY 2007. The Administration's FAA reauthorization proposal would allow that provision to expire and return the federal share to a maximum of 90 percent for many small airports. Small communities around the country often find it difficult to come up with a 5 percent local matching share. Increasing their required contribution to 10 percent might prevent certain small airports from moving forward with planned construction.

The 95% match has eased the burden on small airports. The difference between a 10% match and a 5% match can mean the difference on whether a project is constructed. At Santa Barbara the cost of the Airfield Safety Projects totaled $35 million. Even at a 5% match the dollars were significant. At 10% it is possible that these priority safety projects would have been delayed.

The reduction of the AIP match increases the effectiveness of the limited financial resources available to small airports. As Santa Barbara embarks on its Airline Terminal Project to meet future passenger growth, every dollar is needed to complete this project and to be able to continue the maintenance and replacement of airfield infrastructure over the long term.

Conclusion

Chairman Costello, Ranking Member Petri and members of the House Transportation and Infrastructure Subcommittee on Aviation, thank you for inviting me to appear before your committee to discuss the Administration's FAA reauthorization proposal. It is an honor to represent the view of a small hub airport and more specifically the Santa Barbara Airport. I urge you to continue to assist airports of all sizes to keep pace with the increasing passenger demand and skyrocketing construction costs by raising the PFC cap and increasing AIP funding. These actions will have an impact at Santa Barbara Airport by improving safety and increasing Airline Terminal capacity to meet growing passenger demands.

COLUMBUS REGIONAL
AIRPORT AUTHORITY

Testimony of
Elaine Roberts, A.A.E.
President and Chief Executive Officer,
Columbus Regional Airport Authority
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Before the

Subcommittee on Aviation

Committee on Transportation and Infrastructure

U.S. House of Representatives

March 28, 2007

Chairman Costello, Ranking Member Petri, members of the House Transportation and Insfrastructure Subcommittee on Aviation, thank you for inviting me to participate in this hearing on the Administration's proposal to reauthorize the Federal Aviation Administration's Airport Improvement Program. I am Elaine Roberts, A.A.E., the President and Chief Executive Officer of the Columbus Regional Airport Authority. I am also the current Chair of the American Association of Airport Executives. Before I begin discussing the Federal Aviation Administration's reauthorization bill, I would like to spend just a moment to describe the Columbus Regional Airport Authority.

The Columbus Regional Airport Authority is rather unique in that it oversees the operations of three different types of airports in central Ohio: The Port Columbus International Airport, a medium hub airport that is served by 12 airlines and their regional affiliates and has about 180 daily non-stop flights to 37 destinations; Rickenbacker International Airport, a full-service cargo airport with a network of freight forwarders and cargo airlines such as FedEx, UPS, Polar, and Evergreen; and Bolton Field, a general aviation airport that is located just nine miles from downtown Columbus with more than 110 based aircraft.

Our mission at the Columbus Regional Airport Authority is simple: To operate those three airports in a manner that provides passengers, businesses and the community with the highest level of safety, satisfaction and economic benefit. The next FAA reauthorization bill could help us to successfully carry out that mission by increasing the cap on Passenger Facility Charges (PFCs) and the funding levels for the Airport

Improvement Program (AIP). Both of those actions would help airports in Ohio and throughout the country improve safety, enhance security and build the infrastructure they need to accommodate rapidly increasing demand.

Increasing Demand and Rising Construction Costs

Mr. Chairman, many of my colleagues in the aviation industry are looking ahead and trying to develop a plan to help them accommodate quickly increasing demand. The Department of Transportation is predicting that the number of passenger enplanements in the United States is expected to increase from 740 million in 2006 to more than 1 billion just eight years from now.

Like other airports around the county, we are experiencing strong passenger growth at the Port Columbus International Airport. Last year, we set a new passenger record in the 4th quarter when over 1.7 million passengers traveled through Port Columbus. We also had the strongest December on record with almost 570,000 passengers – an increase of 7.3% from December 2005. Southwest Airlines, our largest airline, experienced an 18% increase in traffic in Columbus in 2006 compared to 2005.

I am pleased to say that the upward trend is continuing in 2007. A record 533,000 passengers traveled through Port of Columbus in January – a 15% increase from January 2006. And February traffic continued to be strong with 5% growth over the prior year. In three of the past five months we have experienced all time passenger records at the Airport. Additionally, Midwest Airlines recently announced its plans to upgrade service to Columbus, and earlier this month, Southwest announced that it will be adding another flight in Columbus.

Cargo traffic is also on the rise. The FAA is predicting that total Revenue Ton Miles will increase from 39.7 billion in 2006 to 81.3 billion in 2020 -- an average of 5.3% per year. The number of cargo aircraft is also expected to increase more than 47% between 2006 and 2020. We're seeing the increase in cargo traffic firsthand at Rickenbacker International Airport. We experienced almost a 20% increase in December cargo to close the year at over 250 million pounds. Overall, the airport handled more than a 37% increase in commercial cargo landings in 2006.

While passenger traffic is rising at Port Columbus and cargo traffic is increasing at Rickenbacker, increasing construction costs have reduced the purchasing power of funding for airport capital development projects at all three of our airports. Construction costs have increased by more than 24% in the past three years alone. Unfortunately, however, the $4.50 cap on PFCs and AIP funding levels have not kept pace with inflation and increasing construction costs.

One example of the impact of rising construction costs is a project to construct a grade separated interchange at the entrance to Port Columbus. The Ohio Department of Transportation (ODOT) agreed to a 50/50 funding split with the Airport Authority for this project which was estimated originally at $41.3 million. Due largely to increased

construction costs, the project is now expected to cost $55.5 million – almost a 35% increase. ODOT has indicated that they are not able to increase their original share of funding, so the Airport Authority must fund the entire $14.2 million increase! This is a major unbudgeted increase for the Authority and will ultimately impact our ability to fund other projects.

Increasing the Cap on Passenger Facility Charges

Mr. Chairman, one way you can help airports build the infrastructure they need to keep up with increasing demand and offset the impact of rising construction costs is by increasing the cap on PFCs. As you know, the PFC cap has not been raised since 2000. The Administration's proposal to increase the cap to $6.00 would generate about $1.2 billion per year. This is welcome step in the right direction. But it needs to be higher in order to offset the impacts of inflation and increasing construction costs and to help airports prepare for increasing demand.

Last year, we had 3.36 million passenger enplanements at Port Columbus International Airport, and our $4.50 PFC generated approximately $15 million. We have used PFC revenue to pay for much needed airfield capacity and rehabilitation projects. Specifically, we have used PFCs to extend a runway, rehabilitate our primary runway, improve runway safety areas as required by FAA, reconstruct our terminal apron including installing a glycol collection system, and constructing a crossover taxiway to enhance airfield capacity. We're also using PFCs to enhance security by replacing our terminal access control systems and providing for use of biometrics. I am pleased to say that our PFC funded projects at Port Columbus have always been approved by all the airlines, as we continue to use PFCs for critical capacity, safety and security related projects.

Increasing the PFC cap to $7.50 would allow us to generate approximately $10 million in additional revenue annually. We are currently in the process of preparing an application to collect additional PFCs for new projects that are currently being planned. These include a new replacement primary runway and associated taxiways that are estimated to cost $160 million and certain security related projects, including a proposed in-line checked baggage screening system and terminal HVAC system security enhancements. The increased PFC cap would allow us to minimize new debt and keep our operating costs reasonable, which is critical for an airport like Port Columbus to continue to attract good air service for the community.

Airport Improvement Program Funding

In addition to increasing the cap on PFCs to $7.50, I urge this committee to increase AIP funding. AIP is a critical source of funding for Port Columbus, Rickenbacker and Bolten Field. I strongly endorse urge this committee to increase AIP funding to $3.8 billion in FY08, $4.0 billion in FY09 and $4.1 billion in FY10. Those funding levels would allow the AIP program to keep pace with increasing construction costs, and they are consistent

with the incremental increases that Congress has approved in the previous two FAA reauthorization bills.

It is true that large airports traditionally rely more on revenue generated from PFCs and airports bonds than AIP funding, but there should be no misunderstanding: the AIP program is an important source of funding for Port Columbus and other large and medium hub airports, too. By 2008, for instance, Port Columbus will have received more than $35 million in AIP funds through the FAA's Letter of Intent program to rehabilitate a runway, extend one taxiway and construct another. Port Columbus has also received $38.9 million in AIP funds in the past 5 years for other airfield capacity, safety, security and noise-related projects.

Last year, the Columbus Regional Airport Authority also received $1.1 million in entitlements and about $4.7 million in discretionary funds for improvements at Rickenbacker International Airport. Rickenbacker is currently participating in the Military Airports Program, and the increased discretionary funds have been used to construct new cargo ramp, a new air cargo terminal, and improvements for existing hangars to enhance revenue potential for the Airport. As a former military base, Rickenbacker has been heavily subsidized by local government, and the Airport Authority is trying to ensure that the airport is self-sufficient in the near future.

We also received $150,000 in entitlement funds and about $238,000 in discretionary funds for Bolton Field. The discretionary funds are being used to install perimeter fencing at our general aviation airport. AIP funding is absolutely critical to Bolton Field and Rickenbacker because both serve as important reliever airports for Port Columbus.

Unfortunately, however, the Administration's FAA reauthorization proposal would cut AIP funding to $2.75 billion in FY08. This is almost $1 billion less than the current authorized level and $765 million less than the appropriated amount. If enacted into law, this drastic funding cut would impact all sizes of airports in Ohio and throughout the country.

For instance, the Administration's proposal would reduce total entitlements for medium hub airports like the Port Columbus International Airport from $111 million to $49 million in FY08 – a $62 million cut. It would also reduce total entitlements for cargo service airports like Rickenbacker International Airport from $118 million to $81 million – a $37 million cut. It is my understanding that the Administration's proposal to cut AIP to $2.75 billion would also have a severe impact on the overall funding available for small airports.

Again, I urge this committee to increase AIP funding instead. Additional AIP funding would allow us to continue to move forward with plans to improve the safety and capacity of Port Columbus, Rickenbacker and Bolton Field Airports. Specifically, we anticipate applying for another Letter of Intent to cover 50% of our proposed runway relocation project at Port Columbus with the remainder of the costs covered by PFCs and

new airport revenue bonds. The FAA is currently conducting an Environmental Impact Study for the runway and construction is anticipated to occur in 2011-12.

Additional AIP funds are also needed at Rickenbacker to rehabilitate the main runway, which is estimated to cost $15 million and for pavement rehabilitation projects at Bolton Field. Without additional AIP funds, we simply cannot afford to proceed with these projects in a timely manner.

Proposed Changes to the PFC and AIP Programs

Mr. Chairman, the Administration is proposing a number of changes to the PFC and AIP programs. I am particularly pleased that the Administration's bill includes a provision to streamline the PFC application process. The current process takes airports several months to complete, unnecessarily delays critical infrastructure projects and drives up project costs. Airports have been calling for a streamlined PFC process for many years, and I strongly support the Administration's PFC streamlining initiative.

The Administration's proposal would also allow up to 10 large or medium hub airports to raise their PFC cap to $7.00 if they participate in a new Air Navigational Facilities Pilot Program. In exchange for being able to increase their PFC cap an additional dollar, airports would agree to operate and maintain navigation equipment at their facilities such as instrument landing systems and approach lighting. I think some of my colleagues at large and medium hub airports might be interested in participating in this pilot program if it was accompanied by some necessary liability protection.

The Administration is proposing a number of changes to the AIP program, too. The section-by-section analysis of the bill indicates that the FAA is proposing these changes "to simplify the formulas for distributing Airport Improvement Program funds, which have grown complicated over the recent authorizations, and to better target funding to the Nation's airports with the greatest needs...." I certainly understand FAA's desire to simplify the AIP program and completely agree that we should try to target funding to those airports that need it the most. I think the FAA and its talented staff in the Airports Office should be commended for its efforts and for coming up with a comprehensive plan.

I like the fact that the Administration is proposing to increase funding for busy nonprimary commercial service, general aviation and reliever airports. Our Bolton Field Airport would likely be eligible to receive $400,000 a year based upon the number of based aircraft at the airport. The Administration argues that this proposal would "better target AIP funding to where it is needed." I support the Administration's efforts.

Representing a medium hub airport that participates in the LOI program, I also support efforts to increase discretionary funds to "cover Letter of Intent commitments and high priority safety, capacity, environmental projects." However, by cutting AIP funding by almost $1 billion, it appears that the Administration would not be able distribute much more discretionary funds next year. I believe a better approach would be to increase the

overall AIP funding level so that there is more money available for all airports – large and small – as well as more discretionary funds for high priority projects.

I am also concerned about the Administration's plans to phase out of entitlements for large and medium hub airports after two years. During the transition period, entitlements would be reduced by 50%. For Port Columbus that would mean that we would be forced to give up approximately $650,000 in FY08, another $650,000 in FY09, and $1.3 million in FY10. The Administration argues that these cuts would be "offset by more than four-fold by the increase in the PFC cap." If given the choice, we might be willing to part with our entitlement funds in exchange for a $7.50 PFC cap. However, raising the cap to $6.00 is simply not enough to cover the loss of entitlements, increasing construction costs, and the need to build more infrastructure projects to prepare for increasing demand.

Although I support some of the Administration's proposed formula changes, I must oppose plans to reduce the Federal Government's matching share for airfield pavement and rehabilitation projects for runways, taxiways and aprons at large and medium hub airports from 75% to 50%. These are critical safety projects, and I encourage Congress to reject the Administration's efforts to reduce the Federal share. Furthermore, I would argue that increasing AIP funding to the levels in the section above would eliminate the financial need to reduce the federal share for airfield pavement and rehabilitation projects.

Conclusion

Chairman Costello, Ranking Member Petri, members of the House Transportation and Infrastructure Subcommittee on Aviation, thank you again for inviting me to participate in this hearing on the Administration's proposal to reauthorize the Federal Aviation Administration's Airport Improvement Program. As you consider the next FAA reauthorization bill, I hope you will continue to provide airports with the tools they need to be prepared for increasing demand and to help offset increasing construction costs.

STATEMENT OF D. KIRK SHAFFER, ASSOCIATE ADMINISTRATOR FOR AIRPORTS, FEDERAL AVIATION ADMINISTRATION, BEFORE THE HOUSE TRANSPORTATION AND INFRASTRUCTURE COMMITTEE, SUBCOMMITTEE ON AVIATION, ON THE FAA'S REAUTHORIZATION PROPOSAL, THE "NEXT GENERATION AIR TRANSPORTATION SYSTEM FINANCING REFORM ACT OF 2007," ON MARCH 28, 2007.

Chairman Costello, Representative Petri, Members of the Subcommittee:

I am happy to appear before you today as part of the series of hearings that the Subcommittee is holding on the Federal Aviation Administration's proposal entitled the "Next Generation Air Transportation System Financing Reform Act of 2007" (H.R. 1356). We have the opportunity during this reauthorization cycle to lay the groundwork to enable us to meet the greatest challenge we currently face---transforming the aviation system so it can accommodate future demand safely and efficiently. Our nation's airports—large, medium and small—must be part of that transformation, providing the capacity to serve over 1 billion passengers annually by 2015. Today I would like to provide an overview of the airport financing reforms we seek in order to provide strategic investment in our national airport system. Our proposal contains a number of significant reforms to the Airport Improvement Program (AIP) and to the Passenger Facility Charge (PFC) programs.

We started looking at elements of our airport funding system almost two years ago. We examined airport capital requirements—from the largest commercial service airports to the smallest general aviation fields—and the ability of airports to pay for those capital improvements. We talked to the municipal bond markets and rating agencies; and we looked at emerging trends in airport financing.

Four major factors came into focus during that review that shaped our proposal.

- Capital Requirements are up;
- Airports have recovered financially from the decline in air travel at the start of this decade, but they need to increase their financial self-sufficiency;
- Small airports still depend on AIP support to meet their capital needs; and

- Federal funds for airports are limited, they need to be better targeted to fund priority requirements and to keep pace with the changing trends in aviation.

Capital Requirements are Up

Our last reauthorization came on the heels of the events of 2001. Airlines and airports were still reacting to the dramatic changes in the aviation industry, spiraling jet fuel prices, and the bankruptcies of major legacy carriers. Congress crafted a reauthorization package that reflected that unsettled state of the industry. Airports pulled back from major expansion projects, taking instead a "wait and see" attitude. Passenger traffic plunged and an atmosphere of cautiousness prevailed. But now, four years later, the industry has settled and recovered.

For the second year in a row, passenger demand on U.S. airlines was strong with 49 million passengers traveling. In 2005, commercial air carrier enplanements rose seven percent and were six percent higher than enplanements in 2000. With passenger levels back to pre-9/11 levels and air carriers shifting from larger aircraft to smaller regional jets, delays returned to the system. 2006 was the worst year ever for delays, and 2007 is shaping up for more of the same. Major airfield improvements together with enhanced technology are planned to help mitigate delays at those airports.

The impact of these changes has been shown in our latest *National Plan of Integrated Airport Systems* or NPIAS, a report we prepare for Congress every two years. This report details the projected capital needs of airports of all sizes throughout our aviation system. The current NPIAS report reflects the economic recovery of the airport industry. Capital needs across all sizes and categories of airports are up four percent over the prior NPIAS, published when the effects of September 11 were still being felt. In fact, the current NPIAS report may understate the true cost of needed capital investment, as sharp increases in construction costs occurring in the last half of 2006 were not fully reflected in the most recent NPIAS report.

Airports have recovered financially

We also studied the financial health of the airport industry itself. We found that airports had recovered financially from the difficulties of the early 2000s. Across all sizes of airports, net operating results (revenue minus expenses) are up. That does not mean that all categories of airports are profitable however. There is a direct relationship between the size of the airport (measured by passenger enplanements) and the profitability of the airport. The large airports (meaning the large- and medium-hub airports, or about the top 70 or so airports) which enplane 89 percent of the nation's passengers are profitable. These airports are financially stable and have had the ability to reach beyond federal grant funding for needed capital improvements. They have ready access to the general airport revenue bond (GARB) markets, and all but four collect a PFC.

The financial performance of small primary airports (small hub and nonhub primary airports) which enplane 11 percent of the nation's passengers, has returned to the levels of the late 1990s, but those levels are not always robust. Many of these airports just break even and even more operate at a loss. Most collect a PFC, but we found that these airports continue to rely on federal AIP grants for major capital improvements. The general aviation (GA) community also reflects the stratification found in the commercial service airports. The largest of the general aviation airports are more financially stable, but the GA airport community, as a whole, depends on AIP for funding capital improvements.

Airports need to increase their financial self-sufficiency

There was also a consensus that airports need to reduce their reliance on air carriers when making major capital improvements. The financial markets were unified in their positions that airports relying on the inherent revenue-generating potential of their local market-their passengers-rather than the vagaries of airline financial health, make the strongest credit risks. Financial markets see local revenue, especially that generated through PFCs, as stable and desired sources of airport revenue. The financial markets

also recommended that airports increase non-aeronautical sources of revenue, such as from concessions providing services to airport users.

More strategic Federal investment—AIP and PFC Reform

AIP Reform

Our proposals for Airport Improvement Program and Passenger Facility Charge reform are designed to empower local airports with strong local revenue sources and strategically target federal dollars to the airports where they will have the most impact. We are proposing major reforms to AIP apportionment and set aside formulas and are also proposing substantial reform to the PFC program.

FAA is committed to a healthy national air transportation system. Airports are a key part of the system, and that includes small primary and general aviation airports that rely on AIP funding to help meet their capital needs and complete strategic projects. Our proposal will stabilize and enhance these funding sources for airports. The level of our AIP request, when combined with programmatic changes to AIP and the PFC program, will provide the financial resources FAA needs to meet the nation's highest priorities for safety, security, and capacity. This includes projects such as upgrading runway safety areas and mitigating runway incursions, funding current and future letters of intent for capacity projects at commercial airports, preserving existing airfield infrastructure, and advancing compliance with airport standards.

Our reform proposal for AIP includes the following major elements:

- Phasing out passenger entitlements for medium and large hub airports (approximately 70 airports) after FY 2009, while preserving discretionary funding for these airports. This proposal recognizes on the one hand, the ability of these airports to finance their own routine capital needs through the PFC program. On the other hand, the important role these airports play in the national system is recognized by continuing to allow these airports to apply for discretionary AIP grants for the most important projects. This change will provide more discretionary funding for the FAA to direct in order to meet national priorities.

For FY 2008 and 2009, passenger entitlements for these airports would be reduced by 50 percent from current levels.

- Retaining the higher passenger entitlements for the remaining smaller airports for all levels of AIP funding, eliminating the link, or "trigger," between these entitlement levels and an AIP funding level of $3.2 billion. This change recognizes smaller airports' continued dependency on AIP.
- Increasing the minimum discretionary fund level from $148 million to $520 million, enabling FAA to better target AIP investment to meet national priorities.
- Reforming general aviation airport entitlements to better target AIP to those airports that will be impacted by emerging technologies by –
    - Establishing a separate state apportionment fund with a minimum funding level of $300 million;
    - Eliminating the uniform $150,000 individual nonprimary airport entitlement with a tiered system of entitlements. The largest and busiest airports would receive $400,000, while the very smallest airports would receive no annual guaranteed AIP amount. These airports would remain eligible for state apportionment and for discretionary funds.
- Eliminating the Military Airport Program and Reliever airport set aside and instead funding these needs out of regular AIP discretionary funds.

In a strategic investment context, large airports are strong and mature financial enterprises that no longer need guaranteed passenger entitlements to meet their capital needs. Most of these airports are already returning 50 or 75 percent of their passenger entitlements under the PFC turnback requirements in current law. Moreover, under our proposed PFC increase (discussed below), these airports, as a group, could gain over $3 in PFC revenue for every dollar of AIP passenger entitlement lost. In FY2006, large airports were allocated approximately $295 million in passenger entitlements. Using the same passenger counts as FY2006, large airports could see an increase in PFC revenue of approximately $1 billion.

Large airports will continue to qualify for discretionary funds, including letters of intent or LOIs. Discretionary funding is a more useful form of Federal assistance to large

airports, because it allows AIP to be concentrated on very costly projects that occur infrequently.

We also propose to update the AIP formula for the discretionary fund. Current law sets that minimum at $148 million (a figure dating from the 1990s, when the level of AIP was about $1.4 billion), plus a calculated amount based on Letters of Intent prior to January 1, 1996. However, all those LOIs have been completed. Our proposal would set a minimum level of $520 million, which will assure that funding is available to cover current and anticipated LOI commitments and high priority safety, capacity, environmental, and security projects, such as runway safety area projects and new runways at Operational Evolutionary Partnership (OEP) airports. We believe that airports of all sizes will benefit from this change.

Our proposal contains a broad range of formula changes for small primary airports, which depend on AIP to meet their capital needs. Current levels of small primary airport entitlements will be retained at all levels of AIP. The current statutory penalty that reduces passenger entitlements by 50 percent and reduces the minimum passenger entitlement from $1,000,000 to $650,000 when AIP levels are less than $3.2 billion will be eliminated. This proposal thus allows small primary airports to be assured of a stable flow of passenger entitlements.

Small airports of all categories will benefit from a new discretionary small airport fund that would replace the existing Small Airport Fund. The current Small Airport Fund is financed from the passenger entitlements that large airports collecting a PFC must return to the FAA. Once passenger entitlements at large airports expire in FY 2010, the current Small Airport Fund will no longer have a source of funding, so our proposal would repeal the fund as it is currently constituted. The new discretionary small airport fund would be established at 20 percent of available discretionary funds.

As noted above, our proposal also provides a more rational structure for general aviation (GA) airport apportionments while preserving their access to essential AIP funds through three critical reforms. We propose to restore the state apportionment to a meaningful

level by separating it from the non-primary entitlements. We would set the level of the state apportionment at 10 percent of AIP, and provide for a minimum level of $300 million per fiscal year. This more robust state apportionment funding will allow states to meet their own strategic investment objectives, with the knowledge that this fund will be stable. This commitment to local funding through state apportionment will allow prudent growth of the individual state aviation systems.

Also in order to better target AIP funding to where it is most needed, we propose to modify the current non-primary entitlement program by providing for tiered funding levels based on airport size and aviation activity. Under current AIP formulas, while primary airports are divided into five categories, the 3,000+ nonprimary, or general aviation airports are allocated a single maximum entitlement regardless of size or role in the system. We analyzed the infrastructure needs of general aviation airports in detail in developing our proposal. The outcome should surprise no one. Busier GA airports – and those used by more sophisticated aircraft – have more complex and costly airfield infrastructure to maintain and improve. One size does not fit all when it comes to GA airports–just as one size does not fit all with primary airports. Our investment in the general aviation system must follow the model long established by primary airports. The entitlement would range from $400,000 per fiscal year for the largest GA airports to $100,000 for those airports with 10 to 49 based aircraft. Airports with less than 10 based aircraft would not be eligible for a guaranteed annual apportionment. These airports would continue to qualify for state apportionment and discretionary funds, and would retain the 95% federal share scheduled to sunset at the end of FY 2007.

The tiered general aviation entitlement is supported by historical data. This data shows that busier general aviation airports tend to be larger, have more complex airfield geometry and more sophisticated lighting and navigational aids. All of this translates into greater capital requirements. The proposed level of the non-primary entitlement is based on engineering and planning reviews that identified essential airfield infrastructure requirements for each tier of airports. We also looked at a number of measures of activity at GA airports. None was perfect, but based aircraft data had the benefits of being objective, obtainable and verifiable. Other options, such as operations or fuel sales

lacked one or more of these characteristics. Based aircraft is a good indicator of the current operational status of an airport. However, like passenger entitlements, it may not be representative of all of the activity at a GA airport. There are airports that have high transient operations and low based aircraft counts. Our experience is that the capital needs of airports with high transient operations tend toward the kinds of high priority airfield projects that compete well for state apportionment or discretionary funds.

In making this tiered proposal, the FAA is not suggesting that the lowest tier airports do not need AIP funding. Rather, we have concluded that these airports do not need, and in some cases cannot use, a guaranteed annual entitlement. In the 42 states that do not participate in the state block grant program, 618 airports would qualify for the lowest tier. (We focused on the non-block grant states because we cannot readily track individual airport grant activity in the block grant states.) Of these, 134 airports, or 22 percent, did not qualify for a non-primary entitlement (NPE) in FY 2006 because they had not reported capital development needs in the NPIAS. Of the remaining airports in the lowest tier that did get a non-primary entitlement, 141 did not take a grant in the four years ending in FY 2006. In other words, 44 percent of the airports that would not receive a NPE under our proposal have shown that they do not need, and cannot use, an annual guaranteed amount of AIP. Given this data, we concluded that an annual guarantee to each and every airport in the NPIAS is not justified.

Our proposal also supports the scheduled sunset at the end of FY2007 of temporary subsidies included in *Vision 100*. Congress responded to the financial turmoil the airport industry faced in the early 2000s by including *temporary, short-term* subsidies to airports. The decision to make these subsidies temporary was the right one. The financial data shows that airports have recovered to their pre 9/11 financial conditions. The financial crisis that triggered the subsidies has passed, and the financial subsidies should be allowed to sunset. The two *Vision 100* subsidies, the Virtual Primary subsidy and the temporary increase in federal share for all but the largest primary airports cost over $150 million per year. At a time when capital development needs are rising, these funds should be better support additional capital projects at small airports.

Passenger Facility Charge Reform

The PFC program, which Congress enacted in 1990 and currently authorizes airports to collect fees of up to $4.50 per enplaned passenger, has been very successful at providing a stable source of revenue to fund capital development projects. The reforms we propose are designed to enhance the status of PFCs as a revenue source to support airport debt financing. First, we propose to increase the maximum PFC to $6.00*. Much of this proposed increase would simply compensate for inflation since the PFC was first authorized. The remainder would help airports cope with the increased capital needs identified in the current NPIAS. Also, this increase would bring in an additional $1.5 billion annually in PFC revenues to airports of all sizes. Large airports would account for about $1 billion of this increase, while small airports would get about $500 million–more than compensating for the loss of passenger entitlements (described above).

Our proposal would also expand PFC eligibility to include most airport capital development projects in non-exclusive use areas, including revenue-producing facilities, as long as it will not hinder competition, and amends statutory PFC provisions to make it easier to use PFCs to help finance intermodal airport ground access projects.

Except for the requirements for competition, PFC eligibility for capital projects would match the eligibility for using airport revenue to fund capital projects. PFCs are local airport revenue, and the airport community has demonstrated that they can be trusted to use PFCs responsibly. In talking to our stakeholders, especially small airports, one of their biggest frustrations is the inability to use PFCs to pay for the construction of revenue-producing facilities. They told us that if PFCs could help pay for the construction costs of these facilities, the airports would have more net revenue going to the bottom line, which they can share directly with the carriers in the form of reduced landing fees and terminal rents, or indirectly with the carriers by reinvesting in additional revenue-producing facilities. Either way, small airports in particular have told us that

* There is one exception to the $6 cap. To support a new pilot program for the transfer of navigational equipment, an airport selected to participate in the program could adopt a PFC of $7 (see section. 318 of our bill, discussed below).

additional PFC flexibility will help them structure their airport finances to retain current air service and attract new service.

Even connecting passengers will benefit from the use of PFCs for revenue producing facilities. Airports function as a financially integrated whole. When profits from revenue-producing facilities increase, those added profits are available to help defray the operating cost of the entire airport. Those lowered costs in turn are passed on to the carriers and ultimately the passenger. Similarly, for those airports that issue debt, higher profits from concessions may translate into better credit ratings, which in turn mean lower costs. This change in eligibility will also address one of the municipal bond market's major criticisms of PFCs as support for debt. The current criteria require expensive accounting and tracking procedures to keep PFC revenues separate from other revenue when an airport issues GARBS to finance a combination of PFC eligible and ineligible work.

The expanded eligibility should not lead to a lessening of PFC support for vital airfield and terminal capacity projects. We looked at 15 OEP runway projects completed since 1999 or under construction. Eleven of the 15 included GARB proceeds in the financing package with percentages as high as 65 percent. In other words, even when they have the freedom to use local revenue on any capital development at an airport, major airports have exercised that freedom to apply their revenue to major capacity projects.

In addition, the PFC administrative review process would be streamlined. Instead of filing applications and amendments, airports would file an annual status report reviewing how they used PFCs in the previous year and how they plan on using PFCs in the coming year. If their plan includes using PFCs for a new project, the airport would have to consult with their air carriers and provide for notice and comment in the community, just as they do today. Likewise, air carriers and the public would have an opportunity to object to a project before the FAA and to receive a determination by the FAA on project eligibility. This new administrative procedure will focus FAA's oversight on the handful of PFC projects that raise serious questions or controversy; and preserve the role of the carriers and the local community in the PFC decision process, while eliminating

unnecessary federal oversight and bureaucratic paperwork exercises that provide minimal benefit to the traveling public. Airports will be able to put their PFCs to work faster building the airport infrastructure the nation needs.

Along with the increased flexibility and streamlining of the review processes for new PFC projects, this provision would also provide explicit authority for the FAA to investigate complaints of non-compliance with PFC requirements. This approach more closely resembles the same approach that current law provides for oversight of the use of other locally-generated airport revenue, including rates and charges.

For new intermodal rail projects, the current prior approval requirement will be retained. These projects tend to be controversial and require close coordination between FAA and other Department of Transportation modal administrations to determine the project's feasibility and likely airport ridership. Retaining the prior approval requirement will assure that the necessary coordination and review occurs.

Finally, this provision would extend the sunset date of the current non-hub airport PFC pilot program until adoption of final regulations for the new streamlined review procedures called for by this proposal. Once the new administrative review procedures are implemented, the pilot program will no longer be needed.

Other Program Highlights

Our proposal includes two pilot programs to encourage airports to be active participants in the NextGen transformation. One proposes a new pilot program to broaden AIP eligibility to include installing ADS-B ground stations in markets that FAA cannot reach from the ATO capital program. This program will supplement the FAA program, allowing states or metropolitan planning organizations to install ADS-B ground stations to "fill in" blank areas of ADS-B coverage, or to accelerate ADS-B coverage ahead of the FAA schedule. FAA has made a technical determination that 100% coverage with ADS-B is not necessary to assure the safety and efficiency of the system. Likewise, FAA's planned deployment schedule addresses the needs of the national system. However there may be some small airports that fall outside the planned national ADS-B coverage areas

that will gain regional or local benefits from the added reliability that ADS-B coverage provides. The pilot program would be open to states, metropolitan planning agencies and regional consortiums to encourage installation of ground stations that would provide coverage at multiple airports. This coverage could extend the situational awareness offered by ADS-B to include several small airports with only one station.

To enhance transition to NextGen, the second pilot offers 10 large airports the opportunity to charge an extra dollar of PFCs (to $7.00 total) in exchange for taking over ground based terminal navigational and weather equipment at their airport. Because the FAA will not simply turn on the NextGen system and turn off the ground based legacy systems on a single day, ground based systems will need to be maintained and operated while the NextGen system is being deployed. FAA views these terminal navigation aids and weather reporting systems as functional extensions of the runways and runway lighting systems that airports already own and maintain. In many countries around the world, airports already own and maintain their navigational aids. The pilot program is limited to large airports, because we know these airports have the financial resources to operate and maintain the equipment to FAA standards.

Finally, I would note that our proposal includes a number of provisions to help FAA and airports work cooperatively to be better environmental stewards. Our bill would modify the eligibility standards and funding calculation for what now is commonly referred to as the "noise set-aside." We would extend eligibility to include water quality mitigation projects that are approved as part of an environmental record of decision (ROD) for an airport project and for carrying out projects authorized as part of a new environmental research pilot program included in Title VI of the bill. In addition to projects allowed under current law (noise mitigation, compatible land use planning, compliance with Americans with Disability Act requirements, air quality improvements such as low-emission fuel systems, gate electrification, and vehicle conversion), this section's changes would make these AIP funds more flexible so as to be available for a range broader environmental uses. To recognize this broader eligibility, we would redesignate it as the "environmental set-aside." We also propose to change how the set-aside is apportioned from the current 35% of the AIP discretionary fund to 8% of all AIP

apportioned funds. This change results in a more stable funding stream for the environmental program because each year the amount of the discretionary fund varies depending not only on the overall funding level but also due to the amount of "carryover" of unused entitlements.

As noted, our bill modifies the Airport Cooperative Research Program (ACRP) and includes specific funding for environmental research. This proposal would provide for the ACRP to enhance R&D support specifically related to airport environmental needs. Funding for the ACRP would be authorized to increase from $10 million to $15 million per year, of which at least $5 million is specifically targeted to research related to the airport environment.

Finally, I would note that we propose a new pilot program to allow the FAA to fund six projects at public-use airports that would take promising environmental research concepts that have been proven in the laboratory into the actual airport environment for demonstration. Eligible projects would demonstrate whether implementation of research results would measurably reduce or mitigate aviation impacts on noise, air quality or water quality in the airport environment. For example, a project could demonstrate new operating procedures that are currently in the developmental stage that offer promising near term environmental improvements. FAA would publish information on best practices based on the results of the projects. Funding would come from the environmental set-aside of the AIP discretionary fund. FAA would fund 50 per cent of the project costs except that a maximum Federal contribution of $2.5 million per project would apply.

Mr. Chairman, our authorization proposal provides the targeted investment, program flexibility and innovations, and environmental protection that will support a healthy airport community, enabling them—large or small--to meet their capital needs and plan for future growth. It provides Federal resources to where they are most needed. I thank you for the opportunity to be here today and look forward to working with this Subcommittee as well as the airport community over the next few months as

reauthorization of our programs proceeds. This concludes my prepared statement. I will be happy to answer your questions at this time.

NASAO

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North Carolina
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Oklahoma
Oregon
Pennsylvania
Puerto Rico
Rhode Island
South Carolina
South Dakota
Tennessee
Texas
Utah
Vermont
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West Virginia
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Wyoming

The Statement of Travis L. Vallin

Director, Colorado Division of Aeronautics
and
Chairman, National Association of State Aviation Officials

before the

Committee on Transportation and Infrastructure
Subcommittee on Aviation
U.S. House of Representatives

concerning

The Federal Aviation Administration's Financing Proposal for FAA and the Airport Improvement Program

March 28, 2007

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Good morning Chairman Costello, Congressman Petri and Members of the Subcommittee. On behalf of the members of the National Association of State Aviation Officials (NASAO), I thank you for this opportunity to share with you the thoughts of my colleagues on the administration's "Next Generation Air Transportation System Financing Reform Act of 2007"... and how it could affect our nation's airports.

My name is Travis Vallin and I am the Director of The Division of Aeronautics of Colorado's Department of Transportation. But today, I am speaking to you as the elected Chairman of NASAO.

Founded in 1931, NASAO is one of the most senior aviation organizations in the United States, predating FAA and even its predecessor, the Civil Aeronautics Authority. The states established NASAO to foster and regulate the fledgling aviation industry, to ensure the uniformity of safety measures, to standardize airport regulations and to develop a truly national air transportation system responsive to local, state and regional needs.

For the past 76 years, NASAO has been unique among aviation advocates. Unlike special interest groups or industry lobbyists, NASAO speaks for the men and women, in the state government aviation agencies...*those who serve the public interest* in all 50 states, Guam and Puerto Rico. My colleagues in NASAO are partners with the federal government in the development and maintenance of the safest, largest and most efficient aviation system in the world.

The states invest more than $800 million annually in planning, operations, infrastructure development, maintenance and navigational aids for our national system of over 3,000 public-use airports. Many states also build, own and operate their own airports...they range from large airports like Thurgood Marshall Baltimore Washington International Airport (BWI) to back-country airstrips which serve emergency and firefighting needs.

Every year state aviation officials conduct safety inspections at thousands of public-use airports. Countless aviation activities including, airport symposiums, pilot safety seminars and aviation education forums are also organized annually by the states.

Although the administration's proposal for FAA and AIP reauthorization was only released last month, **NASAO's 2007 National Legislative Agenda** has been available since March of 2006. Our Legislative Committee and board of directors met again, this January, to review and endorse our whitepaper. I would like to emphasize that this is a consensus document, agreed upon by all of the states. In the wake of the administration's release of its proposal on February 14, the states gathered again to compare our proposal to theirs. We believe so strongly in our thirteen principals that we did not change a single word. I have attached

that document to my written testimony and it is available on our web-site www.nasao.org.

By the way, the American Association of State Highway and Transportation Officials (AASHTO), representing the states' transportation directors, commissioners and secretaries, is in substantial agreement with our views and used our whitepaper as a pattern for a statement of principles that they have issued regarding reauthorization.

Before I address the administration's proposal, I want to assure you that the states fully support and encourage the modernization of the air traffic control (ATC) system. In fact, we believe that "modernization" is too timid a word. We believe that the ATC must be "transformed".

NASAO is actively involved in that transformation - at many levels - from the installation of a state financed multi-lateration system in my home state of Colorado, to state funded pioneer Automatic Dependant Surveillance –Broadcast (ADS-B) systems along the entire Atlantic coast and NASAO's service on the Joint Program and Development Office's (JPDO) National Center for Advanced Technologies' Institute Management Council.

Because of our direct and active involvement in the effort to transform the system, we can tell you that the administration's title for its proposal is entirely misleading. It has much to do with shifting costs between and among aviation interests, but has little to do with the actual Next Generation Air Transportation System (Next Gen).

Now, let me review for you some of the aspects of the administration's proposal that NASAO is inclined to favor...some the issues which concern us greatly... and finally those that we strongly believe must be rejected by Congress.

First, we like the idea of the proposed hard-floor of $300 million for State Apportionment...below which it would not be allowed to fall. State Apportionment is one of the most valuable investment categories available to state aviation agencies. The safety, efficiency and success of our national system of airports is heavily dependent on a robust investment in State Apportionment.

We also appreciate that the so-called "triggers" have been removed from the AIP program but sadly note that the administration is removing the trigger language from the bill in order to reduce the overall AIP amount to an inadequate $2.7 billion. **NASAO recommends reauthorizing AIP in 2008 at $3.8 billion.**

Also, while we have not yet had the opportunity do an in-depth analysis, we are extremely concerned about the way the administration proposes to fund AIP. They would use a formula that depends heavily on international arrival and departure fees as well as a percentage of fuel taxes and a small General Fund

contribution to support AIP. This appears very fragile. For instance, a lengthy downturn in international travel caused by another SARS outbreak is just one factor that could bankrupt the Trust Fund

We agree with the administration that the Automatic Dependant Surveillance-Broadcast (ADS-B) technology, which is the keystone around which the ATC system will be transformed, should be supported by the Aviation Trust Fund.

NASAO also believes that the administration is going in the right direction on Passenger Facility Charges (PFC) – but that it does not go far enough. Because of inflation since the inception of the PFC program and rapidly rising construction costs, we know that state owned and operated airports, such as Maryland's BWI...Rhode Island's T. F. Green...Connecticut's Bradley International...and Hawaii's Honolulu International, and other **major hubs, need and deserve a PFC of $7.50**. They also should have much more flexibility in using PFC derived funds. This is one of many areas in which NASAO is in agreement with our friends at the Airports Council International – North America (ACI-NA) and the American Association of Airport Executives (AAAE).

General Aviation (GA) airports are a vital and important component of the national system. Today, as you know, all of the Non-Primary airports in the National Plan of the Integrated Airport Systems (NPIAS) are eligible for a minimum entitlement of $150,000. We are seriously concerned about the administration's attempt to place these facilities into *four* Non-Primary Entitlement (NPE) categories divided by the number of fixed-wing aircraft based at the airport. (Helicopters are not counted).

On a sliding scale, the administration would make those with 100 or more based aircraft eligible for an annual $400,000 entitlement at one end of the spectrum and zero entitlement for those at the other end with fewer that 10 based aircraft.

While the simplicity of the plan may seem attractive, it could be grossly unfair. Airports which have more than 100 based aircraft are already very competitive for FAA grants, State Apportionment and discretionary funding. Is it good public policy to simply hand them an annual check for $400,000 while potentially ignoring smaller airports that require financial support to serve a public need?

Why eliminate those airports with fewer than 10 aircraft from the NPE program? Is that good public policy? Some of those airports may be at "destinations" which attract a great deal of transient air traffic. They may be training sites with many students, but with few locally based aircraft. They may be essential to bringing emergency medical relief to remote communities. They may provide necessary portals for emergency relief during natural disasters.

Further, because each state's airport system is, naturally, different and unique, the administration's NPE proposal turns some states into huge winners and

others into equally enormous losers. NASAO cannot support the wide-spread funding disparity this proposal would create.

In an effort to assure fair and appropriate funding for all of our GA airports, NASAO is currently actively engaged in discussing the administration's proposed NPE program with the FAA Headquarters Airports Office staff. But, unless or until we are able to modify the administration's view of the NPE program, **we stand by our support of the existing NPE program and strongly encourage Congress to continue it.**

As I said earlier, there is also much in this proposal which NASAO and I find objectionable. It is my understanding, Mr. Chairman, that at a hearing last week you said that you did not believe that the administration's proposal is in the public interest. NASAO's members, as public servants, agree with you! It seems to us that this bill is a solution in search of a problem.

Because you have already held a series of hearings and have assembled a great deal of expert witness testimony, some of the rest of my presentation may seem familiar to you.

The Essential Air Service (EAS) program is a lifeline to many small and often isolated communities across the nation. Those of you who have such communities in your states know how important EAS is to the health and welfare of your constituents. Over the years since deregulation, Congress has modified the program several times. But, the administration's bill would eliminate more that 60 communities from the program and slash the budget to $50 million. NASAO does not believe this is in the public interest. **NASAO recommends that Congress continue the EAS program and fund it at a minimum of $127 million.**

NASAO is pleased to associate itself with the comments of Dr. Gerald Dillingham of the Government Accountability Office, current Department Of Transportation Inspector General Calvin Scovel and former DOT Inspector General Ken Mead...all of whom have said, essentially, that *the system is not broken*...that the present excise tax structure works well and that it will adequately fund FAA and the transformation of ATC. I also recall the testimony of the Congressional Budget Office (CBO) before this committee last September. Acting CBO Director Donald Marron predicted, at that time, that the current system is sufficient to handle FAA's future expenses *and* the transformation of the system to Next Gen...essentially predicting the availability of a $19 billion surplus.

All Americans reap the significant benefits generated by our national aviation system. It provides safe and efficient air travel for both airline and General Aviation users while supporting the national defense, homeland security, postal and cargo delivery, emergency medical evacuation and disaster relief. It has become the foundation of our national economy. NASAO believes that the

administration is short-changing the FAA and AIP when it caps the General Fund contribution at 19%. **NASAO recommends a 30% General Fund share.**

For the past 30 years we have had a funding system that has worked and that have served both FAA and AIP well. In the past decade, Congress wisely passed AIR – 21 and Vision – 100...the two most important infrastructure investment bills in the history of aviation. **Throwing away 30 years of wise, tested and successful public policy for a radically different user fee based system that would actually collect less revenue than we enjoy today and which would likely cause great damage to the General Aviation community is not in the public interest. NASAO adamantly oppose any new user fees for GA.**

Just last spring, NASAO played a role in a formal, ground breaking, academic study of General Aviation's contribution to the U. S. economy...which was sponsored by the General Aviation Manufacturers Association.

That study, which used very conservative models, concluded that the GA sector contributed at least $150 billion to national output in 2005 and, directly or indirectly, employed more than 1,265,000 people whose collective earnings exceeded $53 billion.

Because the states often work very closely with GA operators and airports, we believe that, contrary to the administration's assertions, increasing fuel taxes by about 250% percent would have a very negative effect on the number of hours flown by General Aviation and thus would decrease the administration's projected revenues. That would inevitably lead to a new round of tax increases and a constant erosion of a significant portion of that community.

NASAO's members are particularly concerned that the administration's proposal would protect any and all of the user fees and increased fuel taxes from judicial review. That is definitely not in the public interest.

While we are somewhat sympathetic to the administration's desire to make the system more "equitable", we agree with our GA colleagues at the Aircraft Owners and Pilots Association (AOPA), the Experimental Aircraft Association (EAA), General Aviation Manufacturers Association (GAMA), National Air Transportation Association (NATA) and the National Business Aviation Association (NBAA) that the present ATC system was designed for the airlines and that the administration's cost allocation figures overestimate GA's genuine use of the system. We find some compelling evidence in the fact that GA's top-twenty airports and the commercial airline's top-twenty airports are on totally different lists. We are further persuaded by the fact that while GA has been essentially banned from Ronald Reagan Washington National Airport, FAA's workload and budget at the airport have not diminished.

NASAO is puzzled by the administration's efforts to eliminate the ticket tax. Although I regularly fly the commercial airlines and actively work in the aviation sector, I must admit that I have never heard passengers complain about the current 7.5 percent ticket tax. As you well know, these taxes are paid by the traveler not the airlines. Both ticket prices and passenger traffic are increasing (ticket prices were raised ten times in 2006 alone) and that too will help boost revenues flowing into the trust fund.

So, if much of the administration's proposal is not in the public interest, how does Congress reauthorize FAA and AIP before the September 30, 2007 expiration of the program and the taxes?

NASAO respectfully suggests that you have an excellent template at your disposal...VISION – 100. NASAO encourages you legislate a 5 year FAA and AIP program and authorize the foundational taxing mechanisms for ten years using the VISION – 100 pattern. In the past month, you have gathered ideas, facts and figures from the full spectrum of the aviation industry. If you can remove the administration's divisive and onerous user fee/outrageous tax hike proposal from the equation, we can all focus on the same goal – transforming the present ATC into Next Gen...which will benefit all Americans.

In conclusion, let me say that NASAO recognizes, with appreciation, those of you in Congress who provide the national system with fair, stable and predictable funding and appropriate oversight. We are irrevocably opposed to the administration's attempt to impose a new board of directors on the FAA. **FAA already has a board of directors and it is called the United States Congress.**

That concludes my statement, Mr. Chairman. Thank you, again, for inviting NASAO to participate in this hearing and this legislative process. I would be happy to answer any questions you may have.

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NASAO

NASAO 2007 NATIONAL LEGISLATIVE AGENDA

Alabama
Alaska
Arizona
Arkansas
California
Colorado
Connecticut
Delaware
Florida
Georgia
Guam
Hawaii
Idaho
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Louisiana
Maine
Maryland
Massachusetts
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Minnesota
Mississippi
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New Hampshire
New Jersey
New Mexico
New York
North Carolina
North Dakota
Ohio
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Oregon
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Puerto Rico
Rhode Island
South Carolina
South Dakota
Tennessee
Texas
Utah
Vermont
Virginia
Washington
West Virginia
Wisconsin
Wyoming

REAUTHORIZATION PROVIDES CONGRESS WITH AN OPPORTUNITY TO STRENGTHEN AMERICA'S AIR TRANSPORTATION SYSTEM

Together, the federal and state governments and aviation professionals in both the public and private sector have carefully built the safest, strongest and most efficient transportation network in history. All Americans derive the significant benefits of this system which has become a foundation of our national economy. It provides efficient air travel for both airline and general aviation users while supporting the national defense, homeland security, postal and cargo delivery, emergency medical transportation and disaster relief. We must continue prudently investing in our national aviation infrastructure, while preparing for a three-fold increase in demand over the next twenty years.

NASAO encourages Congress to reauthorize a five year FAA and AIP program and reauthorize the underlying taxing mechanisms for ten years. This pattern has worked very well historically and a five-year funding program is highly appropriate since most airports develop and maintain five-year Capital Improvement Programs. It also permits Congress to perform timely course corrections when needed

NASAO recommends reauthorizing AIP at $3.8 billion for FY 2008. Since infrastructure maintenance and development programs are often planned for many years and there are approximately $14 Billion dollars in needs annually, NASAO recommends continuing the AIR – 21 and VISION – 100 patterns of increasing investments each year to $ 3.9 billion in AIP for FY 2009, $4.0 billion for FY 2010, $4.1 billion in 2011, and $4.2 billion in 2012. This would provide states and airports a stable and predictable planning horizon.

NASAO encourages Congressional oversight to ensure that FAA continues the current formula and fully funds state apportionment. State apportionment has always been an important part of efficient funding system for the nation's smaller airports.

NASAO recommends that Congress continue the non-primary airport grant program. Created by AIR - 21 ($150,000 per eligible General Aviation airport), this program has been successful in assisting the nation's smaller but equally valuable General Aviation airports. These airports relieve traffic at the largest airports while providing all Americans with access to the national air transportation system.

NASAO joins with other leading aviation organizations in calling for a robust investment in FAA funding from the General Fund and recommends a 30% General Fund share. Since all Americans benefit by the national air transportation system, all Americans should have a financial stake in it. As designed by Congress, the AIP Trust Fund was not originally intended to fund FAA salaries and operations; it was designed to invest only in airport infrastructure development and maintenance. A 30% General Fund contribution is highly appropriate.

The Essential Air Service program is important to many rural areas and Congress should continue to fund this program with a minimum of $127 million. The US DOT should also be able to adjust subsidies to reflect cost increases, or decreases, for the airlines.

(OVER)

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NASAO asks congress to preserve the efficient network of more than 3,000 airports of all sizes, across the nation, by continuing their AIP eligibility. NASAO notes that the airline industry has called for eliminating AIP funding for airports that the airlines do not currently serve. These airports provide all Americans with access to goods, services and travel options only available through a truly national network of airports.

NASAO encourages Congress to continue to fund the Joint Planning and Development Office. NASAO is proud to serve on the JPDO's Next Generation Air Transportation System Institute Management Council (JPDO-NGATS-IMC). Since the inception of the JPDO and Congress' investment in NGATS, NASAO has supported NGATS as the best and most appropriate vehicle to shape a bright future for our nation's air transportation system.

NASAO strongly urges Congress to repeal the provision of the 2005 "Transportation Equity Act: a Legacy for Users" which diverts jet fuel tax revenue *from* The Airport and Airway Trust Fund and *into* the Highway Trust Fund. Congress may want to consider holding hearings on this issue – separate and apart from reauthorization hearings.

NASAO advocates raising the cap on Passenger Facility Charges to $7.50 and providing airports more flexibility in the use of these funds. Several NASAO members operate large airports such as Baltimore Washington International Thurgood Marshall Airport. These airports, which enjoy the support of PFCs, have found their value waning in recent years because the charges are fixed at $4.50 and have been outpaced by rapidly increasing construction costs.

NASAO strongly urges Congress to resist calls by the administration and the airline industry to scrap the existing aviation tax system. Contrary to their campaign, the system is not broken. The excise tax on airline tickets continues to flow into the trust fund. Both ticket prices and passenger traffic are increasing. (Ticket prices were raised ten times in 2006 alone). If truly necessary, the current 7.5% excise tax could be raised (in the past it was 10%) or indexed.

In testimony before Congress, the Congressional Budget Office has stated that the existing system is adequate for modernizing the air traffic control system. While the airlines and the administration have repeatedly called for a "new, stable and predictable" funding system for FAA and AIP, NASAO notes that Congress, for more than a decade, has provided the national air transportation system with funding that has been both predictable and stable and that funding has generally increased in each succeeding year. NASAO prefers the present, proven, system over any of the recently floated proposals.

NASAO is opposed to any new user fees for General Aviation. Today's General Aviation fuel tax is elegant in its simplicity. General Aviation pays its taxes at the fuel pump. Larger General Aviation aircraft use more fuel and pay more into the system. Frequent General Aviation flyers use more fuel and pay more taxes. There is no need to build an expensive and inefficient new bureaucracy to calculate and collect new user fees. NASAO observes that General Aviation represents only 3% of the traffic at the nation's largest airports. Further, while the airline industry and some in the administration would have you believe that General Aviation adds to air traffic delays, it is abundantly clear that the top 20 airports served by commercial airlines and the top 20 airports served by General Aviation are two totally different lists.

NASAO recognizes, with appreciation, Congress as providing the national aviation system with fair, stable and predictable funding and appropriate oversight. The final responsibility of this wide ranging and diverse system rightly rests with Congress. **NASAO stands in opposition to any new scheme which would remove this governance responsibility from the United States Congress.**

# # #

January 26, 2007

The Airport Improvement Program

Testimony of
American Road and Transportation Builders Association

Before the
U.S. House of Representatives
Transportation and Infrastructure Committee
Aviation Subcommittee

March 28, 2007

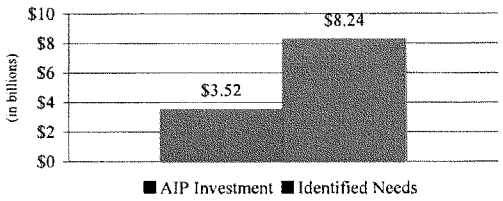
On behalf of the American Road and Transportation Builders Association (ARTBA) and its 5,000 member firms and member public agencies nationwide, the association would like to thank Subcommittee Chairman Costello and the members of the Aviation Subcommittee of the House Transportation and Infrastructure Committee for reviewing the critical needs of the federal Airport Improvement Program (AIP). ARTBA members belong to the association because they support strong federal investment in transportation improvement programs, like the AIP, to meet the needs and demands of the American public and business community. The industry we represent generates more than $200 billion annually in U.S. economic activity and sustains 2.5 million American jobs.

With the current federal aviation program authorization bill set to expire September 30, Congress has a major opportunity to relieve aviation system congestion by providing the resources necessary to expand airport capacity. The mission of the AIP is to fund airfield capital improvements. As such, boosting investment in this critical program will support much needed aviation congestion relief.

Projected Needs
The Federal Aviation Administration (FAA) 2007-2011 National Plan of Integrated Airport Systems (NPIAS) found that $41.2 billion would be necessary to meet identified AIP-eligible projects, an average of $8.24 billion annually. In FY 2007, $3.52 billion was appropriated for AIP grants. This is a shortfall of $4.72 billion annually, which

means the federal government is investing less than half of documented airport infrastructure needs.

Shortfall Between Actual AIP Investment and Identified System Needs FY 2007



Source: Federal Aviation Administration

Furthermore, airports have reported annual investment needs of $17.5 billion for all planned development costs (AIP eligible and ineligible projects). These documented needs exceed available airport revenues by $4 to 6 billion per year. The independent needs assessments from FAA and the airport community clearly demonstrate federal aviation infrastructure investment is not keeping pace with growing demands placed on the system.

Where We Are and Where We Are Going

Commercial Aviation - Passenger

According to the FAA's Aerospace Forecasts: Fiscal Years 2007-2020 released March 15, U.S. commercial air carrier enplanements reached record levels in FY 2006. There were a total of 740.4 million enplanements in FY 2006, 3.8 million more than in FY 2005. This total also represents a 5.7 percent increase, 42.8 million enplanements, over the FY 2000 level, when one in every four commercial flights was delayed, cancelled or diverted. By FAA estimates, commercial passenger enplanements will reach one billion per year by FY 2015, a 36.1 percent increase over FY 2006 estimates. By 2020, total enplanements will reach 1.206.6 billion, a projected 63 percent increase in 14 years.

Commercial Aviation – Cargo

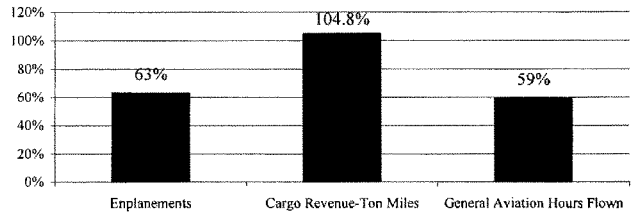
The cargo sector of commercial aviation is expected to grow at a pace beyond that of commercial passenger enplanements over the next 14 years. In FY 2006, cargo revenue ton miles (RTM's) reached 39.689 billion, a 32 percent increase from FY 2000. By FY 2020, cargo RTM's are expected to reach 81.285 billion, a 104.8 percent increase from FY 2006.

General Aviation

General Aviation (GA) has been somewhat unstable since FY 2000, due to the increase in fuel prices over the past few years. However, due to factors like Very Light Jets entering the market in the near future, GA use is expected to climb over the next 14 years. In FY 2006, there were

27.543 million hours flown by planes classified as GA, according to the FAA. By FY 2020, GA planes are expected to fly 43.860 million hours, a 59 percent increase in 14 years.

Projected Growth In Aviation Services 2006-2020



Source: Federal Aviation Administration

These projections all send a clear signal that demands on the nation's already saturated civil aviation system will grow dramatically in the coming years. There are countless examples of how modest disruption in the system due to weather or other issues have had long lasting effects. The U.S. must begin preparing to deal with this challenge today. A significant increase in airport infrastructure capacity is essential to accommodate the projected growth in all aviation services. Without such action, the nation faces substantial risk of impeding economic growth and dramatically hindering the efficient movement of passengers.

Delays

From January 2006 to January 2007, on-time arrival was at 75.3 percent for commercial passenger airlines, very similar to the rate in 2000. In its 2002 report, the Commission on the Future of the U.S. Aerospace Industry estimated the cost of aviation delays to the U.S. economy were $9 billion in 2000 and will climb to $30 billion annually in 2015. The commission expects that the total cost of air traffic management delays from 2000 to 2012 will be $170 billion unless significant infrastructure investment is made.

The commission's report also points out that from 1991 to 2002, air passenger traffic had increased by 40 percent, but only seven new runways and one new airport had been built during this time.

Material Prices & Inflation

The costs of two key materials used to construct and improve airport infrastructure, asphalt and aggregates, have risen dramatically over the last few years. According to data from the U.S. Bureau of Labor Statistics, the average cost of asphalt rose 78.7 percent between 2004 and 2006. The average cost of aggregate production rose 16.8 percent during the same time period. The increase in asphalt prices is due to several factors, including higher aggregate and fuel prices, new EPA standards, and the decision by some refineries to halt production.

The general level of inflation in the U.S. economy, as measured by the Consumer Price Index, rose 6.7 percent between 2004 and 2006. Considering AIP investment has increased 3.5 percent from FY 2004 to FY 2006, it is very clear that AIP investment has not kept up with the rate of inflation and is even further behind the growth in materials costs. In fact, in 2004 dollars, the purchasing power of the $3.47 billion provided for the AIP in FY 2005 was $3.36 billion and the program's $3.52 billion in FY 2006 purchased $3.41 billion worth of improvements. This does not take into account the higher material costs faced by airport infrastructure contractors, which further erodes the value of AIP investment. If the cost of materials and the level of investment continue to increase at these differing rates, the ability for AIP investments to help address the nation's aviation infrastructure needs will further deteriorate.

Conclusion

Like much of the nation's transportation network, the civil aviation system is facing a dual crisis—demands on the system far exceed available revenues, and existing airport infrastructure capacity is saturated. Compounding this situation is the fact that passenger and freight aviation travel are expected to dramatically increase in the coming years. Clearly a comprehensive solution to this challenge must be developed, and expanding airport infrastructure capacity is a major component of that solution.

As such, ARTBA strongly recommends significantly increasing AIP investment in the 2007 reauthorization of the federal aviation programs to levels commensurate with documented airport infrastructure needs. ARTBA has long supported the user fee concept of financing critical transportation infrastructure improvements and believes adjusting aviation user fees is appropriate if current revenues cannot support increased AIP investment. ARTBA also recognizes airports use a variety of revenue generating tools in addition to AIP funds to help meet their infrastructure needs, such as passenger facility charges (PFC) and bond issuanees. Accordingly, ARTBA supports an increase in the PFC to complement necessary increases in AIP investment. To ensure the nation's aviation system capacity challenges are addressed, however, we believe a significant portion of PFC revenue should be dedicated to airport capacity enhancing, congestion relief, and safety improvement projects.

Mr. Chairman, upgrading our nation's aviation infrastructure is about more than just relieving congestion and improving the efficiency of airline operations. It is about securing America's place in the global economic marketplace. While some will undoubtedly focus on the difficulties of improving aviation system capacity, we urge you and all Committee members to consider the consequences of today's aviation infrastructure network attempting to accommodate 105 percent more freight and 63 percent more passenger travel. The 2007 reauthorization of the aviation programs presents an opportunity to meaningfully address this national dilemma and the American Road & Transportation Builders Association pledges to work with you to take full advantage of that opportunity.

Arlene J. Mulder
Mayor - Arlington Hts
IL.

Federal Agenda – DOA, OMP, ONCC

The Chicago Airports System is comprised of O'Hare International Airport and Midway International Airport – two of the most dynamic airports in the nation. Together these airports represent the heart of the nation's aviation infrastructure.

The airports play a vital role in the economy of the region and state, generating $45 billion in economic activity and 540,000 jobs. Because of their great importance, the City continues to prepare the airports for the future.

The O'Hare Modernization Program (OMP) has broken ground and work is underway to increase capacity and reduce delays.

FAA REAUTHORIZATION

The current authorizing legislation for the Federal Aviation Administration (FAA) and the Airport Improvement Program (AIP) expires on September 30, 2007, as do the various excise taxes (e.g. passenger, freight/mail, aviation fuel) that support the Aviation Trust Fund.

The 110th Congress will certainly take this opportunity to reexamine our nation's aviation system. The reauthorization will involve discussions about various issues facing airports including financing of capitol projects, air traffic control, aging infrastructure, and FAA regulations, among others. The challenge will be to reconcile the divergent views among the many stakeholders.

The City will work closely with the two airport trade associations, the Airports Council International – North America (ACI-NA) and that Airport Legislative Alliance (ALA) of the American Association of Airport Executives (AAAE) in order to protect the interests of airports.

Passenger Facility Charges (PFC)

Congress previously capped the PFC at $3.00 per passenger enplanement and airports were later allowed to apply for a maximum of $4.50 per passenger enplanement. These funds are vital to the continued growth of airports since they support the capital improvement program. Due to the effects of inflation over time, the PFCs collected no longer provide the same level of purchasing power. To mitigate the effects of the loss in value, airports will seek to raise or eliminate the cap on the PFC. Airports will seek to eliminate the cap entirely if the airlines and airports are in agreement regarding the level of PFCs. In the alternative, airports will seek to tie the increase in the PFC to an economic

PFC should set aside % for noise / emissions set-aside

indicator such as the Consumer Price Index, in order to preserve the purchasing power of the PFC over time.

In addition, airports will seek to simplify the PFC application process, and increase allowable uses for the PFC funds. Currently, the application for a PFC increase is needlessly cumbersome. Moreover, airports are unfairly limited in their use of PFC funds, even though these funds are not appropriated by the federal government.

Objectives:

- Increase or eliminate the cap on PFCs
- Streamline the PFC application process
- Increase flexibility for projects eligible for PFC funds

Airport Improvement Program (AIP)

The AIP Program is the principal grant-in-aid program for the nation's airports. AIP funds are appropriated as either "entitlement" funds, which are given to airports pursuant to a specific formula, or "discretionary " funds which help support special projects such as the sound insulation program. The City will work to ensure that Congress increases appropriations for the Airport Improvement Program. The City will also seek to maintain the existing AIP funding levels and safeguard all previous LOI commitments.

Objectives:

- Increase the level of authorized funding for the Airport Improvement
- Program for FY08;
- Ensure full funding of LOI agreements

Airport Bonds

Currently, federal tax laws characterize certain airport as private activity bonds, subjecting them to Alternative Minimum Tax (AMT). This characterization causes such airport bonds to bear a higher interest cost, resulting in higher borrowing costs for airports.

In addition, the tax laws also limit the refinancing of certain airport debt. These laws contribute to financial difficulties for airports since bond proceeds represent the largest share of capital financing for airport infrastructure.

Objectives:

- Support legislation that re-characterizes airport debt as public purpose rather than private activity bonds, thus making such debt not subject to AMT.

- Support legislation that allows airports to lower interest costs by being able to advance refund airport debt.

AIRPORT ENVIRONMENTAL ISSUES

The Chicago Airport System is currently conducting the nation's largest and most comprehensive sound insulation program in the communities surrounding O'Hare and Midway. After completing the current program, the City will have insulated 5.945 homes around O'Hare and 3,280 around Midway. The city also will have completed work on 114 schools around O'Hare and 40 around Midway. Based on the 2013 noise contour, the FAA's recent Record of Decision for the O'Hare Modernization Program concluded that 5,400 additional homes will need sound insulation. As the City continues its efforts, we seek a substantial increase in the AIP Noise Set Aside as well as FAA discretionary grants for Midway and O'Hare sound insulation projects.

In addition, the City supports the need for quieter and more efficient aircraft engines. Although more than $1 billion is spent every year on aircraft noise mitigation and abatement efforts, Congress traditionally appropriates only a fraction of that for the research of quieter engines.

The FAA currently administers the Voluntary Airport Low Emissions Program (VALE). This program provides for funding of 75% of the cost of certain airport improvements that lower emission at airports. However, there are a number of airport projects that do not directly lower emissions at airports, but are significant with respect to their positive contributions to the environment. The eligibility for VALE grants should be extended to these types of environmentally-noteworthy projects. These projects include solar panels, wind turbines, or projects to reduce or eliminate airport traffic.

Objective:

- Seek a substantial increase in the AIP Noise Set Aside and FAA discretionary grants to complete the Midway and O'Hare residential and school sound insulation effort.

- Support increased funding for NASA and FAA technology programs that aid noise abatement efforts.

- Seek amendment to VALE grant program to permit funding of airport environmental projects which improve air quality off-airport.

Illinois Department of Transportation
Division of Aeronautics
1 Langhorne Bond Drive / Springfield, Illinois / 62707-8415

April 9, 2007

The Honorable Congressman John L. Mica
2313 Rayburn House Office Building
Washington DC 20515

Re: Subcommittee on Aviation
Committee on Transportation and Infrastructure
Reauthorization of the Airport Improvement Program

Dear Congressman Mica,

As the Director of the Division of Aeronautics for the Illinois Department of Transportation, I am compelled to respond to the testimony provided to the House Aviation Subcommittee on March 28, 2007, by Mr. James Healy. Mr. Healy is a DuPage County Board Member and was representing the National Association of Counties (NACo). Mr. Healy was not a spokesperson for the State Block Grant Program (SBGP) in Illinois. Apparently, he was asked by NACo to testify on their behalf regarding the reauthorization of the Airport Improvement Program (AIP). In his written testimony he makes reference to the County of DuPage owning the airport. This is incorrect. The DuPage Airport is owned by the DuPage Airport Authority, a separate municipal corporation under the Statutes of the State of Illinois.

Neither I, nor my staff, can find a record of any specific Aviation involvement in Illinois on any level by Mr. Healy. We have recently learned from Mr. David Bird, Director of DuPage Airport, that Mr. Healy received input from Director Bird regarding DuPage's dissatisfaction with the SBGP. The Department was unaware of their dissatisfaction with the SBGP. In a subsequent conversation that I had with Director Bird, he stated that the SBGP is valuable for small airports that have no resources to seek their own funding; for those that do have resources, he feels it adds another layer. The fact that larger, more affluent airports like DuPage Airport have access to testify in front of the House Aviation Subcommittee clearly demonstrates why the SBGP is needed. The SBGP balances all airport needs and desires and ranks them based on a federal priority system, regardless of their, size political acumen and financial status.

Mr. Healy's claim that the SBGP is an impediment to project development in the eight block grant states is a very strong statement that has raised the ire of the State Aviation Director in each of these states: Illinois, Michigan, Missouri, North Carolina, Pennsylvania, Tennessee, Texas, and Wisconsin. He has apparently been given some erroneous information by his organization, NACo, and in my professional opinion, his testimony completely misrepresents the function of the State Block Grant Program.

In 1990, the Federal Aviation Administration (FAA) asked Illinois, Missouri, and North Carolina to be "field-test" sites for the SBGP. The purpose of the SBGP program is to allow the Aviation Department in each of the block grant states to function in partnership with the FAA with full authority to pro-actively administer and manage all aspects of the federal AIP for non-primary airports with no commercial air service, like DuPage Airport.

It allows the aviation department staff to work closely with all the non-primary airports in their respective states to determine the critical and ranked needs. Aviation department staff serves as an advocate for federal dollars for non-primary airports in their state. Under this program everybody wins, not just the larger airports, who can afford to hire their own spokesperson in Washington.

The implementation of the SBGP in 1990 was intended to serve multiple purposes, but primarily:

1. To balance the growth and development of individual airports that showed a propensity to garnish a disproportionate share of federal funds against the needs of the state system plan and the National Plan of Integrated Airport System (NPIAS), as a whole.
2. To shift the burden of AIP implementation from the federal government to states where proven agencies already existed for the same purpose.

The states that have been selected and authorized to operate in the SBGP operate with the full support and authority of the FAA to implement the AIP, write grants, and administer projects. Mr. Healy's testimony states that the SBGP is a "...unnecessary administrative layer between the airports and the FAA..." He further testified "...state aviation agencies often provide a lower level of service than the FAA...." Mr. Healy is terribly uninformed in that Illinois has been a block grant for the past 16 years and FAA has indicated that we have their full confidence in operating this program.

All block grant states are required to administer their program in accordance with all federal guidance, exactly as the FAA does in the non-block grant states. To imply that the SBGP uses a more restrictive set of rules than the FAA is simply false.

Mr. Healy's statement that block grant states are inefficient in the administration of the program contradicts the documented success of the block grant states. SBGP states on average process more federal dollars compared to non-block grant states. In many instances, state resources and capabilities to administer the SBGP surpass those of the FAA, making it a more efficient agency on the local level to manage an increasingly complex system. As the saying goes, all politics are local, and this is local, administered by the individual state rather than the FAA. It is a team effort between the states and the FAA.

The success of the Block Grant Program is best characterized by Illinois' ability to seek and distribute federal funds to a wide variety of airports with diverse needs. This can only be accomplished by a systematic approach that analyzes the needs of the state aviation system as a whole.

I fully understand the value and importance of DuPage Airport in the Illinois system. With its close proximity to O'Hare, it is one of the larger reliever airports in Illinois. In the last ten years, the Division of Aeronautics has spent in excess of twenty million federal dollars at DuPage Airport. This figure does not include our state match of federal funds or our state only funds for AIP ineligible projects.

In conclusion, I disagree with Mr. Healy's recommendation that Congress should eliminate the SBGP in the reauthorization of the AIP. We strongly support the SBGP and encourage Congress to work with the FAA to expand the Block Grant Program. In addition, I recommend Congress encourage NACo to meet with the Aviation Directors in each of their respective states to work together to best determine the needs of the airports they represent.

I welcome the opportunity to discuss this in person and am available to testify should another hearing be scheduled. Thank you for the opportunity to set the record straight for the SBGP in Illinois. I can be reached at 217-785-8515 or at susan.shea@illinois.gov.

Sincerely,

Susan R. Shea, Ph.D.
Director, Aeronautics
Illinois Department of Transportation

cc: Subcommittee on Aviation, Committee on Transportation and Infrastructure

April 20, 2007

The Honorable James Oberstar
Chairman
Committee on Transportation and Infrastructure
2165 Rayburn House Office Building
Washington, DC 20515

The Honorable Jerry Costello
Chairman, Aviation Subcommittee
Committee on Transportation and Infrastructure
2251 Rayburn House Office Building
Washington, DC 20515

Dear Chairman Oberstar and Chairman Costello:

On behalf of the American Council of Engineering Companies, the Airport Consultants Council, the American Road & Transportation Builders Association, the American Institute of Architects, and the American Society of Civil Engineers we would like to commend you for your strong leadership of the Committee on Transportation and Infrastructure in the beginning months of the 110th Congress. We particularly appreciate your dedication to the reauthorization of Vision 100 – Century of Aviation Authorization Act which is set to expire this September.

The reauthorization of Vision 100 provides Congress the opportunity to improve safety, increase capacity and reduce delays at airports across the country by increasing funding for airport capital development projects. We fully support the trend set by AIR-21 and Vision 100 of significantly increasing Airport Improvement Program (AIP) funding and raising the cap on Passenger Facility Charges (PFCs) to meet the growing capital improvement needs of the nation's airports and relieve system congestion.

As Congress develops Federal Aviation Administration (FAA) reauthorization legislation, it is important to ensure that all airport development funding is spent in the most effective and efficient manner possible. Accordingly, we are requesting two provisions be included in the introduced version of the Transportation and Infrastructure Committee's FAA Reauthorization Bill to ensure a uniform, open and competitive procurement process for architectural and engineering (A/E) services.

Qualifications-Based Selection (QBS)

Of these provisions, our highest priority is to ensure that Qualifications Based Selection (QBS) requirements which currently apply to the AIP program be extended to PFC-funded projects.

QBS is an open, competitive procurement process whereby firms first compete on the basis of qualifications, past experience and the specific expertise they can bring to the project. Firms are ranked on the basis of their qualifications. The client then works with the top-ranked firm to determine the scope and activities that will occur under the project, and enters into negotiations on a fair and reasonable price.

If those negotiations prove successful, a contract is signed; if not, the client turns to the next ranked firm for negotiations.

QBS is the standard procedure to procure A/E services, ensuring the efficient use of taxpayer dollars, low overall project lifecycle costs and successful project delivery. QBS was codified in 1972 under the "Brooks Act" and because of its success was subsequently applied to U.S. Department of Transportation programs, including AIP, in 1987. Currently, QBS is applied to the AIP program through FAA Advisory Circular 150/5100.14D.

The QBS process ensures that the most qualified firm is selected for A/E services at a price that fits the client's budget. Engineering represents less than 1% of the facility's lifecycle costs, yet the quality of the design can have a profound impact on the cost of construction, maintenance, and other costs of the project. With the anticipated growth in PFC funding for capital improvement projects, Congress should guarantee the same quality procurement process by endorsing the use of QBS for all airport infrastructure projects.

PFCs, which are largely derived from interstate passenger travel, are federally authorized and regulated funds. Congress provides airports the authority to collect PFCs, sets the cap for how much can be charged to each passenger and defines project eligibility. In addition, twelve federal assurances are currently attached to the program, including requirements that projects are carried out in accordance with FAA airport design, construction, and equipment standards and specifications. We believe that extending QBS to PFC-funded projects is a logical and necessary addition to the current federal framework of the program, because it ensures that capital investments made in the aviation system are maximized for the benefit of the traveling public.

QBS is not new to the aviation community. As stated previously, airports have been using the QBS process to procure A/E services for AIP projects over the past 20 years. In addition, 46 States have QBS laws and regulations on the books. However, because of the unique nature of airport authorities and the characteristics of State laws, not all State QBS laws flow down to the local level. With the extension of QBS to the PFC program, Congress will ensure that the highest standard for procuring A/E services is being used in a uniform fashion for airport capital improvement projects.

Uniform Contracting Regulations

The second provision which we urge you to include in the introduced version of the Committee's FAA Reauthorization Bill would apply the same uniform Federal Acquisition Regulations (FAR)-based overhead and audit regulations to both AIP- and PFC-funded projects that already apply to programs administered by the Federal Highway Administration and the Federal Transit Administration.

The cost of providing A/E services for public infrastructure projects is based on a combination of direct costs to complete the project (such as direct labor costs) as well as the allowable charges that make up the firm's overhead rate (such as rent, utilities, benefits, and other non-project-specific expenses). The FAR sets forth very specific rules governing what overhead costs are appropriate and allowable and which are considered unallowable. Rules are also in place requiring firms to be audited by a cognizant agency to ensure compliance.

Use of FAR-based rules ensures that overhead rates are reasonable for both government agencies and A/E firms, and that the rules governing allowable overhead are uniform for publicly funded projects. The use of FAR-based rules also ensures maximum competition, allowing large and small firms to compete equally. Unfortunately, some airports currently impose arbitrary limits on overhead in their

contracts with A/E firms. Many times these arbitrary caps are significantly below the allowable rate under the FAR preventing otherwise highly qualified firms from competing for work at the airport.

Once again, under Federal Highway Administration and Federal Transit Administration statutes, project sponsors are required to follow uniform FAR-based procedures governing allowable overhead. This policy has been embraced by Congress through statute over the years, and was recently reaffirmed as it applies to the Federal Transit Administration under Section 3025 of SAFETEA LU.

Summary

With the inclusion of provisions extending QBS to PFCs and setting uniform FAR based overhead and audit requirements for AIP and PFC projects, we are seeking to preserve competition, create uniformity in public policy, ensure the highest quality services are rendered and provide for the most effective use of federally authorized funds. We look forward to working with the Committee to achieve these goals which, we believe, serve the interests of our nation's aviation system and America's flying public.

Thank you for your consideration and we look forward to working with you and your staff throughout the reauthorization process.

Sincerely,

Dave Raymond
President
American Council of Engineering Companies

Paula P. Hochstetler
President
Airport Consultants Council

T. Peter Ruane
President and CEO
American Road and Transportation Builders Association

Christine W. McEntee
Executive Vice President and CEO
American Institute of Architects

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Testimony of
The American Society of Civil Engineers
Before the Subcommittee on Aviation
of the
House Committee on Transportation and Infrastructure
on
The Airport Improvement Program

March 28, 2007

Mr. Chairman and Members of the Subcommittee:

On behalf of the American Society of Civil Engineers (ASCE) and its 140,000 members, the society would like to applaud the members of Aviation Subcommittee of the House Transportation and Infrastructure Committee for reviewing the infrastructure needs of the nation's aviation system and specifically the critical needs of the Airport Improvement Program.

In 2007, Congress must reauthorize the "Century of Aviation Reauthorization Act" (VISION-100) the federal law that funds the Federal Aviation Administration programs. Enacted in 2003, VISION-100 authorized just under $16 billion for the nation's aviation infrastructure programs and builds on the initiatives established in the Wendell H. Ford Aviation Investment and Reform Act for the 21st Century (AIR-21).

ASCE believes the reauthorization should focus on three goals: expanding infrastructure investment; enhancing infrastructure delivery; and maximizing infrastructure effectiveness. In this testimony, ASCE will focus its comments on expanding infrastructure investment.

The crumbling state of America's airports poses a real threat to public safety and the nation's economy, and financing the urgently needed repairs must become a priority for our nation's leaders. ASCE's 2005 Report Card for America's Infrastructure graded the nation's infrastructure a "D" based on fifteen categories, including aviation with a "D+."

Gridlock on America's runways eased from crisis levels earlier in the decade due to reduced demand and recent modest funding increases. In March 2005, the FAA forecasted total passenger enplanements would surpass 1 billion over the next ten years, representing a 41% increase from 2005. With this increase in passenger traffic, airports are at risk for seasonal and peak-period delays. Additionally, airports face the challenge of accommodating increasing numbers of regional jets and new very large aircraft (i.e. Airbus 380) and in the future, microjets.

ASCE has made passage of the FAA Reauthorization legislation a key component in its *Action Plan for the 110th Congress* which highlights eleven legislative actions that will help raise the nation's infrastructure GPA.

Investment Needs

The FAA's National Plan of Integrated Airport Systems (NPIAS) estimates that over the next five years (2007-2011) $41.25 billion would be necessary to meet AIP-eligible infrastructure development projects, an average of $8.24 billion annually. In FY 1007, $3.52 billion was appropriated for AIP grants – a shortfall of $4.72 billion. If this continues, the federal government will be investing less than half of what is needed to meet the documented airport infrastructure needs.

Additionally, airports have reported annual investment needs of $17.5 billion for all planned development costs (AIP eligible and ineligible projects). Both the independent assessments and those of the FAA clearly demonstrate that federal aviation infrastructure investment is not keeping pace with growing demands placed on the system.

A System Reaching Capacity

The nation's aviation system is once again reaching capacity. Enplanements are at record levels with a total of 740.4 million in FY 2006 – 3.8 million more than in FY 2005 and will reach one billion a year by 2015. By 2020, total enplanements will reach 1.2 billion a projected increase of 63 percent in 14 years.

Growth in the cargo area is expected to outpace passenger growth over the next 14 years. In FY 2006, cargo revenue ton miles (RTMs) reached 39.6 billion, a 32 percent increase from FY 2000. By FY 2020, cargo RTMs are expected to reach 81.2 billion, a 104.8 percent increase from FY 2006.

These increases in flight activity are being felt by the traveling public in the form of delays. From January 2006 to January 2007 on time arrival was at 75.3 percent for commercial passenger airlines, similar to the rate in 2000. In its 2002 report, the Commission on the Future of the U.S. Aerospace Industry estimated the cost of aviation delays to the U.S. economy were $9 billion in 2000 and would climb to $30 billion

annually in 2015. The commission expects that the total cost of air traffic management delays from 2000 to 2012 will be $170 billion unless significant infrastructure investment is made.

Finally, the commission's report pointed out that from 1991 to 2002 air passenger traffic had increased by 40 percent, but only seven new runways and one new airport had been built during this time.

Expanding Investment in the Nation's Aviation Infrastructure

The Airport Improvement Program (AIP) funding and Passenger Facilities Charges (PFC) are the primary sources for funding airport capacity improvement projects. Congress needs to provide continued but separate funding for security operations that are not reliant on AIP and PFC funds.

AIP provides grants to the nation's airports for capital projects such as runways, taxiways and major facilities. Since 1970, the majority of AIP funding has been supported by direct and dedicated user fees through the Airport Trust Fund that is predicted to grow to more than $16 billion by FY 2007.

The Passenger Facility Charge (PFC) Program allows the collection of PFC fees up to $4.50 for every enplaned passenger at commercial airports controlled by public agencies. Airports use these fees to fund FAA-approved projects that enhance safety, security, or capacity; reduce noise; or increase air carrier competition.

ASCE supports the following goals for aviation infrastructure investment.

- An appropriate increase in the aviation user fee to meet the identified level of investment detailed in the National Plan of Integrated Airport Systems -- $41.2 billion over 5 years.
- The Airport and Airway Trust Fund balances should be managed to maximize investment in the nation's infrastructure.
- Congress should preserve the current firewalls to allow for full use of trust fund revenues for investment in the nation's aviation transportation system.
- The reauthorization should maintain the current funding guarantees.
- Focusing the Airport and Airway Trust Fund expenditures on capital improvement.
- The Airport and Airway Trust Fund should not be used to pay for security costs, but specifically used for air traffic and airport maintenance and improvement.

ASCE has long supported the use of dedicated user fees and trust funds to finance infrastructure needs. ASCE supports the permanent extension and increase of user fees to adequately fund the Airport Improvement Program (AIP) through the Airport and Airway Trust Fund. Furthermore, ASCE recommends that all monies collected from these user fees should be deposited in the Airport Trust Fund, that the Airport Trust

Fund be removed from the unified federal budget. The Airport and Airway Trust Fund should not be used to pay for security costs, but specifically used for air traffic and airport maintenance and improvement. Trust fund balances should not exceed necessary funds to meet obligations plus an appropriate reserve. Revenue Aligned Budget Authority (RABA), which allows for the allocation of all trust fund revenues, should be established in the airport trust fund.

ASCE supports:

- An appropriate increase in the passenger facility charge (PFC) cap from $4.50 to at least $7.50 to allow airports to raise needed funds for improving the nation's aviation infrastructure.

- The timely reauthorization of the program before the current legislation expires on September 30, 2007, to ensure predictability and stability in airport improvement funding.

- A requirement to apply the qualifications-based selection (QBS) procedures of the Brooks Architect-Engineers Act of 1972 to all architectural and engineering design contracts awarded by local airport authorities under the PFC program.

The use of the QBS procedure is justified on a number of important policy grounds.

1. The Brooks A/E Act protects public safety.

By law, airports may only use their passenger facility fees to fund federally approved projects that enhance safety, security, or capacity; reduce noise; or increase air carrier competition. These charges are only for services and functions that directly relate to, and benefit, civil aviation operations; they are not used for any non-public purpose.

Engineering design contracts are essential to the delivery of safe projects. Critically important airport facilities should not be compromised by the use of budget-conscious contract procedures. The design of airport facilities should not be dependent on an airport authority's reliance on optional contracting procedures that may place cost (in the form of a low-bid design contract) on a par with public safety.

Further, the use of QBS accords with the congressional requirement in section 40117 to place public health, safety, and welfare ahead of other considerations, including price, by hiring the most qualified firms to design facilities that are themselves intended to ensure public safety.

2. A mandate to use QBS for PFC-funded facilities provides the advantage of nationally consistent acquisition procedures that emphasize reliably high-quality engineering.

The AIP requires the use of QBS procedures for every airport development project funded by the FAA. The use of the QBS process for the acquisition of engineering design contracts for facilities funded by a PFC logically follows on the requirements for AIP projects under section 47107. Using QBS for PFC-funded projects guarantees that all contracts for projects funded or authorized under the Act, regardless of the source of the funds, will be awarded under a single acquisition process.

Such a requirement would not unduly upset state law. The proposed language does *not* pre-empt state law in 46 states that mandate QBS *or* the 29 states that now require QBS for PFC projects. Congress, however, *should* apply the QBS process to the award of design contracts by airport operators in the 21 states that do not use the Brooks A/E Act for their aviation facility designs. This will ensure that airport projects in every state are based on the best engineering available.

3. PFC funds are federal funds because they are authorized by federal law.

Funds authorized by federal law are federal funds, regardless of the identity of the person that actually collects them. An act authorizing a state or local agency to levy funds for a federally approved program essentially creates a contract between the federal government and the agency that requires the agency to manage the program in accordance with the purposes of the underlying federal law. It follows then that, for an agency to satisfy the public-safety requirements of aviation improvement program, the agency adopting a PFC must apply the QBS requirements of the act to all engineering design contracts funded by the PFC.

Innovative Financing

Aviation capital needs exceed available funding. Therefore, support for initiatives for targeted airport and airway programs that foster innovative finance and project delivery (such as public-private partnerships) should be expanded to build and manage aviation projects, where feasible. ASCE supports the innovative financing programs and advocates making programs available to all states where appropriate. Additionally, the federal government should make every effort to develop new programs.

Conclusion

Aviation, like the other sectors of the nation's infrastructure, needs significant attention. The system is reaching capacity and the investment needs exceed the current available revenue. This situation will only grow worse as the volume of passengers and cargo continue to increase. Congress needs to address the problem by developing a comprehensive solution that increases the available investment in our nation's aviation infrastructure.

Again, ASCE supports an increase in the current user fees to adequately fund the Airport Improvement Program (AIP) through the Airport and Airway Trust Fund. Additionally, ASCE supports an appropriate increase in the passenger facility charge (PFC) cap from $4.50 to at least $7.50 to allow airports to raise needed funds for improving the nation's aviation infrastructure.

Addressing the nation's infrastructure needs will ensure that the United States remains a leader in the global economy while users of the system will benefit from less congestion and increased efficiency.

ASCE looks forward to working with the Transportation & Infrastructure Committee to develop a comprehensive solution for the nation's aviation infrastructure.

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