federal register

Monday
April 19, 1999

Part II

Department of Transportation

Federal Aviation Administration

14 CFR Part 108

Security of Checked Baggage on Flights Within the United States; Proposed Rule

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 108

[Docket No. FAA–1999–5536; Notice No. 99–05]

RIN 2120–AG51

Security of Checked Baggage on Flights Within the United States

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA is proposing that each certificate holder required under § 108.5 to adopt and implement an FAA-approved security program screen checked baggage or conduct passenger-to-bag matching for scheduled passenger operations within the United States when using an airplane having a passenger seating configuration of more than 60 seats. The security of checked baggage on domestic flights may be accomplished by screening the checked baggage of every passenger with FAA-certified explosives detection system (EDS) equipment, by 100% positive passenger bag matching (PPBM), or by utilizing the FAA-approved computer-assisted passenger screening (CAPS) system to select passengers whose checked baggage must be subjected to additional security measures. The checked baggage of CAPS selectees would be screened by EDS equipment, where available, or bag matching would be applied. These requirements for checked baggage on domestic flights are intended to prevent or deter the introduction of explosives or incendiary devices into the cargo holds of airplanes on flights within the United States. This proposal is necessary to provide a high level of security for domestic civil aviation.

DATES: Comments must be received on or before June 18, 1999.

ADDRESSES: Comments on this proposed rulemaking should be mailed or delivered, in duplicate, to: U.S. Department of Transportation Dockets, Docket No. FAA–1999–5336; 400 Seventh St., SW, Rm. Plaza 401, Washington, DC 20590. Comments may also be sent electronically to the following internet address: 9–NPRM–CMTS@faa.gov. Comments may be filed and/or examined in Room Plaza 401 between 10 a.m. and 5 p.m. weekdays, except federal holidays.

FOR FURTHER INFORMATION CONTACT: Mr. Lon M. Siro, Aviation Security Specialist, Civil Aviation Security Office of Policy and Planning, ACP–100, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone (202) 267–3414.

SUPPLEMENTARY INFORMATION:

Comments Invited

Interested persons are invited to participate in the making of the proposed rule by submitting such written data, views, or arguments, as they may desire. Comments relating to the environmental, energy, federalism, or economic impact that might result from adopting the proposals in this notice are also invited. Substantive comments should be accompanied by cost estimates. Comments must identify the regulatory docket or notice number and be submitted in duplicate to the Rules Docket address specified above.

All comments received, as well as a report summarizing each substantive public contact with FAA personnel on this rulemaking, will be filed in the docket. The docket is available for public inspection before and after the comment closing date.

All comments received on or before the closing date will be considered by the Administrator before taking action on this proposed rulemaking. Late-filed comments will be considered to the extent practicable. The proposals contained in this notice may be changed in light of the comments received.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this notice must include a pre-addressed, stamped postcard with those comments on which the following statement is made ''Comments to Docket No. FAA–1999–5336.'' The postcard will be dated, stamped, and mailed to the commenter.

Availability of NPRM's

An electronic copy of this document may be downloaded using a modem and suitable communications software from the FAA regulations section of the Fedworld electronic bulletin board service (telephone: 703–321–3339), the Federal Register's electronic bulletin board service (telephone: (202) 512–1661), or the FAA's Aviation Rulemaking Advisory Committee Bulletin Board service (telephone: (800) FAA–ARAC or (202) 267–5948).

Internet users may reach the FAA's web page at http://www.faa.gov/avr/arm/nprm/nprm.htm or the Federal Register's webpage at http://www.access.gpo.gov/su__docs/aces/aces140.html for access to recently published rulemaking documents.

Any person may obtain a copy of this NPRM by submitting a request to the Federal Aviation Administration, Office of Rulemaking, ARM–1, 800 Independence Avenue, SW., Washington, DC 20591, or by calling (202) 267–9680. Communications must identify the notice number or docket number of this NPRM.

Persons interested in being placed on the mailing list for future NPRM's should request from the above office a copy of Advisory Circular No. 11–2A, Notice of Proposed Rulemaking Distribution System, that describes the application procedure.

Background

Over the past several years, the Federal Aviation Administration (FAA) has recognized that the threat against civil aviation has changed and grown. In particular, recent terrorist activities within the United States have forced the FAA and other federal agencies to reevaluate their assessment of the threat against civil aviation. For example, investigations into the February 1993 attack on the World Trade Center uncovered a foreign terrorist threat in the United States more serious than previously known. In addition, in 1995 a conspiracy was discovered involving Ramzi Ahmed Yousef and co-conspirators who intended to bomb twelve American airliners over the Pacific Ocean. This conspiracy showed that: (1) foreign terrorists conducting future attacks in the United States may choose civil aviation as a target, despite the many more easily accessible targets equally symbolic of America; (2) foreign terrorists have the ability to operate in the United States; and (3) foreign terrorists are capable of building and artfully concealing improvised explosive devices that pose a serious challenge to aviation security. In addition to threats posed by foreign terrorists, criminals operating within the United States also pose a threat. For example, the partial detonation of a bomb aboard American Airlines flight 444 while en route from Chicago to Washington, DC, in 1979, has been attributed to Theodore Kaczynski (known as ''the Unabomber'').

The serious consequences of an in-flight explosion were dramatically demonstrated on July 17, 1996, when Trans World Airlines (TWA) flight 800 crashed off the coast of Long Island, New York. While the Federal Bureau of Investigation (FBI) and the National Transportation Safety Board (NTSB) determined that this accident was not the result of a terrorist act, it did elevate concerns regarding the safety and security of civil aviation. This concern led to the formation of the White House

Commission on Aviation Safety and Security (the Commission).

The Commission made several recommendations that were published on February 12, 1997, in its ''Final Report to President Clinton.'' In reviewing civil aviation security, the Commission stated that ''the threat of terrorism is changing * * * it is no longer just an overseas threat from foreign terrorists. People and places in the United States have joined the list of targets, and Americans have joined the ranks of terrorists.'' The Commission indicated that aviation security would be enhanced by the use of sophisticated technology for determining the presence of explosives in checked baggage, such as use of explosives detection system (EDS) equipment. The Commission recommended that, until those machines are widely available, the FAA should implement bag matching, initially based on passenger profiling, by December 31, 1997, and that the FAA should develop an automated system for passenger profiling. (For the purposes of the discussion of the CAPS system in this NPRM, the terms ''passenger profiling'' and ''passenger screening'' are used interchangeably.) Because of the FAA's high degree of confidence in CAPS' ability to evaluate information from passenger name records and other passenger records already maintained by air carriers, as well as its confidence in CAPS' ability to identify the large majority of passengers who are not associated with a threat to a flight, the FAA concurs with the Commission's recommendations. In addition, due to the limited availability of EDS equipment and the significant operational and economic impacts that immediate compliance with the Commission's recommendations would have on the air carriers, the FAA has determined that a phase-in period is necessary. Security requirements for implementation of the Commission's recommendations are discussed below.

White House Commission Recommendations

Explosives Detection System (EDS) Equipment-The FAA defines an EDS machine as an automated device, or combination of devices, which has the ability to detect, in passengers' checked baggage, the amounts, types, and configurations of explosive materials likely to be used by terrorists to cause catastrophic damage to large aircraft. The term ''automated'' means that the system is able to detect explosive materials and does not depend exclusively on human skill, vigilance, or judgment. Because EDS equipment is capable of detecting the explosive materials used in bombs with minimal human intervention, the FAA has determined that it is highly effective and agrees with the Commission's contention that use of EDS equipment is preferable to other security measures for clearing checked baggage, including PPBM. The FAA and the Commission also agree that full deployment of EDS is not something that is operationally feasible in the near future, due to the limited availability of certified EDS equipment. Accordingly, the FAA believes use of EDS equipment should be phased in to eventually replace PPBM and other checked baggage security measures. For a further discussion of this alternative and others, see discussion under ''Alternatives Considered by the FAA'' below.

Bag Matching, Initially Based on Passenger Profiling—The Commission recommended that, until sophisticated technology for determining the presence of explosives in checked baggage is widely available, the FAA begin implementation of baggage matching, initially based on passenger profiling (discussed below), for domestic flights. The Commission stated, ''this approach is the most effective methodology available now.'' Positive passenger baggage matching involves matching the passengers who have boarded the airplane to the baggage that was checked for carriage in the airplane's baggage compartment so that a passenger's checked baggage is flown only if he or she is aboard that airplane. Although 100% PPBM is currently performed on all international flights, pursuant to the International Civil Aviation Organization (ICAO) requirements, the FAA has not required PPBM on domestic flights except in periodic emergency situations. While civil U.S. flag aircraft have long been an attractive target of terrorists overseas, bombings of airliners within the United States have been extremely rare, even though the U.S. civil aviation system is the largest and most complex in the world. Over 500 million passengers (40 percent of all passengers in the world) enplane at U.S. airports and check approximately 750 million bags. In addition, 14 of the world's 20 busiest airports are in the United States.

As stated above, the FAA recognizes the changing threat to civil domestic aviation and believes that, in lieu of screening by EDS equipment, checked baggage must be properly matched to passengers on domestic flights. The FAA, however, also recognizes that, while ICAO standards may be appropriate for international flights, there are significant differences between domestic and international flights due to the varying levels of threat to them and the economic impact of additional security measures. These differences include: (1) the much greater number of domestic flights; (2) the use of an extensive and highly concentrated ''hub and spoke'' system, in which flights converge on a central connection point, and scheduled connection times may be 25 minutes or less; (3) the significantly earlier check-in time for international flights, which allows PPBM reconciliation delays to be kept to a minimum; and (4) the higher rate of last-minute passenger no-shows and cancellations on domestic flights, which could result in a greater number of passenger reconciliation and baggage-pull delays.

Automated Passenger Profiling—The Commission's recommendation that bag matching be implemented was linked to another recommendation that it be initially based on profiling of passengers flying out of airports located in the United States. As with manual profiling, the purpose of automated profiling is to exclude from the additional security measures the great majority of passengers who are very unlikely to present any threat and, conversely, to identify passengers to whom heightened security measures should be applied. Unlike manual profiling, however, automated profiling offers numerous advantages, including elimination of the potential perception of personal biases, greater sophistication, speed, accuracy, flexibility, and protection against compromise of sensitive security information. The Commission discussed a computer-assisted passenger screening (CAPS) system developed by the FAA and Northwest Airlines and recommended that the FAA implement an automated profiling system by December 31, 1997. On January 1, 1998, several air carriers voluntarily implemented CAPS, and most other carriers have since opted to implement it as well. The few carriers that have yet to complete the phase-in of CAPS are in the process of systemwide implementation.

In April 1997, in accordance with provisions of an FAA grant, the FAA and Northwest Airlines completed final programming changes to a prototype CAPS system, which, as noted above, Northwest Airlines and most other carriers have since implemented. The CAPS system was developed as a more feasible alternative to 100% checked baggage matching and EDS screening of all passenger baggage by narrowing the pool of passengers on whom additional security measures should be focused, thus effectively utilizing the currently limited supply of highly technical

screening equipment (e.g. EDS), and minimizing the operational impact of applying other passenger and checked baggage security measures, such as PPBM.

The CAPS system is based on the same concept as the manual screening system, which is designed to exclude from additional security measures the great majority of passengers who are unlikely to present any threat. There are many advantages to CAPS, however. One important advantage is that it does not rely on the judgment of individual airline employees to reduce the population of persons to whom heightened security measures should be applied. The automated system ''scores'' passengers according to a set of weighted criteria to determine which should be subjected to additional security measures. Automated screening excludes from heightened security measures the great majority of passengers about whom enough is known to determine confidently that they present no threat.

The use of a profile for the screening of passengers dates back to the mid-1970's when the FAA began using manual passenger screening to combat hijackings and to prevent explosives or incendiary devices from being placed aboard airplanes on international flights departing from the United States. Manual screening has also been used on domestic flights during periodic emergency situations. This screening relies on an employee of an air carrier to determine whether a passenger meets the profile that the employee has been trained to use. Because manual screening allows for more extensive human interaction between passengers and air carrier employees, it carries the potential that, even though the factors used in conducting manual screening are not biased, an employee's personal bias can be evident, regardless of whether a given passenger is a selectee or not. While manual screening has been a successful tool in combating hijackings and preventing the introduction of explosives or incendiary devices onto aircraft, it has been criticized by persons who perceived it as discriminating against citizens on the basis of race, color, national or ethnic origin, religion, and gender. It has also been criticized for causing embarrassment to selectees when fellow passengers became aware of his or her selectee status. Because a technological substitute for individual employee judgment has not been available until now, the FAA has continued to require, in emergency situations, manual passenger screening for determining the need to implement heightened security measures for checked baggage in order to combat the placing of explosives aboard aircraft.

The CAPS system would, in addition to selecting persons pursuant to the profiling standards, randomly select a limited number of passengers, as specified in air carriers' FAA-approved security programs, for heightened security measures. The FAA has determined, and the Commission has recommended, that random selection, which ensures that each passenger has a chance of being a selectee, has a deterrent value that would increase airline passenger security. It means that, even if an individual with criminal intentions believed he or she had figured out how to circumvent the CAPS system, the individual still would have a chance of being designated as a selectee. In addition, random selection helps to ensure passengers' civil liberties by guaranteeing that no individual or group of individuals is excluded from the selection process.

The CAPS system represents a significant improvement over the existing manual system. It uses a greater number of factors and permits combinations of sets of factors to determine passengers' status with greater confidence. In contrast, there are inherent limitations on the number and complexity of factors that an air carrier employee can apply. In addition, air carrier employees performing the manual process have a limited amount of time available to assess the factors and determine whether a passenger is a selectee. For these reasons, the number of factors in a manual process must be small and the rules for applying them must be simple. The CAPS system virtually eliminates the possibility of subjective selection and inadvertent or deliberate discrimination by airline employees, as they would not be asked to implement any selection process themselves. Finally, the CAPS system provides a more secure system, as only a few key airline employees (i.e., those who program the computers and implement computer program changes) are provided with selection criteria and their relative weights. Other air carrier employees need only be aware of the output generated by the computer programs, without being aware of the criteria. Manual screening, though controlled, may be more easily compromised, as details are contained in FAA Security Directives, which are available to many airline employees.

The CAPS system is also intended to minimize the overt identification of passengers selected for additional security procedures. The CAPS system operates off the computer reservation systems utilized by the major U.S. air carriers as well as some smaller carriers. The CAPS system relies solely on information that passengers presently provide to air carriers for reasons unrelated to security. It does not depend on the gathering of any additional information from air travelers, nor is it connected to any law enforcement or intelligence database. Pursuant to a recommendation by the Department of Justice, as part of the proposed rule, the FAA would periodically review the CAPS system and its profiling factors to assure that they continue to be reasonable predictors of threat. For operations covered under this proposed rule, CAPS would replace the manual screening system as a baseline security measure.

Funding for Implementation of White House Commission Recommendations—The FAA subsidized a substantial portion of the air carriers' cost for development of the core CAPS system. In addition to grants of approximately $3.1 million to Northwest Airlines for the development of the prototype CAPS system, consultation to the FAA, and technical support to other air carriers, the FAA spent an additional $7.4 million for the development of core CAPS for other air carriers. In total, the $10.5 million subsidy has benefited eight lead carriers (provided to six separate Computer Reservation Systems (CRS)), all carriers associated with the lead carriers (e.g., feeder carriers), plus 19 other regional and national carriers. In total, approximately 95% of domestic airline passengers are served by the carriers receiving FAA subsidies. Also, by the end of fiscal year 1998, the FAA will have spent $129 million for the purchase, installation, initial training, and first-year maintenance of advanced security screening equipment designed to detect explosives in checked baggage. This equipment, which will be deployed at airports in the United States, includes EDS machines (54 new and 3 upgrades), advanced technology (AT) equipment (22 of which are assessed by the FAA as effective), and other high-technology equipment such as explosives trace detection technologies used to assist in alarm resolution for EDS and AT equipment. The FAA intends, subject to Congressional approval, to purchase an additional 20 EDS machines during fiscal year 1998 for $25.1 million, and has requested additional funding of $100 million in fiscal year 1999 to continue purchases of advanced security equipment to be installed at U.S. airports. The FAA intends to

request appropriations at similar levels in fiscal years 2000 and later.

Alternatives Considered by the FAA

In developing this proposed rule, the FAA considered the relative merits and disadvantages of the following alternatives:

(1) Maintaining the current policy for security of checked baggage on domestic flights. To date, the FAA has required domestic checked baggage screening and PPBM only when a heightened threat exists. Domestic baseline security measures under normal conditions, though not requiring checked baggage screening and PPBM, have thus far been adequate to counter the domestic threat. However, as evidenced by events such as the World Trade Center bombing, the FAA believes that the threat to civil aviation within the United States has increased and further rulemaking is vital. Though maintaining current baseline security measures would be the least costly course of action, the FAA does not believe this option is prudent given the current domestic threat.

(2) Phasing in mandatory use of EDS (without requirement for CAPS). The FAA considered requiring carriers to use EDS as it becomes available to them for screening 100% of checked baggage, and not requiring CAPS for those that would be using EDS. EDS offers the highest level of security because it is an automated system. To be certified, the system must have the ability to detect in passengers' checked baggage, the amounts, types, and configurations of explosive materials likely to cause catastrophic damage to an aircraft. The term ''automated'' means that the ability of an EDS to detect explosive materials does not depend on human skill, vigilance, or judgment. Baggage that clears through EDS screening does not require additional security measures on subsequent flight segments. In keeping with the White House Commission's recommendations, it is the FAA's goal to phase in EDS for all flights that would be subject to this proposed rule, which would make continued use of the CAPS system unnecessary in the future; however, because of the limited availability of EDS equipment, this goal of all carriers using EDS for 100% of its flights cannot be implemented in the near future. Under the alternative scenario of requiring carriers that have EDS to use it and not use CAPS, carriers that do not have EDS would not be required to do anything beyond what they are currently required to do (manual profiling or PPBM during heightened threats) until they are provided with EDS equipment. While the FAA recognizes that this would be a less costly approach for the carriers waiting to acquire EDS equipment, it could provide an unfair competitive advantage to those carriers that have not been provided EDS because of the additional costs associated with maintaining and staffing the equipment. Also, there would be little improvement in the level of security during the early phase-in period when few terminal gates have any EDS equipment. Moreover, overall aviation security may be reduced during the early phase-in period because a terrorist could more easily figure out which carriers were using EDS and which were not.

(3) Requiring 100% PPBM of each carrier while phasing in mandatory use of EDS. Although 100% PPBM is required for international flights, the FAA has determined that this approach is not feasible for domestic flights, even though it may be an effective alternative while EDS is being phased in, because it would be too costly. Domestic flights differ from international flights from the United States in the following respects: (1) There are a greater number of domestic flights; (2) they are coordinated around a hub and spoke system; (3) passengers can check in as late as 10 minutes prior to a flight; and (4) there is a significant rate of last-minute passenger cancellations and no-shows. The FAA believes that the passenger would ultimately feel the negative impact of 100% PPBM because the availability and affordability of air transportation would be affected. The FAA's studies show that air carriers would lose on average one rotation per aircraft in service per day. The loss of flights would be due to longer time needed to load the baggage for each flight and cumulative delays when problems loading one flight impact on connecting flights. These operational burdens on air carriers would result in passengers paying more for tickets and getting fewer discount offers. While the FAA recognizes that this approach would also provide a high level of security, it does not believe that the significant operational and economic costs associated with 100% PPBM are justified. The FAA also does not consider performing 100% PPBM a good allocation of air carrier resources, as the vast majority of passengers who would be subjected to it would not pose a threat. In addition, since it is the FAA's goal to require the use of EDS equipment for all flights in the next 10 years, conducting 100% PPBM, which is not as effective as screening by EDS, would ultimately be phased out.

(4) Bag matching on randomly selected passengers while phasing in EDS. While this alternative could be more effective than continuing to rely on manual profiling, which still has value as a security measure even though its effectiveness has eroded, the FAA does not believe it would be practical. Deciding how small or large a percentage to require would be difficult. Screening too small a percentage of passengers would not provide an adequate level of security, and screening too large a percentage would result in the same kinds of inconveniences and delays described above under ''Requiring 100% PPBM of each carrier while phasing in mandatory use of EDS.'' Even though the proposed rule would require that air carriers use an approved CAPS system that would be programmed to select some passengers at random, both as a deterrent and to ensure the nondiscriminatory application of CAPS, the use of an exclusively random selection process, even if it were done by computer and not manually, would not be a satisfactory security measure. The FAA therefore does not believe that it would be a good allocation of an air carrier's resources to conduct bag matching or EDS screening on the checked baggage of selectees chosen purely at random, as the vast majority of those selectees would not have posed any risk.

(5) Bag matching on passengers selected by CAPS with use of EDS, where available (the proposed rule). Until it is possible for air carriers to acquire and use EDS equipment for screening checked baggage on all scheduled operations subject to this rule, at which time the use of CAPS and PPBM would be replaced, the FAA believes that using CAPS to identify those passengers who possibly are a threat to the security of a flight and requiring bag matching or screening by EDS, when available, is the most practical and cost-efficient alternative currently available to increase the level of security on domestic flights. Using CAPS would enable air carriers to use already-existing data from reservations systems, eliminate the civil liberties concerns associated with manual passenger screening methods, and eliminate from consideration the majority of passengers who do not pose a threat to civil aviation. By limiting the pool of selectees to those who meet certain risk criteria, as opposed to those who are chosen randomly and most likely would not pose a threat, and subjecting only the checked baggage belonging to those selectees to bag matching, the air carriers would realize greater cost benefits than using the random method to identify selectees. While identifying selectees randomly or

by using CAPS would result in approximately the same cost to an air carrier, using the CAPS criteria would allow the carrier to concentrate its resources on clearing the baggage of passengers about whom there is insufficient information to confidently conclude that they pose no threat. For these reasons, the FAA has chosen this alternative as the basis for today's proposed rule.

(6) Performing bag matching on a limited number of CAPS selectees. This would be a modification of the proposed rule in that air carriers would use the CAPS system to determine a pool of selectees, but perform bag matching on only a portion of them. This would reduce the cost of implementing the regulations by keeping the pool of selectees as small as possible. However, this approach would offer a lower level of security and would essentially amount to reducing the value of the CAPS criteria.

For more detailed cost analyses of these alternatives, see the ''Regulatory Evaluation Summary'' below.

Discussion of the Proposed Rule

This proposal, if adopted, would amend part 108 (14 CFR part 108) to require each certificate holder required under § 108.5 to adopt and implement an FAA-approved security program to employ one of the following options—(1) use an FAA-approved CAPS system for each originating passenger checking baggage, then either use FAA-certified EDS equipment, where available, to screen the checked baggage of the CAPS selectee or conduct bag matching to ensure that the checked baggage of the CAPS selectee is not transported aboard an airplane unless that selectee is aboard the same airplane and flight; or (2) where CAPS is not used, conduct 100% EDS screening on checked baggage or 100% PPBM. This requirement would only be imposed on certificate holders that engage in operations with airplanes having a passenger seating configuration of more than 60 seats. Certificate holders that are engaged in operations with an airplane having a passenger seating configuration of 60 or fewer seats may choose to comply with this requirement, but they must adopt and implement an FAA-approved security program to do so.

Under the FAA-approved CAPS system, the checked baggage of the small percentage of passengers whom the CAPS system has identified as selectees would be subjected to screening by EDS or bag matching procedures would be applied. To further enhance the deterrence value of the system, the CAPS system would be required to also randomly select a small percentage of other passengers (the percentages to be specified in each air carrier's standard security program) whose checked baggage would be subjected to the same types of additional security measures as that of the other CAPS selectees. These additional security measures would include EDS, where available, or bag matching. The Department of Justice has reviewed the FAA's proposed CAPS system and found there to be no infringements on civil liberties (see discussion of ''Civil Liberties Issues'' below). For a more in-depth analysis of proposed rule, see discussion under ''Section-by-Section Analysis'' below.

Civil Liberties Issues

The Commission, while endorsing CAPS, recognized that care must be taken in implementing automated passenger profiling to ensure that there would be no infringements on the civil liberties of American citizens. Accordingly, the Commission convened a panel of civil liberties experts from outside the government to provide guidance. Based on the proposals made by this panel, the Commission made several recommendations, including that the Department of Justice (in consultation with other experts) review the FAA's proposed CAPS system prior to implementation ''to ensure that selection is not impermissibly based on national origin, racial, ethnic, religious, or gender characteristics.''

On October 1, 1997, following its review, the Department of Justice issued the ''Report by the Department of Justice to the Department of Transportation on the Department's Civil Rights Review Conducted of the Federal Aviation Administration's Proposed Automated Passenger Screening System.'' In its report, the Department of Justice stated that its principal finding is that the FAA's proposed CAPS system will not discriminate on the basis of race, color, national or ethnic origin, religion, or gender. The Department of Justice went on to state the following:

- CAPS fully complies with the equal protection guarantee incorporated in the Fifth Amendment to the Constitution. CAPS will not impermissibly select passengers for heightened security measures on the basis of race, color, national or ethnic origin, religion, or gender.
- CAPS does not violate the Fourth Amendment prohibition on unreasonable searches and seizures. CAPS itself involves no ''search'' or ''seizure;'' nor does bag matching, pursuant to CAPS, occasion any ''search'' or ''seizure.'' A search of a selectee's luggage pursuant to CAPS, such as by an EDS screening, is a permissible extension of the constitutional administrative search procedures that operate at U.S. airports today.
- CAPS does not involve any invasion of passengers' personal privacy. CAPS does not create any new database on passengers and is not linked to any database other than the existing airline computer reservation systems. CAPS selectee results will not be retained on a personally identifiable basis and the information used to calculate each CAPS result will not be retained on computer by the airline reservation systems.

In its report, the Department of Justice recommended that the Department of Transportation, with the Department of Justice, take five steps to further assure that airline passenger screening is implemented in a non-discriminatory and appropriate manner. The five recommendations are as follows:

1. The FAA should undertake regular, periodic reviews of CAPS (and any residual manual screening system) to ensure that the screening factors continue to be reasonable predictors of risk or the absence of risk;
2. The Department of Justice, with the assistance of the Office of the Secretary of Transportation and the FAA, should undertake a post-implementation review of CAPS (and any residual manual system), approximately one year after implementation begins, to ensure that selection in fact is not impermissibly being based on race, color, national or ethnic origin, religion, or gender, and should undertake additional reviews thereafter as appropriate;
3. The Office of the Secretary of Transportation and the FAA should expand their public education and outreach efforts to inform the American public about the purpose of airline passenger screening, as well as the right of passengers to file a complaint * * * if they believe they were the victim of discriminatory airline security procedures;
4. The FAA should require that domestic air carriers that implement CAPS (or any residual manual system) obtain pre-approval from the FAA before implementing any passenger screening system in addition to the screening procedures prescribed by the FAA, and the FAA should consult with the Department of Justice before approving any supplemental screening procedure; and
5. The FAA should require that air carriers implementing CAPS (or any residual manual system) establish procedures to ensure appropriate interactions between air carrier employees responsible for implementing passenger screening and airline passengers, and should provide appropriate training to these employees.

In conclusion, the Department of Justice report stated that the FAA's

proposed automated airline passenger screening system, as designed, would not infringe the civil rights or civil liberties of American citizens. In addition, the Department of Justice stated that the FAA has taken great care in designing CAPS so as to respect Americans' civil rights and civil liberties.

Finally, the Department of Justice stated that it would closely monitor the FAA's passenger screening procedures to ensure that they remain non-discriminatory.

Section-by-Section Analysis

Section 108.5 Security Program: Adoption and Implementation

This proposal would amend § 108.5 by requiring all holders of air carrier operating certificates, or holders of operating certificates for scheduled passenger operations, that engage in operations with an airplane having a passenger seating configuration of more than 60 seats, to comply with the provisions of proposed paragraph (a) of § 108.12 Security of checked baggage for operations within the United States. The proposal also allows other operators, where they operate under an FAA-approved security program, to comply with the provisions of § 108.12. Section 108.12, as more fully discussed below, would require the implementation of security measures for checked baggage on domestic flights by screening the checked baggage of every passenger with an FAA-certified EDS machine, by conducting 100% PPBM, or by utilizing an FAA-approved CAPS system for screening airline passengers and subjecting the selectees' checked baggage to screening by EDS equipment, where available, or bag matching.

While FAA-approved air carrier security programs, which implement § 108.9, require checkpoint security measures for the screening of passengers and their carry-on baggage to prevent or deter the introduction of deadly or dangerous weapons or incendiary devices carried aboard an aircraft by a passenger, the security programs prescribe limited measures to prevent the introduction of improvised explosive devices in checked baggage on flights within the United States, except in emergency situations. The FAA recognizes the potential danger associated with an increase in terrorism in the United States and the limited baseline domestic checked baggage security requirements to prevent or deter the introduction of explosives in checked baggage. This proposal addresses security measures for checked baggage.

Under this proposal, the FAA would require compliance with § 108.12 for all air carrier operations using aircraft with more than 60 passenger seats because the FAA has concluded that larger aircraft are at a significantly higher risk to terrorist attacks. Since air carriers with operations using aircraft with passenger seating configurations of 60 or fewer seats may also wish to comply with the provisions of § 108.12, the FAA has provided that as an option under this proposal. These operators would be required to adopt and implement a security program that includes provisions effecting compliance with § 108.12. Compliance with an FAA-approved security program would be required because the FAA believes that any carrier, regardless of the size of operation, that accepts the responsibility for conducting the important security measures for checked baggage on operations within the United States should also be accountable for other aspects of a security program related to the acceptance and control of checked baggage. For example, smaller operators with large interline partners, which use the same passenger reservation services, may decide to comply with § 108.12. This would include, but would not be limited to, ensuring that no unauthorized person has access to checked baggage once it has been subjected to security measures.

Section 108.7 Security Program: Form, Content, and Availability

This proposal would amend § 108.7 (b) to require that each air carrier's FAA-approved security program include a description of the procedures used to perform the checked baggage security functions specified in § 108.12 for scheduled passenger operations. This amendment is needed to ensure that each air carrier that adopts and implements an FAA-approved security program in accordance with § 108.5 would include the provisions for the security of checked baggage on flights within the United States.

Section 108.12 Security of Checked Baggage for Operations Within the United States

The FAA is proposing to amend part 108 by introducing a new section to address the security of checked baggage on flights within the United States. Under proposed § 108.12 (a), each air carrier required to adopt and implement a security program under § 108.5, would be required to apply the checked baggage security requirements of this section for scheduled passenger operations, in accordance with its security program, for flights within the United States. For each flight the air carrier would be required—(1) to apply a CAPS system approved by the Administrator for each originating passenger checking baggage; (2) to determine that the passenger associated with each originating checked bag is aboard the flight; or (3) that each originating bag not matched to a passenger aboard the flight has been screened by an FAA-certified EDS machine. To receive approval from the FAA, an air carrier's CAPS system would have to be capable of selecting passengers according to specific criteria (which had been assigned relative weights by the FAA) and at random, as provided in the air carrier's FAA-approved security program.

When compared to the screening of all checked baggage on flights within the United States by FAA-certified EDS equipment, or conducting 100% PPBM, the proposed rule would result in a much smaller percentage of passengers being subjected to additional security measures; however, the FAA believes at this time that performing 100% PPBM for operations within the United States is not an efficient use of air carrier resources because the majority of passengers who would be subjected to it would not pose a threat. In addition, implementation of 100% domestic PPBM would be impractical given the operational impact it would have. The FAA recognizes that 100% screening of all checked baggage on domestic flights by an FAA-certified EDS machine is not feasible in the near term, due to the limited availability of EDS equipment. The FAA views 100% screening or matching of checked bags on domestic flights as a reasonable long-term goal, but has determined that screening or matching based on CAPS will greatly strengthen the security of checked bags on domestic flights in the near term. Further, CAPS-based measures can be implemented without the time air carriers would need to attempt the 100% EDS screening or bag matching measures. Accordingly, this proposed rule would permit options for an air carrier to either subject all passengers to the FAA-approved CAPS system (with EDS screening of selectees' checked baggage or matching of selectees and their checked baggage), employ 100% checked baggage screening by EDS, or conduct 100% PPBM of passengers and their checked baggage for operations within the United States. The FAA has concluded, as did the Commission, that this proposal would provide the most effective methodology currently available for ensuring the security of checked baggage on domestic flights.

Proposed § 108.12 (b) would require that for each operation subject to proposed § 108.12 (a), the air carrier may not transport the checked baggage of a non-originating passenger, on-line or inter-line, unless: (1) the passenger is transported on the same airplane and flight; (2) the passenger associated with the checked baggage was screened by an FAA-approved CAPS system prior to an earlier flight or leg and information is available to the air carrier that the passenger was not selected for additional security measures; (3) information is available to the air carrier that the baggage was screened by an FAA-certified EDS machine prior to an earlier flight or leg; (4) the baggage is screened by an EDS machine prior to the current flight; or (5) the passenger is screened by an FAA-approved CAPS system for the current flight and, if selected, subjected to additional security measures (checked baggage screening by EDS or bag matching). The intended purpose of this proposed paragraph is to ensure that checked baggage on domestic flights would be adequately screened or matched regardless of where the baggage originated. For example, an air carrier may receive a non-originating inter-line transfer passenger whose checked baggage may not have been subjected to any screening requirements. This proposal would ensure that the non-originating inter-line transfer passenger's checked baggage would undergo checked baggage security requirements before being placed in the cargo compartment of the airplane. The FAA has determined that this proposed requirement is necessary to prevent explosive devices concealed in checked baggage transferred from earlier flights from being introduced into the holds of airplanes.

Proposed § 108.12 (c) would require that the checked baggage of a passenger selected by the CAPS system not be transported aboard the flight unless it had been screened by an FAA-certified EDS machine, where available, or had been matched to the selectee. The FAA is proposing under this paragraph to require the use of available EDS equipment for the screening of selectee checked baggage because EDS is highly effective in detecting explosives. To ensure that there is a consistent and realistic interpretation of when EDS is ''available,'' proposed § 108.12 (d) provides a description of what constitutes EDS availability. The FAA recognizes that, because of the various factors that play a role in baggage make-up operations (e.g., the physical lay-out of an airport's facilities), a definition of ''available'' might be difficult to apply uniformly in this context. For this reason, the FAA seeks specific comments on whether the proposed definition of the term is a reasonable one. The proposed section provides that EDS is considered to be available to an air carrier for screening checked baggage when the equipment is—

(1) Under the operational control of the air carrier. The carrier that has operational control of EDS equipment is generally the air carrier to which the FAA has provided the equipment. This carrier is usually responsible for the testing, maintenance, and staffing of the machine; however, it may be possible for one carrier to share or accept operational control under a contractual agreement with another air carrier.

(2) Functioning properly. Carriers with operational control of EDS equipment are required by their FAA-approved security programs to conduct daily testing to ensure that the equipment is functioning properly. Once it is determined, either by carrier testing or by periodic FAA testing, that the EDS equipment is not performing in accordance with minimum EDS certification standards, it cannot be used for the screening of checked baggage until it is repaired or replaced.

(3) Located proximate to where the baggage is tendered by the passenger or along the route the baggage normally travels during the process of being loaded onto the aircraft. This is intended to avoid a situation where an air carrier would be required to use EDS equipment that is not easily and readily accessible to it, and where using it would result in significant operational delays. For example, for its current flight, an air carrier may be authorized to use EDS equipment which has been installed at a location at the airport that is not at or near the point of checked baggage acceptance, or in the baggage make-up area.

(4) Staffed by appropriately trained personnel. Staffing and training requirements for EDS screeners are described in the air carrier's FAA-approved security program.

(5) Not in use to screen other identified baggage such that a significant delay in a flight might result from having to wait to use the EDS to screen the bag. This description is intended to avoid a situation where EDS equipment meets all other descriptions for availability and is performing in accordance with minimum throughput requirements, but baggage cannot be processed quickly enough to avoid a significant flight delay. This might occur, for example, when several flights serviced by the same EDS are leaving at the same time, resulting in a severe backup of bags waiting to be processed through the same EDS.

In proposed § 108.12(e), the FAA would require that each air carrier establish procedures for implementing the screening of checked baggage under proposed § 108.12. The proposal would also require the air carrier to ensure nondiscriminatory application, and to reduce to the extent practicable the overt identification of passengers selected for additional security procedures.

In proposed § 108.12(f), the FAA would require that each person used by an air carrier to implement its CAPS system whose job function will be likely to involve interactions with passengers shall be trained on the CAPS system. The proposed training would include— (1) an overview of the purpose of screening, including an explanation that selection does not imply that a passenger is suspected of any illegal activity; (2) a general description of the CAPS system and how it is designed to select passengers on a non-discriminatory basis; (3) an advisory that the CAPS system selects some passengers at random; (4) an explanation that the CAPS system is not connected to any law enforcement or intelligence data base; and (5) instruction on treating passengers selected by the CAPS system in a respectful and non-stigmatizing manner. These proposed paragraphs are based on recommendations from the Department of Justice, as discussed previously in the ''Civil Liberties Issues'' section. The FAA has determined that these proposed measures are necessary to implement the Justice Department's recommendations and to assure that CAPS is implemented in a non-discriminatory and appropriate manner.

In proposed § 108.12(g), the FAA would require that an air carrier may not modify the criteria of the CAPS system, or their weighting, without the written approval of the Administrator. This proposed paragraph would also provide that an air carrier may not apply any supplemental system of passenger screening to select passengers for additional security measures without the approval of the Administrator. The FAA has determined that this proposal is necessary to ensure that no impermissible factors are used to select passengers for additional security measures. This proposal also ensures that there is standardization among air carriers utilizing an FAA-approved CAPS system for screening checked baggage (i.e., the same factors are used in profiling passengers).

In proposed § 108.12(h), the FAA would require that each air carrier make available to the Administrator the information specified in its security program on the operation of its CAPS system; however, the FAA anticipates that this information would not be routinely requested. In overseeing compliance with proposed § 108.12, the FAA would need to know which individuals were actually being selected by the CAPS system in order to ensure that members of specific ethnic groups were not being unfairly targeted and that selectee rates did not vary, for example, between carriers or regions. The FAA believes that this requirement would be necessary to protect the civil rights and liberties of individuals selected by the CAPS system. The proposal would further require that an air carrier dispose of any information linking a passenger's name or other personal identifying data to whether that passenger was selected by the CAPS system no sooner than 24 hours, but no later than 72 hours, after a flight's departure. By specifying data retention for a minimum of 24 hours after a flight departure, the FAA intends to ensure that it can, when necessary, obtain information in the course of investigating accidents or security incidents, overseeing air carrier security programs (i.e., that the CAPS system has been properly applied and implemented throughout each step of processing checked baggage), or monitoring the nondiscriminatory application of the CAPS system. The data retention limit of 72 hours after a flight departure is intended to ensure that no long-term database of personally identifiable information is kept.

While the FAA has set forth an all-selectee data retention limit of 72 hours after flight departure as its proposed rule under § 108.12(h), the Department of Transportation's Office of the Assistant General Counsel for Aviation Enforcement and Proceedings has requested that the FAA seek comments on whether information relating to random selectees should be retained for a more extended period (eg., 18 months) than information on non-random CAPS selectees. The Office of Aviation Enforcement and Proceedings is the office that investigates airline security-related discrimination complaints filed with the Department of Transportation. That office has advised the FAA that, while it could effectively investigate the application of the non-random CAPS selection process, it is concerned that there would be no basis upon which to make determinations regarding the appropriate application of the random CAPS selection process. The Office of Aviation Enforcement and Proceedings notes that typically a complaint is received, and the investigation takes place, three to nine months after a passenger's flight, and it is not reasonable to expect that the air carrier employee involved in a particular selection (even if that employee's identity could be established) would have recollection of the specific incident being investigated. To determine whether or not an air carrier employee or the CAPS system made a particular selection, a record of any random selection would be needed. The Office of Aviation Enforcement and Proceedings believes that, as long as the only CAPS selection data retained for an extended period of time concerned the purely random selections, there would be no infringement on passengers' privacy rights, while their civil rights would be better protected. The FAA therefore requests comments (including implementation and maintenance cost estimates) on the recommendations of Office of Aviation Enforcement and Proceedings.

Finally, in proposed § 108.12(i), the FAA would require that an air carrier receive approval from the Associate Administrator for Civil Aviation Security before it may apply alternate procedures from its security program for the security of checked baggage in special situations. As provided under this proposal, these special situations would include: (1) baggage acceptance at off-airport locations; (2) the transportation of bags separated from a passenger for reasons outside the control of the passenger (e.g., lost bags); (3) CAPS system failures; (4) extraordinary operational circumstances (e.g., natural disasters or extreme weather conditions); (5) the use of technologies or equipment other than EDS to screen checked baggage; and (6) any other situation specified by the Associate Administrator for Civil Aviation Security in the air carrier's security program. The FAA has determined that this proposed paragraph is needed to provide relief to an air carrier for special circumstances and during those extraordinary and emergency situations where the passenger and air carrier do not have control over the circumstances.

Paperwork Reduction Act

This NPRM, Security of Checked Baggage on Flights Within the United States, contains information collection requirements. As required by the Paperwork Reduction Act of 1995 (44 U.S.C. 3507(d)), the FAA has submitted a copy of these proposed sections to the Office of Management and Budget (OMB) for its review.

The FAA expects that this proposed rule would affect 32 air carriers, and that the proposed rules under § 108.12 would impose additional reporting and recordkeeping requirements on those operators. This reporting and recordkeeping would be needed, when requested by the Administrator, as part of monitoring for the nondiscriminatory implementation of CAPS, accident and security incident investigations, oversight of air carrier SSP compliance, or evaluating personnel training records. Accordingly, it is estimated that all 32 affected air carriers would spend a total of 64 hours, in the first year, to provide compliance information, and 4,981 hours in all years to generate training information. Hence, there would be a total burden of 5,045 hours in the first year and 4,981 hours in all subsequent years. Over a ten-year period (2000–2009), the average estimated annual cost would be $827,678 per affected air carrier (a total of $26,485,695 for all 32 affected carriers). These cost figures are based on estimates provided in the FAA's ''Regulatory Impact Analysis.''

The FAA does not expect that there would be any additional record keeping burden on part 108 aircraft operators which either conduct 100% PPBM or use FAA-certified EDS equipment to screen checked baggage.

Organizations and individuals desiring to submit comments on the information collection requirements should do so by June 18, 1999. Comments should be directed to the Department of Transportation's rules docket (see **ADDRESSES** above). These comments should reflect whether the proposed collection is necessary; whether the agency's estimate of the burden is accurate; how the quality, utility, and clarity of the information to be collected can be enhanced; and, how the burden of the collection can be minimized.

International Compatibility

The FAA has determined that a review of the Convention on International Civil Aviation Standards and Recommended Practices is not warranted because the proposed rule would apply to domestic operations only.

Economic Evaluation Summary

This proposed rule is considered a significant regulatory action under section 3(f) of Executive Order 12866 and, therefore, is subject to review by the Office of Management and Budget. This proposed rule is considered significant under the regulatory policies

and procedures of the Department of Transportation (44 FR 11034; February 26, 1979).

Proposed and final rule changes to Federal regulations must undergo several economic analyses. First, Executive Order 12866 directs that each Federal agency shall propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify its costs. Second, the Regulatory Flexibility Act of 1980, as amended May 1996, requires agencies to analyze the economic effect of regulatory changes on small entities. Third, the Office of Management and Budget directs agencies to assess the effect of regulatory changes on international trade. In conducting these analyses, the FAA has determined that the proposed rule would generate benefits that justify its costs and is ''a significant regulatory action'' as defined in the Executive Order and the Department of Transportation Regulatory Policies and Procedures. The proposed rule will have a significant impact on a substantial number of small entities and will not constitute a barrier to international trade. In addition, this proposed rule does contain Federal intergovernmental or private sector mandates. Therefore, the requirements of Title II of the Unfunded Mandates Reform Act of 1995 do apply. These analyses, available in the docket, are summarized below.

A. Costs

Although the proposed rule requires the use of EDS, where available, for screening the checked baggage of CAPS selectees, the FAA was unable to develop a cost of compliance due to the lack of information on how many EDS machines each air carrier would need at each airport. Since interpretation of ''where available'' may differ among air carrier operators, it becomes very difficult to estimate the potential cost of using EDS. As a result of this situation, the FAA estimated the cost of this proposed rule on the premise that all air carriers adopting CAPS would use baggage matching as the security measure. Baggage matching represents a worst case scenario in terms of costs.

This analysis has estimated the costs of the proposed rule by examining the incremental changes from the existing air carrier security regulations rather than from procedures required by emergency, temporary regulations. On occasion the FAA establishes security measures on an emergency basis, typically through limited duration Security Directives, to respond to specific or assessed threats. For the past several years, air carriers have been applying a manual passenger screening system, in most cases conducting bag matching on the checked baggage of passengers who were selected. At the time it was instituted, immediate implementation was deemed necessary to counter the then-prevailing security threat. These contingency measures are not permanent rules; accordingly, the FAA's analysis reflects the costs of instituting security measures beyond those required by permanent rules.

Costs for the bag matching implementation, operating, and delay portions of the proposed rule were based on estimates by SABRE Decision Technologies Group, South Lake, Texas (SABRE). SABRE based their costs on interpolation of data from a live study of the operational feasibility and cost impact of requiring 100% PPBM for part 108 aircraft operators. The proposed rule anticipates that only 5% of checked baggage would be subject to bag matching. In addition to SABRE, the National Center of Excellence in Aviation Operations Research (COE) assisted in the assessment of costs for this proposed rule. The FAA used cost data developed by SABRE as the potential maximum as the costs of the proposed rule. Cost estimates used in this analysis were based on SABRE's analysis of the aforementioned bag matching study. The data from the bag matching study included a wide diversion of cost experience by individual air carriers using procedures to accommodate all checked baggage. Substantially different and less expensive procedures with fewer delays and system-wide impacts may be applicable where bag matching is done for a pre-selected group of travelers. Descriptions of the potentially less costly implementation of the proposed rule are discussed in the FAA's forthcoming ''Report to Congress: Domestic Bag Match Pilot Program.''

1. Baggage Matching Costs

The proposed rule would impose an estimated cost of $2.8 billion ($2.0 billion, discounted) over the next 10 years in 1998 dollars, for baggage matching. This cost estimate is composed of two primary cost components: (1) Baggage Matching Startup and Operating Costs and (2) Baggage Matching Delay Costs. The manner by which costs for each of these two components were derived will be discussed in the following sections.

a. Baggage Matching Startup Costs. Based on cost information received from the SABRE Technologies Group (henceforth, referred to as ''SABRE''), baggage matching startup costs for all impacted air carriers would amount to an estimated $217 million ($203 million, discounted) over the next 10 years. Startup costs consist of several components. First, there is initial training for gate agents, ramp personnel, and skycap personnel. Air carriers would be expected to train their airport personnel in order to ensure compliance with the proposed rule. This training would familiarize airport terminal personnel with the new requirements of baggage matching procedures for 5% passenger screening. At some airports, skycap personnel currently load passenger baggage on a conveyer belt in the curbside area. Under the proposed rule, air carriers would have to either train skycap personnel or use trained ticket agents to handle the checked baggage of those passengers selected by CAPS, in order to prevent this and other potential problems. Second, additional hardware would be needed. Hardware would primarily consist of additional boarding pass readers, communications equipment, barcode scanners, and magnetic strip readers. Third, equipment such as radios and carts would be needed. Fourth, some airport facilities would be changed. The ticket counter, curbside, and gate areas may be expanded as a means of accommodating the implementation of baggage matching requirements. Additional staffing would be needed, as would additional gate agents and ramp personnel to minimize the number of lost or mishandled baggage.

SABRE obtained aggregated startup costs of $141 million (in 1997 dollars; this estimate was subsequently updated to 1998 dollars using the GDP Implicit Price Deflator) from seven major air carriers. To estimate startup costs for the two major air carriers that did not report cost data, SABRE projected cost based on annual departures. SABRE believed this procedure would take into account the size of the air carriers' operations on startup cost. A simple average of the seven air carriers' costs would have significantly overstated or understated the startup costs for the two air carriers that did not report cost data. The startup cost rate for ''majors'' was $36.24 per departure. This estimate and all other cost estimates were updated to 1998 dollars. Moreover, this estimate was derived by dividing the startup costs of $141 million by the number of 1997 domestic departures for those seven major air carriers that participated in SABRE's survey.

For national and regional jet air carriers, the same startup rate of $36.24 per departure was used to estimate their startup costs. National and regional operators operate on a much smaller scale than the majors do. While the

assumed startup rate for national and regional jet operators may be higher than what they may actually incur, it is believed to provide a reasonable first approximation of startup costs for this group of operators.

For national and regional turboprop air carriers, a startup cost estimate of $2.82 per departure is used, as estimated by SABRE, based on an earlier report (March 1996) for 100 % PPBM for national and regional turboprop air carriers. This estimate of $2.82 was extrapolated by SABRE in a manner similar to that of the aforementioned startup cost estimate of $36.24, to reflect an estimate of baggage matching with a 5% selectee rate. Turboprop airplane operators conduct significantly smaller scale operations than the jet air carriers. In addition, turboprop airplane operators have fewer employees, lower wage rates, smaller airplanes, etc.

b. Baggage Matching Operating Costs (Excluding Delays). Baggage matching operating costs would impose an estimated $2.0 billion ($1.4 billion, discounted) over the next 10 years. This estimate is comprised of equipment and hardware costs ($360 million), staffing costs ($1.6 billion) and training costs ($9 million). It is based on cost information received from SABRE. Annual costs were derived by multiplying the cost for each component times the number of projected domestic departures for part 108 air carriers over the next 10 years and summing to an annual total.

The cost per departure for the major air carriers has been estimated to be $30.30. The national and regional jet air carriers would incur an estimated cost of $21.19 per departure. The turboprop air carriers within the ''nationals and regionals'' category would incur an estimated operating cost of $5.88 per departure for baggage matching. All per-departure rates are based on cost information received from SABRE. These estimates represent costs for recurring maintenance, staffing, and staff training for baggage matching requirements of the proposed rule for CAPS.

c. Baggage Matching Delay Costs. Baggage matching delay costs would impose an estimated $467 million ($323 million, discounted) over the next 10 years (this cost is equal to 0.1% of the delay costs incurred by the entire air carrier system on an annual basis). These costs consist of local air carrier delays ($298 million), downstream delays ($135 million), passenger missed connections ($19 million), and extended operating days ($16 million). These costs, which are based on information received from SABRE, were derived by multiplying the cost per departure for each delay component times the number of projected annual domestic departures over the next 10 years and summed. The total delay cost per departure for the major, national and regional jet air carriers would be an estimated $6.85. For the national and regional turboprop air carriers, it would be an estimated cost of $1.18 per departure.

The baggage matching delay cost estimates are from the SABRE Decision Technologies Group's Dependability Predictor Model (DPM). The DPM is a proprietary simulation model that was developed for use by a major airline. The DPM analyzes schedule performance for a typical day by focusing on delays that could affect the scheduled operations. The model uses historical data distributions for gate delays (ramp service, passenger service, mechanical delays, air traffic control (ATC) gate holds, etc.) and block time delays to simulate the movement of each flight within the schedule.

While cost information has been received from SABRE, which was extrapolated from a sample of air carriers, the FAA believes there is still uncertainty associated with the estimates for startup, operations, and delay costs for major, national and regional air carriers. As the result of this uncertainty, the FAA solicits comments from the aviation industry on startup, operating, and delay costs for compliance with the baggage matching procedures portion of this proposed rule.

2. CAPS Program Costs

Part 108 air carriers expected to install CAPS on their computer reservation systems (CRS's) as the result of this proposed rule, would incur an estimated compliance cost of $70 million ($51 million, discounted) over the next 10 years, in 1998 dollars, $8 million from the federal government. This cost estimate can be further subdivided between those costs that air carriers would incur in their first year (2000), at approximately $18 million ($16 million, discounted). The cost of compliance for subsequent years (2001–2009) would amount to an estimated $52 million ($35 million, discounted).

The individual cost components for the first year include software design and construction, system testing, system implementation, additional capacity for Department of Justice inquiries into how the air carriers are complying with Department of Justice recommendations, and check-in personnel training costs. Subsequent year cost components include hardware and software maintenance, additional capacity for responding to Department of Justice inquiries, and recurrent check-in personnel training. The FAA has estimated these component costs for each impacted air carrier for 1997. In the discussion below, these components are expressed in terms of per-departure costs to be consistent for all the other costs discussed in this analysis are expressed in terms of per-departure costs. The agency has also determined that the best way to project future costs would be to calculate the per-departure costs. These per-departure costs are then multiplied by total departures to calculate costs for the years covered by this analysis.

The entire CAPS program is made up of three components. These three components include the computer program, the individualized screens that would be unique to each air carrier, and the data gatherer. All air carriers could obtain the necessary licenses from the FAA to use the computer program free of charge; however, all air carriers would incur costs modifying both the interface between CAPS and the rest of the system and the individualized screens for their specific needs.

To establish CAPS on their CRS's, air carriers have three viable options. These options include joining other air carriers' CRS's, building their own CAPS systems, and using part of the existing CAPS and revising other portions. The first option would be the least costly, while the middle option would be the most costly. Air carriers that would adopt this costly option would be those whose computers would not accept the original source code developed for CAPS or would want more privacy due to proprietary data.

The U.S. Congress has appropriated $8.0 million to the FAA to pay for the necessary software, hardware, and other costs needed to get the CAPS program up and running (this does not include the $2.5 million that the FAA had awarded to Northwest Airlines to develop CAPS). The FAA has established an Integrated Product Team (IPT) to work with the air carriers to determine their individual needs. The cost estimates gathered by the IPT were used by the FAA in this analysis to help determine first-year implementation costs for the following components: software design, system testing, and system implementation. For this analysis, the FAA divided the total costs among these components for all air carriers by the total number of departures to obtain the per-departure costs at $1.81, $0.13, and $0.10, respectively. Due to the need to keep records for Department of Justice inquiries, each air carrier would need to add additional computer capacity; the

per-departure cost for this added capacity is estimated to be $0.34. In addition, all check-in personnel would need training; the per departure cost for this training is estimated to be $0.33.

Each air carrier would have hardware and software maintenance costs in the subsequent years, and the software costs would depend on which of the aforementioned CAPS options the air carrier had chosen. The cost per departure for hardware and software maintenance is estimated to be $0.39. Meanwhile, the per-departure costs for the Department of Justice inquiries and training are $0.05 and $0.33, respectively. Hence, first year costs sum to $2.71 per departure, while subsequent year costs sum to $0.77 per departure.

For both the CAPS and baggage matching, the proposed rule would impose total compliance costs of $2.8 billion ($2.0 billion, discounted), over 10 years. This estimate is composed of the following components:

- Baggage Matching Startup Costs:
  $217 million ($203 million, discounted)
- Baggage Matching Implementation and Operating Costs:
  $2.0 billion ($1.4 billion, discounted)
- Baggage Matching Delay Costs:
  $467 million ($323 million, discounted)
- CAPS Program Implementation and Operating Costs:
  $70 million ($51 million, discounted)

The FAA expects that the total cost of compliance of $2.8 billion may represent a potential maximum cost estimate. Estimating the economic cost that this proposed rule would impose on airlines and passengers was a difficult undertaking, as suggested by the wide range of estimates that different airlines provided. As mentioned above, in addition to SABRE, COE assisted in the assessment of costs for this proposed rule. Because implementation of domestic baggage matching based on a passenger screening process such as CAPS was not the subject of any live tests, COE believes that substantial economies may be achieved by airlines beyond the experience of a live bag matching test that was conducted in the spring of 1997 and ''a priori'' estimates supplied by individual airlines. COE projected that the proposed rule would cost between $500 million (based on 7 cents per passenger enplanement) and $2.5 billion (based on 36 cents per passenger enplanement) over the next decade. In addition, according to COE, as part of a follow-up to the live test conducted for passenger baggage matching, air carriers stated that the costs they provided were overstated by at least 33%. This assessment is based on the fact that air carriers now have a much better idea how they would implement 100% PPBM if they were required to do so by regulation. Based on this information, coupled with the fact that there is some uncertainty as the result of the interpolation technique used by SABRE and COE to estimate costs, the FAA solicits comments from the aviation community as to the accuracy of this assessment of costs.

B. Benefits

The primary benefits of the proposed rule would be in significantly increased protection from terrorism for U.S. citizens and others traveling on U.S. domestic air carrier flights. Specifically, the proposed rule is aimed at deterring terrorism by preventing explosives from being placed on board commercial flights in checked baggage.

Terrorism can occur within the United States. Members of foreign state-sponsored terrorist groups and radical fundamentalist elements from many nations are present in the United States. In addition, Americans are joining terrorist groups. The activities of some of these individuals and groups go beyond fund-raising to recruiting other persons (both foreign and American) for activities that include training with weapons and making bombs. These extremists operate in small groups and can act without guidance or support from state sponsors. This makes it difficult to identify them or to anticipate and counter their activities. The following discussion outlines some of the concrete evidence of the increasing terrorist threat within the United States and to domestic aviation.

Investigation into the February 1993 attack on the World Trade Center uncovered a foreign terrorist threat in the United States that is more serious than previously known. The World Trade Center investigation disclosed that Ramzi Yousef arrived in the United States in September 1992 and presented himself to immigration officials as an Iraqi dissident seeking asylum. Yousef and a group of Islamic radicals in the United States then spent the next five months planning the bombing of the World Trade Center building and other acts of terrorism in the United States. Yousef returned to Pakistan on the evening of February 26, 1993, the same day that the World Trade Center bombing took place. Yousef traveled to the Philippines in early 1994, and by August of the same year had conceived a plan to bomb as many as twelve U.S. air carriers flying between East Asian cities and the United States.

Yousef and co-conspirators Abdul Murad and Wali Khan tested the type of explosive devices to be used in the aircraft bombings, and in December 1994 they demonstrated the group's ability to assemble such a device in a public place by bombing a Manila theater. Later in the same month, the capability to get an explosive device past airport screening procedures and detonate it aboard an aircraft also was successfully tested when a bomb was placed by Yousef aboard the first leg of Philippine Airlines Flight 424 from Manila to Tokyo. The device detonated during the second leg of the flight, after Yousef had deplaned at an intermediate stop in the Philippine City of Cebu.

Preparations for executing the plan were progressing rapidly; however, the airliner bombing plot was discovered in January 1995 only by chance after a fire led Philippine police to the Manila apartment where the explosive devices were being assembled. Homemade explosives, batteries, timers, electronic components, and a notebook full of instructions for building bombs were discovered. Subsequent investigation of computer files taken from the apartment revealed the plan in which five terrorists were to have placed explosive devices aboard United, Northwest, and Delta airline flights. In each case, a similar technique was to be used. A terrorist would fly the first leg of a flight out of a city in East Asia, plant the device aboard the aircraft and then get off at an intermediate stop. The explosive device would then destroy the aircraft as it continued on the subsequent leg of the flight to the United States. It is likely that thousands of passengers would have been killed if the plot had been successfully carried out.

Yousef, Murad and Khan were arrested and convicted in the bombing of Philippine Airlines Flight 424 and in the conspiracy to bomb U.S. airliners. Yousef was sentenced to life imprisonment for his role in the Manila plot, while the two other co-conspirators have been convicted. Yousef also was convicted and sentenced to 240 years for the World Trade Center bombing. However, there are continuing concerns about the possibility that other conspirators remain at large. The airliner bombing plot, as described in the files of Yousef's laptop computer, would have had five participants. This suggests that, while Yousef, Murad and Khan are in custody, there may be others at large with the knowledge and skills necessary to carry out a similar plot against civil aviation.

The fact that Ramzi Yousef was responsible for both the World Trade Center bombing and the plot to bomb as many as twelve U.S. air carrier aircraft

shows that: (1) foreign terrorists are able to operate in the United States, and (2) foreign terrorists are capable of building and artfully concealing improvised explosive devices that pose a serious challenge to aviation security. This, in turn, suggests that foreign terrorists conducting future attacks in the United States may choose civil aviation as a target. Civil aviation's prominence as a prospective target is clearly illustrated by the circumstances of the 1995 Yousef conspiracy. The bombing of a federal office building in Oklahoma City shows the potential for terrorism from domestic groups. While the specific motivation that led to the Oklahoma City bombing would not translate into a threat to civil aviation, the fact that domestic elements have shown a willingness to carry out attacks resulting in indiscriminate destruction is worrisome. At a minimum, the possibility that a future plot hatched by domestic elements could include civil aircraft among possible targets must be taken into consideration. Thus, an increased threat to civil aviation exists and needs to be prevented and/or countered from both foreign sources and potential domestic ones.

That both the international and domestic threats have increased is undeniable. While it is extremely difficult to quantify this increase in threat, the overall threat can be roughly estimated by recognizing the following:

- U.S. aircraft and American passengers are good representatives of the United States, and therefore are appealing targets;
- Up to 12 airplanes could have been destroyed in the actual plot described above, and thousands of passengers killed (while the proposed rule would not have prevented the plot described above, this plot is representative of the type and seriousness of the threat that this proposed rule is trying to prevent);
- These plots came close to being carried out; it was only through a fortunate discovery and tighter security after the discovery of the plot that these incidents were thwarted;
- It is just as easy for international terrorists to operate within the United States as domestic terrorists, as evidenced by the World Trade Center bombing; therefore
- Based on these facts, the increased threat to domestic aviation could be seen as equivalent to some portion of 12 Class I Explosions on U.S. airplanes. (The FAA defines a Class I Explosion as an incident that involves the loss of an entire aircraft and incurs a large number of fatalities.)

In 1996, both Congress and the White House Commission on Aviation Safety and Security recommended further specific actions to increase aviation security. The White House Commission stated that it believes that the threat against civil aviation is changing and growing, and recommended that the federal government commit greater resources to improving civil aviation security. President Clinton, in July 1996, declared that the threat to aviation of both foreign and domestic terrorism is a national threat. The U.S. Congress recognized this growing threat in the Federal Aviation Reauthorization Act of 1996 by: (1) authorizing money for the purchase of specific anti-terrorist equipment and the hiring of extra civil aviation security personnel; and (2) requiring the FAA to promulgate additional security-related regulations.

The cost of a catastrophic terrorist act can be estimated in terms of lives lost, property damage, decreased public utilization of air transportation, etc. Terrorists acts can result in the complete destruction of an aircraft with the loss of all on board.

In the absence of increased protection for the U.S. domestic passenger air transportation system, it is conceivable that the system would be targeted for future acts of terrorism. If even one such act were successful, the traveling public would demand immediate increased security. Providing immediate protection on an ad hoc emergency basis would result in major inconveniences, costs, and delays to air travelers that may substantially exceed those imposed by the planned and measured steps contained in this proposal.

Based on the above statement, and after evaluating feasible alternative measures, the FAA concludes that this proposed rule sets forth the best method to provide increased security at the present time. Notwithstanding the above, it is helpful to consider, to the limited extent possible, the benefits of this proposal in reducing the costs associated with terrorist acts to the threat level and other factors. The following analysis describes alternative assumptions regarding the number of terrorist acts prevented and potential market disruptions averted that result in the proposed rule benefits at least equal to the proposed rule costs. This is intended to allow the reader to judge the likelihood of benefits of the proposed rule equaling or exceeding its cost.

The FAA considers a Boeing 737 as representative of a typical airplane flown domestically. It flies with an average load factor of 64.7%, which translates into 73 passengers per flight; the airplane would also have two pilots and three flight attendants.

A terrorist catastrophic incident could also result in fatalities on the ground. There were 11 such fatalities in the Pan Am 103 explosion and 15 fatalities in a collision of an AeroMexico airplane with a Piper PA–28 airplane over Cerritos, California in 1986. However, looking at the number of accidents including aircraft covered by this proposed rule and the number of fatalities on the ground over the last ten years, the average fatality was less than 0.5 persons per accident. Therefore, the FAA will not assume any ground fatalities in this analysis.

In order to provide a benchmark comparison of the expected safety benefits of rulemaking actions with estimated costs in dollars, the FAA currently uses a value of $2.7 million to statistically represent a human fatality avoided. Applying this value, the total fatality loss of a single Boeing 737 is represented by a cost of $210.6 million (78 x $2.7 million).

Quantified undiscounted estimated costs of a single domestic Class I Explosion on civil aviation are summarized on Table 1.

TABLE 1.—COSTS OF A DOMESTIC CLASS I EXPLOSION

[1998 Dollars]

	Number	Value	Total cost
Fatalities	78	$2,700,000	$210,600,000
Aircraft	1	16,500,000	16,500,000
Property	1	12,508,028	12,508,028
Investigation	1	28,640,637	28,640,637
Legal Fees		3,569,383	3,569,383
Total			271,818,048

TABLE 1.—COSTS OF A DOMESTIC CLASS I EXPLOSION—Continued

[1998 Dollars]

	Number	Value	Total cost
Total, discounted			190,908,689

Source: U.S. DOT, FAA, APO–310, March 1999.

Certainly the primary concern of the FAA is preventing loss of life, but there are other considerations as well. Another large economic impact is related to decreased airline travel following a terrorist event. A study performed for the FAA by Pailen-Johnson Associates, Inc., *An Econometric Model of the Impact of Terrorism on U.S. Air Carrier North Atlantic Operations,* indicated that it takes about 9 to 10 months for passenger traffic to return to the pre-incident level after a single event. Such a reduction occurred immediately following the destruction of Pan Am Flight 103 over Lockerbie, Scotland in December 1988. In general, 1988 enplanements were above 1987's. There was a dramatic fall-off in enplanement in the first 3 months of 1989 immediately following the Pan Am 103 tragedy, and it took until November 1989 for enplanements to approximate their 1987 and 1988 levels.

Trans-Atlantic enplanements increased, from 1985 to 1988, at an annual rate of 10.7 percent. Projecting this rate to 1989 would have yielded 1989 enplanements of 8.1 million, or 1.6 million more than Pan Am actually experienced. This represents almost a 20 percent reduction in expected enplanements caused by the destruction of Pan Am 103 by terrorists.

The estimated effect of a successful terrorist act on the domestic market has not been studied. Although there are important differences between international and domestic travel (such as the availability of alternative destinations and means of travel), the FAA believes that the traffic loss associated with international terrorist acts is representative of the potential domestic disruption.

There is a social cost associated with travel disruptions and cancellations caused by terrorist events. The cost is composed of several elements. First is the loss associated with passengers opting not to fly—the value of the flight to the passenger (consumer surplus) in the absence of increased security risk and the profit that would be earned by the airline (producer surplus). Even if a passenger opts to travel by air, the additional risk may reduce the associated consumer surplus. Second, passengers who cancel plane trips would not purchase other goods and services normally associated with the trip, such as meals, lodging, and car rental, which would also result in losses of related consumer and producer surplus. Finally, although spending on air travel would decrease, pleasure and business travelers may substitute spending on other goods and services (which produces some value) for the foregone air trips. Economic theory suggests that the sum of the several societal value impacts associated with canceled flights would be a net loss. As a corollary, prevention of market disruption (preservation of consumer and producer welfare) through increased security created by the proposed rule is a benefit.

The FAA is not able to estimate the actual net societal cost of travel disruptions and the corollary benefit gained by preventing the disruptions. However, there is a basis for judging the likelihood of attaining benefits by averting market disruption sufficient, in combination with safety benefits, to justify the proposed rule. The discounted cost of this proposed rule is $2.0 billion, while the discounted benefits for each Class I Explosion averted (from Table 7) comes to $190 million. Hence, if only 1 Class I Explosion is averted, the present value of losses due to market disruption must at least equal $1.8 billion ($2.0 billion less $190 million—one Class I Explosion). If two Class I Explosions are averted, the value of the market losses must at least equal $1.6 billion ($2.0 billion less 2 times $190 million).

The value of market loss averted is the product of the number of foregone trips and the average market loss per trip (combination of all impacts on consumer and producer surplus). If one uses an average ticket price of $160 as a surrogate of the combined loss, preservation of 11.2 million lost trips would be suffered, in combination with the safety benefits of 1 averted Class I Explosion, for the benefits of proposed rule to equal costs. This represents 3 percent of annual domestic trips (the traffic loss caused by Pan Am 103 on trans-Atlantic routes was 20 percent). Calculations can be made on the number of averted lost trips needed if the net value loss was only 75 percent of the ticket price or exceeded the ticket price by 25 percent. If total market disruption cost was $130 or $200 per trip, retention of 13.8 and 9.0 million lost trips, respectively, would need to occur for the proposed rule benefits to equal the proposed rule costs, assuming 1 Class I Explosion would be prevented. The FAA requests comments on the potential size of market loss per trip and number of lost trips averted.

Table 2 presents combinations of the total number of trips not taken as a result of one to four Class I Explosions at alternative values per lost trip that would be sufficient to generate monetized benefits in excess of the estimated proposed rule costs.

TABLE 2.—NUMBER OF TRIPS NOT TAKEN AS A RESULT OF ONE TO FOUR CLASS I EXPLOSIONS AVOIDED

[For Benefits to Equal Costs]

Number of class I explosions avoided	Assumed net market loss per trip (in 1998 dollars)		
	$130 (million)	$160 (million)	$200 (million)
1	13.8	11.2	9.0
2	12.2	10.0	8.0
3	10.9	8.8	7.1
4	9.4	7.6	6.1

Source: FAA, APO–310, March 1999.

The FAA stresses that the range of trips not taken in Table 2 is shown for illustrative purposes and does not represent an explicit endorsement that these would be the exact number of trips that would actually be lost. As noted above, it is important to compare, to the limited extent possible, the cost of this proposal to some estimate of the benefit of increased security it would provide as that level of security relates to the threat level.

Based on the White House Commission recommendation, recent Congressional mandates and the known reaction of Americans to any air carrier disaster, the FAA determines that pro-active regulation is warranted to prevent terrorist acts (such as Class I Explosions) before they occur.

C. Analysis of Alternatives to the NPRM

The proposed rule is a ''significant regulatory action'' as defined by Executive Order 12866 (Regulatory Planning and Review) because it would impose costs exceeding $100 million annually. The Executive Order requires that agencies proposing significant rules

provide an assessment of feasible alternatives to their respective rulemaking actions. In addition, the Executive Order requires that an explanation of why the proposed rule, which is significant, is preferable to the identified potential alternatives. In the following discussion, FAA provides an assessment of six alternatives, with Alternative Number Five being chosen as the proposed rule:

1. The Status Quo

This alternative would maintain the status quo. Currently, the FAA mandates manual passenger screening or baggage matching based on this screening only in situations where the FAA has determined that a heightened security threat exists. Manual passenger screening is performed on a contingency basis when the FAA issues Security Directives (SD's). Security Directives are temporary conditions, which are considered part of the status quo. While costs are incurred to implement manual passenger screening whenever a threat exists, they are not considered permanent costs because they are associated with procedures required by emergency, temporary rules. The FAA believes that the threat to civil aviation within the United States has increased and further rulemaking is necessary.

2. Phasing In the Mandatory Use of Explosives Detection System (EDS) (Without Requirement for CAPS)

Alternative Two would phase in the mandatory use of EDS over a 10-year period of time, at a rate of 10% per year. By the end of the first year, approximately 10% of all passengers and baggage would be covered, by the end of the second year, 20% of all passengers and baggage would be covered, etc. Under Alternative Two, air carriers without EDS would be required to continue performing their status quo security procedures until they are provided with EDS equipment. Over 10 years, total EDS costs sum to $2.1 billion ($1.4 billion, discounted).

In terms of benefits, EDS equipment offers the highest level of security against explosives being stored in the cargo compartments of airplanes. Explosives detection system equipment is able to examine all baggage as it passes through on a conveyor belt. Baggage that clears on the first leg of travel does not require re-examination with subsequent transfers to other flights or other air carriers.

Alternative Two would, over the initial 10-year period, probably provide, on average, less benefits than the proposal. In the first year, only 10% of the passengers and baggage would be covered, so only 10% of the potential increase in overall security (and hence, benefits) associated with EDS would be attained. Only during the tenth year would there be full augmentation of EDS, and attainment of the full increase in security (and hence, benefits) associated with EDS. Averaging these increases over 10 years yields only 55% of the full EDS benefit. This contrasts with the proposed rule where each year there would be the full attainment of benefits.

The FAA believes that where it is applied, EDS would be more effective than the proposal; however, the benefits of complete EDS implementation would need to be roughly twice that of the proposal for Alternative Two to be superior.

A goal of all carriers using EDS for 100% of its flights cannot be realized immediately due, among other reasons, to the lack of production capability. This lack of full EDS coverage would lead to a window of vulnerability as only some flights would be covered. Under Alternative Two, the step-by-step annual improvements in the level of security would lead to a bifurcated security program. The public would realize that some flights would be safer than others. Terrorists may be able to determine which flights were cleared by EDS and act accordingly, potentially resulting in an airplane explosion. The FAA rejects Alternative Two on the basis that it would provide an unacceptable level of risk higher than the proposed rule.

3. Requiring 100% PPBM of Each Carrier While Phasing In Mandatory Use of EDS

Alternative Three would supplement the EDS required in Alternative Two by requiring 100% PPBM for those flights until EDS becomes available. Hence, the first year would have 10% of the passengers and baggage covered by EDS and 90% by baggage matching, etc., until the tenth year which would have 100% of the passengers and baggage covered by EDS.

This alternative would combine the costs of EDS with the costs of those flights on which full baggage matching is used. Over 10 years, total EDS costs sum to $2.1 billion ($1.4 billion, discounted). The costs of baggage matching portion of this alternative would be $4.6 billion ($3.7 billion, discounted), with total 10-year costs for Alternative Three at $6.7 billion ($5.0 billion, discounted).

Alternative Three would yield the highest level of security of any of the alternatives considered; however, this alternative could produce major operational obstacles. Large numbers of domestic flights are scheduled around a hub and spoke system. Under this alternative, a 100% PPBM alternative would probably result in substantial flight delays due to the unloading of unmatched baggage. These initial delays would impact and delay some connecting flights. This action would result in a daily ripple effect, which would get worse as the day wore on. These operational burdens on air carriers would result both in fewer flights and passengers paying more for tickets. Facility requirements for each passenger on each flight of a combined passenger bag match/EDS system could overload the existing system; the space and time required for screening all checked baggage by EDS could cause severe congestion at existing airport facilities.

The FAA has very high confidence in the effectiveness of the proposed rule in terms of countering the current threat. It believes that most of the current threat could be successfully countered through the implementation of CAPS. Alternative Three would be more effective in countering the threat, but the FAA does not believe that the incremental increase in security provided by Alternative Three is worth the additional cost of this alternative, which is about $4 billion more than the proposed rule.

4. Baggage Matching on Randomly Selected Passengers While Phasing In EDS

Like Alternatives Two and Three, Alternative Four would move towards a security system based on EDS screening. Random selection, rather than CAPS, would determine which passengers would be subjected to baggage matching.

The FAA believes, for analyzing this alternative, that a 10% screening rate would be a believable and effective random rate to provide deterrence to terrorists. Explosives detection systems would be phased in, such that, for the first year, 10% of the passengers and baggage would be subject to the full use of EDS and 90% to this reduced (10%) screening rate of baggage matching, etc. Ten-year costs for the partial baggage matching portion of this scenario would be $1.4 billion (net present value, $1.1 billion). With total EDS costs at $2.1 billion ($1.4 billion, discounted), total 10-year costs for this alternative sum to $3.5 billion ($2.5 billion, discounted).

As above, the FAA believes that where it is applied, EDS would be more effective than the proposal, so total benefits from 100% EDS screening would be higher than the proposal;

however, even with the greater effectiveness of EDS, the major problem with Alternative Four is the window of vulnerability that would still exist. In the first year, 90% of flights would depend on a randomly selected baggage matching alternative that would be much less effective than CAPS. As discussed above, the FAA assumes that CAPS would be very effective in countering the threat. Selecting 10% of the passengers at random would, on these flights, yield benefits only 10% of those that would be derived from the proposal. Until the tenth year, where full EDS implementation would be expected, there would be a major shortfall in benefits.

A goal of using EDS for 100% of flights cannot be implemented immediately due, among other reasons, to the lack of production capability. Even when partial EDS screening is combined with random baggage matching, only some flights would be covered, so many flights would remain vulnerable. Given that this alternative is more expensive than the proposal, yet does not close the window of vulnerability, the FAA rejects this alternative.

5. Baggage Matching on Passengers Selected by CAPS With Use of EDS, Where Available

This is the proposed rule, which was costed out in the discussion above.

6. Performing Baggage Matching on a Limited Number of CAPS Selectees

Alternative Six would modify the proposed rule in that the air carriers would use CAPS to form the pool of selectees, but only subject a random number of these selectees to baggage matching. For analysis purposes, the FAA is assuming that 50% of the pool of selectees would be subjected to baggage matching. This yields ten-year costs of $1.6 billion ($1.1 billion, discounted).

The proposed rule provides benefits by performing baggage matching on 100% of selectees. Reducing this pool would reduce the protection afforded by CAPS and baggage matching and would increase the likelihood that someone who would have been a CAPS selectee but who was excluded from heightened security measures under this alternative would be able to cause an explosion on an airplane. The FAA is calculating benefits by assuming that a 50% reduction in the pool of CAPS selectees would bring about a nearly 50% reduction in benefits from current levels.

The major problem with this alternative is that it would offer a lower level of security and would amount to reducing the effectiveness of the CAPS criteria. As discussed above, the FAA assumes that CAPS would be very effective in countering the threat. Reducing the selectee pool by 50% at random would yield benefits equal to roughly half of those that would be derived from the proposal. This creates a window of vulnerability on every flight, as only some passengers' baggage would be screened, and would not mitigate the threat as effectively as the proposed rule. It is not prudent to establish a computerized automated profiling system to select passengers and then ignore some of these selectees, hoping that the deterrence value of the possibility of being selected would equal or outweigh the benefits of performing baggage matching. This alternative could allow a selectee whose checked baggage was not subject to baggage matching to cause an explosion on an airplane.

Initial Regulatory Flexibility Determination and Analysis

A. Initial Regulatory Flexibility Determination

The Regulatory Flexibility Act of 1980 (RFA) was enacted by Congress to ensure that small entities (small business and small not-for-profit government jurisdictions) are not unnecessarily and disproportionately burdened by Federal regulations. The RFA, which was amended May 1996, requires regulatory agencies to review rules that may have ''a significant economic impact on a substantial number of small entities.'' The Small Business Administration suggests that ''small'' represents the impacted entities with 1,500 or fewer employees. For this proposed rule, the small entity group is considered to be part 108 scheduled operators with airplanes having 61 or more passenger seats (Standard Industrial Classification Code 4512) and 1,500 or fewer employees. The FAA has identified a total of 12 operators that meet this definition.

To determine the impact of the proposed rule on small part 108 operators, the FAA has estimated the annualized cost impact on each of those small entities potentially impacted by the proposed rule. The proposed rule is expected to impose an estimated $122 million on the 12 small entities over the next 10 years. For purposes of this rulemaking, one percent of the annual median revenue ($823,000, in 1998 dollars) is considered economically significant in that it may entail either an increase in airline ticket fares or a requirement to create operating cost efficiencies to preserve the economic stability of impacted airlines. Ten of the 12 part 108 small entities would incur a substantial economic impact in the form of higher costs in excess of $823,000, as the result of the proposed rule. Furthermore, the cost burden is not strictly proportionate to the size of the airline as inferred by the number of employees. For these reasons, a regulatory flexibility analysis is presented below.

B. Initial Regulatory Flexibility Analysis

Under Section 603(b) of the RFA (amended May 1996), each initial regulatory flexibility analysis is required to address these points: (1) reasons why the FAA is considering the proposed rule, (2) the objectives and legal basis for the proposed rule, (3) the kind and number of small entities to which the proposed rule would apply, (4) the projected reporting, recordkeeping, and other compliance requirements of the proposed rule, and (5) all Federal rules that may duplicate, overlap, or conflict with the proposed rule.

Reasons why the FAA is considering the proposed rule: Over the past several years, the FAA has recognized that the threat against civil aviation is changing and growing. See either the discussion under ''Background'' above, or the background section of the Regulatory Impact Analysis (RIA) for a more detailed discussion of this threat. Terrorist and criminal activities within the United States have forced the FAA and other federal agencies to reevaluate the domestic threat against civil aviation. The proposed rule is intended to counter this increased threat to U.S. civil aviation security.

The objectives and legal basis for the proposed rule: The objective of the proposed rule is to significantly increase protection to Americans and others traveling on U.S. domestic air carrier flights from acts of terrorism. Specifically, the proposed rule is aimed at preventing explosives from being placed on board commercial flights in checked baggage.

The legal basis for the proposed rule is found in 49 U.S.C. 44901 et seq. As a matter of policy, the FAA must consider, among other concerns, maintaining and enhancing safety and security in air commerce as its highest priorities (49 U.S.C. 40101(d)).

The kind and number of small entities to which the proposed rule would apply: The proposed rule applies to 32 operators of part 108 aircraft, of which 12 are small scheduled operators (with 1,500 or fewer employees) that use aircraft with more than 60 passenger seats (SIC Code 4512). A brief financial

profile of these small entities is provided in the full Regulatory Impact Analysis (which includes net income, assets, liabilities, and financial strength ratios) by category: Nationals, Large Regionals, and Medium Regionals.

Category	Annual revenues by category	Total No. of entities impacted	No. of small carriers impacted
Majors	More than $ 1.0b	9	0
Nationals	$100.0m–$ 1.0b	14	3
Large Regionals	$ 20.0m–$99.9m	6	6
Medium Regionals	$ 0.0m–$19.9m	3	3
Total		32	12

The projected reporting, recordkeeping, and other compliance requirements of the proposed rule: As required by the Paperwork Reduction Act of 1995 (44 U.S.C. 3507(d)), the FAA has submitted a copy of these proposed sections to the Office of Management and Budget (OMB) for its review.

All air carriers using either CAPS, 100% PPBM screening or checked baggage screening via FAA-certified EDS system, would need to provide compliance with the approved security program. The FAA estimates this compliance effort would take place on a one-time basis and impose an additional 24 hours of clerical labor for each of the small entities during the first year of compliance (2000 only). However, the employment of CAPS as a security procedure for screening passengers, requires air carriers to make available, where appropriate, certain information that the CAPS system has been programmed to generate to facilitate DOJ and OST reviews to ensure that selection is not impermissibly being based on race, color, gender, national or ethnic origin or religion. To comply with the recordkeeping requirements for DOJ inquiries, each small part 108 aircraft operator employing CAPS will have an estimated annual recordkeeping burden of 100 hours of clerical labor per year for a period of 10 years (based on having compliance information available for the DOJ inquiries, and records for personnel requiring CAPS training). Therefore, the additional recordkeeping burden, which would apply to each of the small entities, imposed by the proposed rule would be 124 hours in 2000 and 100 hours for each year during 2001—2009. The cost for this time would be $2,600 or an average of $218 per respondent for 2000. For the subsequent years (2001–2009), the additional cost for this time for small entities would be $2,100 or $176 per air carrier per year.

There are additional annual costs resulting from the collection of information. The first year (2000 only) estimated cost for the small entity respondents is estimated to be $523,200 or an average of $43,600 per respondent. For years 2000—2009, the additional recordkeeping costs for all of the small entities would be $96,500 or $8,000 per air carrier per year.

All federal rules that may duplicate, overlap, or conflict with the proposed rule: The FAA is unaware of any federal rules that either duplicate, overlap, or conflict with the proposed rule.

Other Considerations

Description of lower impact alternatives: A discussion of those alternatives that would impose less costs on the small entities subject to this proposed rule is provided below. In addition to the proposed rule and status quo, the analysis of alternatives reviewed three alternatives that had a range of compliance costs between $10 million and $122 million in a 10-year period.

Affordability analysis: For the purpose of this RIA, the degree to which small entities can ''afford'' the cost of compliance is predicated on the availability of financial resources. Initial implementation costs may be obtained from either existing company assets such as cash, by borrowing, or through the provision of additional equity capital. Continuing annual costs of compliance may be accommodated either by accepting reduced profits, by raising ticket prices, or by finding other offsetting costs.

In this analysis, the assessment of the availability of financial resources is based on the ability of each of the small entities to meet their short-term obligations. According to financial literature, a company's short-term financial strength is substantially influenced, among other things, by its working capital position and ability to pay short-term liabilities. Net working capital is the amount by which current assets exceed current liabilities. It represents the margin of short-term debt paying ability over existing short-term debt.

In addition to the amount of net working capital, two analytical indexes of current position are often computed: (1) current ratio and (2) quick ratio. The current ratio (current assets divided current liabilities) helps put the amount of net working capital into perspective by showing the relationship between current resources and short term debt. And the quick ratio (sometimes called the acid test ratio) focuses on immediate liquidity (cash, marketable securities, accounts receivable, etc., divided by current liabilities). A decline in net working capital, the current and quick ratios over a period of years (say, 3 years, 4 years, etc.) may indicate that a company is losing financial solvency. Negative net working capital is a clear indication of financial difficulty. If a company is experiencing such financial difficulty, it is less likely to be able to afford additional costs.

The following conclusions are based on the subject financial information:

- Based on current liquidity, at least three small entities would probably be able to afford the cost of compliance associated with this proposed rule. These entities have experienced increases in their net working capital as well as their current and quick ratios over the past three or four years, as shown in Table 11B. They are also generally profitable and may, therefore, have financial resources available to meet the requirements of this proposed rule.
- For one currently profitable small entity, its ability to afford the cost of compliance is less certain. This uncertainty stems from the fact that there is no financial performance history for the small entity from 1994 to 1996 because it has only been operating as a large passenger air carrier since second quarter of 1997. In 1997, this small entity had a net working capital in excess of $40 million and its current and quick ratios are at least 1.8, respectively. While this information is very positive, it does not necessarily serve as an indicator of future performance, especially in light of the proposed rule.

- For another air carrier, there is greater uncertainty than that for the aforementioned air carrier. Uncertainty for this entity is due to the fact that it has no financial performance history from 1994 to 1997. This lack of financial information is due to the fact that this air carrier did not receive its effective operating authority until mid 1997. Its ability to comply with the proposed rule and remain in business is unknown due to the lack of financial information on its performance history.
- The current liquidity of the remaining seven small entities will require action to finance the expected cost of compliance imposed by this NPRM. Over the past two or three years, each of these small entities has had negative net working capital. In addition, their respective current and quick ratios have generally been on a decline. They have frequently experienced financial losses.

Relative Cost Impact

- The other alternative of assessing affordability, annualized cost of compliance relative to the total operating revenues, for each of the 12 small entities impacted by this NPRM shows relatively small impacts for most of the small entities. The annualized cost of compliance relative to total operating revenues would be between 0.2 percent and 7.2 percent; in most cases, the impact would be less than 1.0 percent.
- For seven of the air carriers the ratio of annualized proposed rule costs to revenues would be less than 1.0 percent, on average, for the three-year period 1995 through 1997. For these air carriers, there appears to be a prospect of absorbing the cost of the proposed rule through some combination of fare increases and cost efficiencies. Even though the ratio of costs to revenues exceed 1.0 percent, on average, for the seven other air carriers, there is a prospect that two of these air carriers may have sufficient working capital to incur initial cost increases.

Disproportionality analysis: The FAA does not believe any of the 12 small entities would be disadvantaged relative to large air carriers, due solely to disproportionate cost impacts. All of the air carriers operating airplanes with 61 or more seats have to comply with the proposed rule for CAPS.

Many small air carriers are expecting to incur relatively smaller costs proportionate to the size of their operations because most of them have code-share arrangements with large air carriers within the majors category. These airlines would probably be able to employ the CAPS systems of their code-sharing partners and thereby avoid system development costs. Thus, because of code-share arrangements with larger air carriers, at least 8 of these 12 small air carriers may incur costs lower than they otherwise would. In the operating cost of compliance section of this RIA for passenger baggage matching, major jet air carriers are expected to incur an estimated departure cost of $30, national and regional jet air carriers estimated departure cost of $20.98. Some of the smallest air carriers that fall within the national and regional turboprop category would incur a departure cost of $5.82. Hence, on a per operation basis, lower operating costs are anticipated for carriers which operate smaller aircraft. In general, small entities are more likely to operate small aircraft than large aircraft.

Competitiveness analysis: The proposed rule, while it may impose financial burdens on small entities (see affordability and business closure analyses), is not anticipated to significantly change the competitiveness of small entity airlines relative to larger carriers on their domestic routes.

As discussed in the disproportionality analysis, the proposed rule is not expected to impose a greater relative financial burden on small compared to large airlines. Furthermore, small entities impacted by this proposed rule are more likely to either face no competition on individual route segments or compete among themselves rather than with large airlines. Medium and large regional airlines (annual revenues less than $100 million) do not compete directly with major carriers (annual revenues exceeding $1 billion). Instead, at least two of the impacted small entities are regional carriers code-share with major airlines—UFS Inc. with United and Alaska Airlines with US Airways and Northwest. Code-sharing is a device whereby regional carriers feed traffic to majors rather than compete for traffic. Thus, for nine of the small entities, which are classified as medium or large regionals, to the extent there is competition on routes, competition is generally limited to carriers within the same revenue categories. Three of the impacted small entities are classified as nationals (annual revenues between $100 million and $1 billion). Air Wisconsin, one of the small entities classified as a national is also affiliated with United Airlines—a major. Because of this affiliation, it seems unlikely that the cost impact of the proposed rule per se would significantly change the relative competitiveness of Air Wisconsin. The remaining two small entity carriers classified as nationals do compete both with major airlines, with other nationals, and some smaller revenue carriers (namely, large regionals). While the financial impact on these small entities may not be proportionally greater than that imposed on the majors, the nationals may have greater difficulty in recovering the costs of compliance with the proposed rule through ticket price increases. This is because they are engaged in competition with the majors for price sensitive travelers. Lower ticket prices are vital to maintaining a competitive edge. There is also another competition factor important for nationals—the cost of compliance would probably be less for carriers if they link to an existing computer reservation system (CRS) which has been modified for CAPS rather than building a new stand alone CAPS system. Thus, the proposed rule may tend to increase national carrier reliance on CRS systems controlled by major airlines. Again, this may exacerbate the competitive advantage of majors vis a vis national carriers because the terms and cost of CRS use are determined by the majors.

Business closure analysis: The FAA is unable to determine with certainty the extent to which those small entities that would be significantly impacted by the proposed rule for CAPS would have to close their operations. However, the profitability information (net income gains and losses) and the affordability analysis can be a factor in business closures.

In determining whether or not any of the 12 small entities would close business as the result of compliance with this proposed rule, one question must be answered: ''Would the cost of compliance be so great as to impair an entity's ability to remain in business?'' A number of these small entities are already in serious financial difficulty. For example, one small entity has already filed for bankruptcy under chapter 11. To what extent the proposed rule makes the difference in an entity remaining in business is difficult to answer. The FAA believes that if the potential cost of compliance materializes as expected, several small operators could go out business due at least in part to the proposed rule.

Alternatives Considered

As part of section 603(c) of the RFA, the following is an analysis of pros and cons of the alternatives to the proposed rule:

1. Status Quo

Under this alternative, the practice of maintaining the current policy for security of checked baggage on domestic flights would continue. Currently, the FAA mandates manual passenger screening or baggage matching only in situations where the FAA has determined that a heightened threat exists. Continuing with this policy would be the least costly course of action but less safe. The FAA believes that the threat to civil aviation within the United States has increased and further rulemaking is necessary. Thus,

this alternative is not considered to be acceptable because it permits continuation of an unacceptable level of risk to U.S. airline passengers. *Conclusion:* Under this alternative, there is a likelihood of one or more terrorist acts resulting in Class I Explosions involving large commercial airplanes that operate within the United States (discussed previously in the benefits portion of this Regulatory Evaluation Summary).

2. Current Proposal Would Apply to Small Entities Only When a Specific Threat Exists (Standby CAPS Program)

Under this alternative, all small entities (part 108 aircraft operators) would be required to implement requirements identical to those of the proposed rule only when the Assistant Administrator for Civil Aviation Security notified the certificate holder in writing that a security threat existed with respect to a particular operation. Under the proposed rule, all small entity operations with 61 or more seats would be required to implement CAPS for selectees for 5% of all passengers (originating only) and either 100% PPBM or EDS (where available). Under this alternative, however, small entity operators with airplanes having 61 or more passenger seats and 1,500 or fewer employees would only be required to have a ''standby security provision'' to implement CAPS and baggage matching for selectees.

This alternative may reduce the potential cost impact to the small entities. For example, such airlines might incur the initial implementation cost estimated for the proposed rule but avoid annual operating costs; however, the proposed rule is based upon the premise that a terrorist or criminal is not likely to ignore a larger aircraft (determined by FAA to be those with seating configurations of 61 or greater seats) merely because it is operated by a small entity.

Accordingly, this alternative is not considered feasible because it is unlikely to counter the existing terrorist threat. The potential cost of compliance associated with this alternative is estimated to be $10 million ($9 million, discounted) over 10 years, 1998 dollars, for all 12 small entities potentially impacted by this proposed rule. This cost estimate assumes that potentially impacted small entities would only incur startup costs for 1998, to be prepared in the event the Assistant Administrator for Civil Aviation Security requests that they implement and operate a CAPS program identical to that of the proposed rule. Further, this analysis assumes that air carriers could respond immediately to a CAPS program request, using existing personnel in the short run. *Conclusion:* This alternative would impose the smallest cost of compliance on part 108 small entities, and it would not impose a significant economic impact (less than one percent of the median annual revenues of the small entities or $823,000) on a substantial number of such small entities. This alternative would provide minimal improvement in protection against terrorism because it would be implemented only after an airline was known to be a target. This alternative is rejected on the basis that it would permit an unacceptable level of risk to continue and would jeopardize FAA's intent to address current security concerns related to U.S. civil aviation.

3. Small Entities Do Nothing When Receiving Passengers From a Large Entity Air Carrier That Has Applied Proposed Rule

The proposed rule could be revised to require small entities (having operations using aircraft of 61 or greater seats) to apply the proposed rule only for originating passengers. For this alternative, when a passenger transfers from a large entity to a small entity (on which the flight is to the passenger's final destination), that small entity would not be required to perform additional security measures. The small entity would still be required to implement the proposed rule for originating passengers (including those transferring to a large entity). The checked baggage of some passengers previously identified as posing a threat, would be allowed to continue on the small entity if they had been subjected to heightened security measures by a major air carrier. The potential cost of compliance associated with this alternative is estimated to be $61 million ($43 million, discounted) over 10 years, 1998 dollars, for all 12 small entities potentially impacted by this proposed rule. This cost estimate was derived on the premise that the proposed rule would only apply to those passengers that start their trips on flights provided by the small entities. Since at least half of the passengers carried by small entities are received from larger air carriers, the cost of this alternative would be half of that cost imposed by the proposed rule. *Conclusion:* This alternative would impose the third highest cost of compliance impact on part 108 small entities. It would impose a significant economic impact on 6 of 12 small entities. This alternative would achieve only 50% of the potential safety of the proposed rule. This alternative is rejected on the basis that it would offer an unacceptably high level of threat to U.S. civil aviation security. While the potential safety level of this alternative is higher than that of Alternative Two, it is significantly lower than that of the proposed rule.

4. Small Entities Apply Proposed Rule on a Smaller Scale

The proposed rule could be revised to allow small entities to apply baggage matching for a smaller number of selectees. Under this alternative, the rate for selectees would be 1% (as opposed to 5% for the proposed rule). The cost savings to small entities would depend on the magnitude of the reduction in the number of selectees; however, this would involve reducing the number of selectees arbitrarily and not based on a prudent rationale. Under this alternative, 80% of the checked baggage of passengers who would have been identified as CAPS selectees under the proposed rule would be allowed to go through the system without undergoing additional security measures. Thus, under this alternative a high level of risk would still remain that would be mitigated by the proposed rule. The potential cost of compliance associated with this alternative is estimated to be $99 million ($71 million, discounted) over 10 years, 1998 dollars, for all 12 small entities potentially impacted by this proposed rule. This cost estimate is based on the premise that small entities would primarily experience a reduction in delay costs of about 80% of that to be incurred under the proposed rule. The 1% selectee rate of this alternative represents a reduction of 80% when compared to the proposed rule's selectee rate of 5%. With 80% fewer passengers as potential selectees, problems with reconciliation of checked baggage would be significantly reduced. This impact is assumed to be linear, for lack of more accurate information. According to technical personnel with SABRE, small changes in the selectee rate (between 1% and 20%, for example) would only have a linear affect on delay costs. That is, a 10% selectee rate would have twice the delay costs than a 5% selectee rate, etc. There may also be reductions in startup and operating costs, though to what extent is unknown. This alternative would only generate potential security benefits of about 20% (⅕ = 20%) of that of the proposed rule. *Conclusion:* This alternative would impose a lower cost of compliance on part 108 small entities than the proposed rule; however, this alternative (when compared to the proposed rule) would provide a less secure flight environment to small part

108 operators and passengers. It would also impose a significant economic impact on a substantial number of such small entities (more than 1% of the median annual revenues of the small entities, or $823,000). This alternative is rejected on the basis that it would not sufficiently reduce the risk of explosions due to terrorism.

5. The CAPS NPRM (Preferred)

This alternative represents the proposed rule for CAPS. Under this alternative, small entities (in addition to any other part 108 aircraft operators with airplanes having 61 or more seats) would be required to implement CAPS (estimated at selectee rate of 5% of all passengers (originating only) whose checked baggage would be subjected to additional security measures), or either conduct 100% PPBM or screen checked baggage by EDS (where available). The cost of compliance expected to be incurred by the 12 small entities subject to the requirements of the proposed rule is estimated to be $122 million ($85 million, discounted) over the next 10 years.

This alternative is preferred to the aforementioned alternatives because it would impose costs and generate benefits in a manner that would create the best balance between the cost of doing business for all affected part 108 operators and enhanced aviation security (in the form of threat reduction) for the traveling public (including operators).

International Trade Impact Statement

This proposed rule would not present a significant impediment to either U.S. firms doing business aboard, or foreign firms doing business in the United States. The proposed rule would only apply to and impact those part 108 scheduled air carriers (with 61 or more passenger seats) that conduct operations in the United States. Foreign air carriers do not compete with U.S. domestic air carriers in providing air transportation within the United States. Air carriers that conduct operations outside of the United States are required to conduct 100% PPBM, which is a more stringent requirement than contained in this proposal.

Initial Unfunded Mandates Assessment and Analysis

A. Applicability of the Unfunded Mandates Act

Title II of the Unfunded Mandates Reform Act of 1995 (the Act), enacted as Pub. L. 104–4 on March 22, 1995, requires each Federal agency, to the extent permitted by law, to prepare a written assessment of the effects of any Federal mandate in a proposed or final agency rule that may result in the expenditure by State, local, and tribal governments, in the aggregate, or by the private sector, of $100 million or more (adjusted annually for inflation) in any one year. Section 204(a) of the Act, 2 U.S.C. 1534(a), requires the Federal agency to develop an effective process to permit timely input by elected officers (or their designees) of State, local, and tribal governments on a proposed significant intergovernmental mandate. A ''significant intergovernmental mandate'' under the Act is any provision in a Federal agency regulation that would impose an enforceable duty upon state, local, and tribal governments, in the aggregate, of $100 million (adjusted annually for inflation) in any one year. Section 203 of the Act, 2 U.S.C. 1533, which supplements section 204(a), provides that before establishing any regulatory requirements that might significantly or uniquely affect small governments, the agency shall have developed a plan that, among other things, provides for notice to potentially affected small governments, if any, and for a meaningful and timely opportunity to provide input in the development of regulatory proposals or rules.

Since this proposed rule contains a private sector mandate with a potential cost impact of more than $100 million annually, the requirements of Title II of the Unfunded Mandates Reform Act of 1995 do apply. For this reason, an assessment of the Unfunded Mandates Act on the impacted private sector is discussed below.

B. Unfunded Mandates Act Impact Assessment

To assess the potential impact of the Unfunded Mandates Reform Act (Act) of 1995 from this proposed rule, the Act identifies six components that must be addressed in the assessment of this proposed rule. Each of those components is discussed below.

1. Provision of Federal Law Under Which the Proposed Rule is Being Promulgated

The legal basis for the proposed rule is found in 49 U.S.C. 44901 *et seq.* As a matter of policy, the FAA must consider, among other concerns, maintaining and enhancing safety and security in air commerce as its highest priorities (49 U.S.C. 40101(d)).

2. Assessment of the Anticipated Costs and Benefits of the Federal Mandate

a. *Estimate of Costs*—The proposed rule would impose an estimated cost of $2.8 billion ($2.0 billion, discounted) over 10 years. This cost estimate is composed of three components: (1) checked baggage matching costs ($2.2 billion; $1.6 billion, discounted), (2) checked baggage matching flight delay costs ($473 million; $326 million, discounted), and (3) CAPS program costs ($70 million; $51 million, discounted). During the first year of the proposed rule (2000), which is also the most costly, part 108 air carriers are expected to incur costs of approximately $456 million ($426, discounted). This estimate includes fixed and recurring cost components.

b. *Estimate of Benefits*—The primary benefit of the proposed rule would be significantly increased protection to Americans and others traveling on U.S. domestic air carrier flights from the increasing threat of acts of terrorism. Specifically, the proposed rule is aimed at preventing explosives from being placed on board commercial flights in checked baggage. In order for security benefits to offset compliance costs, a terrorist act (such as a Class I Explosion) resulting in 380 aviation fatalities (including other types of casualty losses such as aircraft replacement, market loss, etc.) would have to be avoided over the 10 years.

c. *Estimates of Future Costs of Compliance of the Federal Mandate*—For the 32 aircraft operators that would potentially be impacted by the proposed rule, the total annual costs in each of the next 10 years would be greater than $100 million. The total cost of the proposed rule for the 10-year period (in 1998 dollars) would be approximately $2.8 billion ($2.0 billion, discounted) and the annualized present value of the costs of compliance would be approximately $234 million per year. A more detailed discussion of costs is shown in the analysis of costs section of this regulatory impact analysis summary.

d. *Estimates of Disproportionate Budgetary Effects of the Federal Mandate*—The 32 aircraft operators that would be impacted by the proposed rule are widely dispersed across the United States, as evident by their respective hub locations. For example, Delta Airlines has its main hub in Atlanta, GA; United Airlines has its main hub in Chicago, IL; American and Southwest Airlines have their main hubs in Dallas, TX. Smaller air carriers (namely regionals) also have their main hubs dispersed similarly to the majors and nationals since they primarily carry their passengers into small hub airports. It is for these reasons that the proposed rule would not impose any disproportionate budgetary effects on

any particular region of the country. The proposed rule would, however, impose costs on a particular segment of the private sector as noted previously in the estimate of costs section of this Unfunded Mandate Act Analysis.

e. *Estimates of the Effect of the Federal Mandate on the National Economy*—As the result of the proposed rule, the impacted part 108 air carriers are expected to increase staffing and training of airport terminal personnel. There is insufficient information to be able to estimate the multiplier effect the additional jobs spurred by this proposed rule would have on the local economy in the form of a lower unemployment rate, added tax revenues, and increased sales for consumer goods on local communities and the national economy. The FAA is reasonably certain that the creation of additional jobs by the proposed rule would have a positive impact.

f. *Discussion of the Least Burdensome Regulatory Alternative*—The FAA has identified four alternatives to the proposed rule in addition to maintaining the status quo: (1) require mandatory EDS (phased in) without CAPS; (2) require 100% PPBM during phase-in of EDS; (3) require random bag matching during EDS phase-in; or (4) require bag matching on only some CAPS selectees. Section V of the full Regulatory Impact Analysis (RIA) (contained in the docket) describes the four alternatives to the proposed rule as well as the costs to implement them. The FAA contends that using CAPS to identify those passengers who possibly are a threat to the security of a flight and requiring passenger baggage matching or screening by EDS, where EDS is available, is the most practical and cost-beneficial alternative currently available to increase the level of security on domestic flights. A more detailed discussion of alternatives is shown in the analysis of alternative section of the RIA.

C. Conclusion

The FAA has determined that the cost of compliance of the proposed rule would be greater than $100 million in each of the 10 years, but the economic impact on State, local and tribal governments would not exceed the $100 million threshold. The proposed rule would impose a Federal mandate of greater than $100 million per year on the private sector. Of all of the alternatives examined in this assessment of the Act and the analysis of alternatives section of the RIA, the proposed rule provides the largest net benefit.

Federalism Implications

The regulation proposed herein would not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this proposal would not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

List of Subjects in 14 CFR Part 108

Air carriers, Aircraft, Airmen, Airports, Arms and munitions, Explosives, Law enforcement officers, Reporting and recordkeeping requirements, Security measures, X-rays.

The Proposed Amendment

In consideration of the foregoing, the Federal Aviation Administration proposes to amend part 108 of Title 14, Code of Federal Regulations (14 CFR part 108) as follows:

PART 108—AIRCRAFT OPERATOR SECURITY

1. The authority citation for part 108 continues to read as follows:

Authority: 49 U.S.C. 106(g), 5103, 40113, 40119, 44701–44702, 44705, 44901–44905, 44907, 44913–44914, 44932, 44935–44936, 46105.

2. Amend § 108.5 by revising paragraph (a) to read as follows:

§ 108.5 Security program: Adoption and implementation.

(a) Each certificate holder shall adopt and carry out a security program that meets the requirements of § 108.7 of this part for each of the following scheduled or public charter passenger operations:

(1) Each operation with an airplane having a passenger seating configuration of more than 60 seats.

(2) Each operation with an airplane having a passenger seating configuration of 60 or fewer seats that provides deplaned passengers access, that is not otherwise controlled by a certificate holder using an approved security program or a foreign air carrier using a security program required by § 129.25 of this chapter, to a sterile area, except that where the certificate holder elects to not carry out the provisions of § 108.12 of this part, that part of the program effecting compliance with the requirements listed in § 108.7(b)(9) of this part need only be implemented when the Associate Administrator for Civil Aviation Security, or a designee, notifies the certificate holder in writing that a security threat exists with respect to the operation.

(3) Each operation with an airplane having a passenger seating configuration of 60 or fewer seats where the certificate holder elects to carry out the provisions of § 108.12 of this part, except that where the operation does not provide deplaned passengers access to a sterile area, the requirements of § 108.7(b) (1) and (4) of this part need only be implemented when the Associate Administrator for Civil Aviation Security, or a designee, notifies the certificate holder in writing that a security threat exists with respect to the operation.

(4) Each operation with an airplane having a passenger seating configuration of more than 30 but less than 61 seats, that is not subject to paragraph (a)(2) of this section, except that those parts of the program effecting compliance with the requirements of § 108.7(b) (1), (2), (4) and (9) of this part need only be implemented when the Assistant Administrator for Civil Aviation Security notifies the certificate holder in writing that a security threat exists with respect to the operation.

* * * * *

3. Amend § 108.7 by adding paragraph (b)(9) to read as follows:

§ 108.7 Security program: Form, content, and availability.

* * * * *

(b) * * *

(9) The procedures used to perform the checked baggage security functions specified in § 108.12 of this part for scheduled passenger operations.

* * * * *

4. Add § 108.12 to read as follows:

§ 108.12 Security of checked baggage for operations within the United States.

(a) Each air carrier required to adopt and carry out a security program in accordance with § 108.5 of this part shall apply the checked baggage security requirements of this section in accordance with its security program for scheduled passenger operations within the United States. For each operation the air carrier shall—

(1) For each originating passenger checking baggage, use a computer-assisted passenger screening (CAPS) system, approved by the Administrator, capable of selecting passengers based on specific criteria and at random; or

(2) Determine that the passenger associated with each originating checked bag is aboard the flight or that each originating bag not matched to a passenger aboard the flight has been screened by an explosives detection system (EDS).

(b) For each operation subject to paragraph (a) of this section, the air carrier may not transport the baggage of a non-originating passenger unless—

(1) The passenger is aboard the flight;

(2) The passenger associated with the baggage was screened by a CAPS system approved by the Administrator prior to an earlier flight leg and information is available to the air carrier that the passenger was not selected;

(3) Information is available to the air carrier that the baggage was screened by an EDS prior to an earlier flight leg;

(4) The baggage is screened by an EDS prior to the current flight; or

(5) The passenger is screened for the current flight as an originating passenger in accordance with paragraph (a) (1) of this section.

(c) The checked baggage of a passenger selected by the CAPS system shall not be transported aboard the flight unless—

(1) The baggage is screened by an EDS where an EDS is available; or

(2) Where an EDS is not available, the passenger associated with the baggage is aboard the flight.

(d) An EDS is considered to be available to an air carrier for screening a checked bag when it is—

(1) Under the operational control of the air carrier;

(2) Functioning properly;

(3) Located proximate to where the baggage is tendered by the passenger or along the route the baggage normally travels during the process of being loaded onto the aircraft;

(4) Staffed by appropriately trained personnel; and

(5) Not in use to screen other identified baggage such that a significant delay in a flight might result from having to wait to use the EDS to screen the bag.

(e) Each air carrier shall establish procedures for implementing security measures for checked baggage under this section that—

(1) Ensures nondiscriminatory application; and

(2) Minimizes the overt identification of passengers selected for additional security procedures.

(f) Each person used by an air carrier to implement its CAPS system whose job function will be likely to involve interactions with passengers shall be trained on the CAPS system. The training shall include—

(1) An overview of the purpose of screening, including an explanation that selection does not imply that a passenger is suspected of any illegal activity;

(2) A general description of the CAPS system and how it is designed to select passengers on a nondiscriminatory basis;

(3) An advisory that the CAPS system selects some passengers at random;

(4) An advisory that the CAPS system is not connected to any law enforcement or intelligence data base; and

(5) Instruction on treating passengers selected by the CAPS system in a respectful and non-stigmatizing manner.

(g) An air carrier may not modify the selection criteria of the CAPS system without the written approval of the Administrator. Nor may an air carrier apply any supplemental system of passenger screening to select passengers for additional security measures without the approval of the Administrator.

(h) (1) Each air carrier shall make available to the Administrator the information specified in its security program on the general operation of its CAPS system.

(2) Each air carrier shall maintain, for at least 24 hours, but not longer than 72 hours, after flight departure, information linking a passenger's name or other identifying data to whether the passenger was selected by the CAPS system.

(3) Each air carrier shall provide the Administrator with CAPS system data for any specific flight, including selectee status of individuals on the flight, when requested as part of—

(i) An evaluation of the CAPS system to determine possible discriminatory impacts;

(ii) An accident investigation;

(iii) A security incident investigation; or

(iv) Security compliance oversight.

(i) An air carrier may apply alternate procedures that are established in its security program for screening checked bags to address special situations. These situations could include—

(1) Baggage acceptance at off-airport locations;

(2) The transportation of bags separated from a passenger for reasons outside the control of the passenger, e.g., lost bags;

(3) CAPS system failure;

(4) Extraordinary operational circumstances;

(5) The use of technologies or equipment other than an EDS to screen checked baggage; and

(6) Any other situation specified by the Associate Administrator for Civil Aviation Security in the air carrier's security program.

Issued in Washington, DC, on April 13, 1999.

Anthony Fainberg,

Director, Office of Civil Aviation Security Policy and Planning.

[FR Doc. 99–9635 Filed 4–14–99; 10:07 am]

BILLING CODE 4910–13–U