

IBM, has recommended replacing the machines.

There is a lesson to be learned here. Consultants confronted with this problem have told me this all along. The problem is deeper than the programs. It deals with the micro-code beneath the programs. This micro-code is in everything from our telecommunications systems to the personal computer on your desk—essentially the infrastructure of the company or agency.

Thus, we peel back another layer of the onion. The FAA is taking multiple approaches to its fix: a combination of debugging and replacement. On the one hand, debugging old systems risks that they won't be fully tested until after the year 2000. On the other hand, replacing them costs millions upon millions. When the maker of the machines—in this case IBM—recommends replacement, and a failed effort to debug the machines could mean lives lost in air accidents across the country, I would prefer we lean heavily on the replacement approach.

With fewer than two years until January 1, 2000, this lesson must be learned quickly and throughout the Federal Government. A few Chief Information Officers who are ahead of the curve on this issue are similarly discovering they not only have to fix the application codes, but they also have to make their infrastructure—telecommunication systems, micro-computers, and electrical components—year 2000 compliant.

In the few months ahead, agencies must be ready and willing to admit the extent of their problems, and find solutions that will be balanced between debugging and replacement. At the same time, we in Congress must be ready and willing to assist agencies in what is beginning to look a lot like a matter of damage control.

I ask that today's Times article, "F.A.A. to Fix and Replace Aging Computers," be printed in the RECORD.

The article follows:

[From the New York Times, Jan. 29, 1998]

#### F.A.A. TO FIX AND REPLACE AGING COMPUTERS

(By Matthew L. Wald)

WASHINGTON, Jan. 28—The Federal Aviation Administration said today that it would hunt down and remove the "year 2000" bugs from 40 crucial, aging air traffic control computers, and then throw out the computers themselves.

One team at the F.A.A. has promised to have the bugs fixed within 90 days. The leader of a second team announced today that the agency would replace the computers anyway, at a cost of about \$100 million, because of uncertainty over whether the software changes can ever be tested adequately. But since there is also uncertainty over whether all the computers can be replaced within the next 23 months, the de-bugging will continue.

Around the world, the issue, known in data processing as "Y2K," is perplexing companies because computers that record the date as a 2-digit number will conclude that the year after 1999 is 1900.

The problem was first thought to be a programming glitch. But as the F.A.A. is demonstrating, the line between hardware and software is not so clear, because of computer instructions, called micro-code, that are

built in and are more basic than the programs the computer runs.

In some instances, the answer may be the wholesale replacement of computers that might otherwise have run for years. Early indications are that many airlines will also throw out numerous computers.

George L. Donohue, associate administrator of the F.A.A. for research and acquisitions, said, "Some of the software people now say that even if you think you've fixed all the micro-code, there's no way to be sure."

But, speaking today at an air traffic control conference, Dr. Donohue said that trying simultaneously to de-bug the system and replace it was a good "belt and suspenders approach," because it was impossible to be sure the F.A.A. could replace the aging computers in the next 23 months.

Drucella Andersen, a spokeswoman for the agency, said, "We're trying to do both because it gives us the highest assurance and insurance."

Just last week the F.A.A. invited reporters to tour a "war room" where a team of software engineers is coordinating the de-bugging of 297 interrelated computer systems that make up the National Airspace System.

The machines are at the heart of the 20 air traffic control centers that handle high-altitude, long-distance flights, and officials said they were confident that their replacement would not be necessary. The software changes are projected to cost \$91 million, and involve 22 million lines of software.

The International Business Machines Corporation, which made the computers, warned the F.A.A. last fall that it no longer had the engineers or software tools to find the bugs, and recommended replacing the machines.

Dr. Donohue said the computers were about 14 years old, which he termed old by the standards of private industry but young for the F.A.A.

The agency's budget does not include the estimated \$100 million to replace the computers, but officials said they could delay other modernization projects. ●

#### CONDEMNING IRAQ'S THREAT TO INTERNATIONAL PEACE AND SECURITY

Mr. BOND. Mr. President, the crisis in Iraq has been created because of the appalling behavior of a man bent on defying the legitimate directives he agreed to as the defeated leader of a ruthless and rogue army. For months, if not years, Saddam Hussein has been developing and hiding the very weapons he explicitly vowed to excise from his country's arsenal. These are weapons which he has demonstrated the will to use and which, in a slightly more sophisticated delivery system, may threaten the entire world. He has starved his people in order to gain sympathy from a compassionate world community, he has gassed his own citizens to silence their cries for freedom, he has ruthlessly attacked his neighbors, massacring thousands through chemical warfare, and he has threatened to incinerate an entire people of a neighboring sovereign nation.

This crisis needs to be ingrained into our psyche as a case study of how a bellicose and unrepentant government can circumvent its obligations to the world community and world peace, and avoid the reasonable consequences for those actions. Even more so, this is an object lesson of how our "allies" will respond to such behavior. They seem willing to

curry favor with a dictator by compromising and redefining critical enforcement procedures. Compromise? What is there to compromise? Saddam has broken his covenant with the world. We know it. The world knows it, and our collective governments have been ineffectual in dealing with him. To the President and the leaders of the other nations of the world, I ask three very basic questions and give you three very basic "heartland of America" responses.

First, has Saddam honored his commitment to the world in freely and openly ridding Iraq of weapons of mass destruction? No.

Second, will he? Not if we don't have the courage to force him, with extreme prejudice to his military, if necessary.

And third, is he more dangerous today than yesterday because of a basic weakness and willingness to compromise something which should be enforced without compromise? And that answer is, yes he is more dangerous.

We have wasted critical time. We have allowed Saddam the opportunity to develop the very things he has sworn not to and the very things we swore we wouldn't permit. The current situation must not continue. We must and I believe we can, convince a nervous and wary cadre of allied nations to stand up for what is right and what is demanded to preserve the stability of the world. But if not Mr. President we may have to go it alone or with but a few courageous colleagues from the league of nations.

I am sure we will support the President's decision for decisive action, whatever it may be. Therefore, I join with the majority and minority leaders of this great body and ask that they would consider adding me to the list of co-sponsors of their concurrent resolution number 71 concerning the current crisis in Iraq. ●

#### VIOLENT AND REPEAT JUVENILE OFFENDER ACT OF 1997

● Mr. LEAHY. Mr. President, I want to speak briefly about juvenile crime legislation pending before the Senate. The "Violent and Repeat Juvenile Offender Act," S.10, was reported by the Judiciary Committee last year and may be among the bills we consider early in this session. While the measure was improved during the course of the Judiciary Committee markup, unfortunately, as explained more fully in the minority views to the Committee report, there is much work that still needs to be done and much that still needs to be improved.

The bill reported by the Committee to the Senate would mandate massive changes in the juvenile justice systems in each of our States, and would allow an influx of juvenile cases in Federal courts around the country. The repercussions of this legislation would be severe for any State seeking federal juvenile justice assistance.

I look forward to the Senate taking up these matters and to a full and open debate on exactly what this bill will do. Those aspects that will do more harm than good ought to be rejected. Those aspects that can be improved, should be. Those aspects that fail to respect the role and judgment of the States, their legislatures and their people ought to be changed. This can only be done if the Senate is willing to do the work still unfinished and do so in our greatest tradition of full, fair and open debate.

Washington Does Not Know Best. I am very concerned about the stringent mandates with which States must comply before they qualify for the \$500 million per year in new funding under S.10. This new block grant program sounds great until you look closely. The extensive new requirements created by this program make this money inaccessible to the States. In fact, no State currently qualifies for the new grant money. Consequently, while this bill is touted as helping the nation's juvenile justice systems, States that accept the help will have to surrender their State legislative judgment and change their laws to comport with Washington mandates.

For example, to qualify for this new source of funds, States would have to change their laws to ensure, for example, that they make accessible to the FBI all juvenile disposition or adjudication records, whether the juvenile was brought in for shoplifting, graffiti or more serious felonies. In addition, the States must make sure they make those records available, not only to elementary or high schools in which the juvenile is enrolled, but also to any college to which the juvenile may later apply. Many of our home States will find these requirements too intrusive and costly to make it worth their while to change their laws.

We Should Avoid the "Federalization" of Juvenile Crime. By imposing on the States a one-size-fits-all approach to juvenile crime, this bill turns federalism on its head. As reported, S.10 would repeal the presumption in current Federal law that the State has primary responsibility for dealing with juvenile offenders. Changing that presumption to get the federal government and the federal courts involved is neither necessary nor wise.

Chief Justice Rehnquist and the Administrative Office of the U.S. Courts have expressed serious concerns about the efforts in S.10 to shift juveniles to the federal court system. As the Chief Justice noted in his 1997 Year-End Report:

The Judicial Conference of the United States has raised concerns about legislation pending in Congress to "federalize" certain juvenile crimes, maintaining its longstanding position that federal prosecutions should be limited to those offenses that cannot or should not be prosecuted in state courts.

The Chief Justice clearly recognizes what so many other law enforcement

and court personnel know: The federal courts are not equipped to handle the expected increase in federal juvenile cases if S.10 is not modified.

We should preserve the core protections for juveniles in custody. Regrettably, S.10 would gut the core protections that have been in place for over 20 years to protect children who come in contact with the criminal justice system and to keep abused, neglected and mistreated children out of detention altogether. Every Vermonter who has contacted me about this issue has said the same thing: dismantling these core protections is an ill-conceived move.

Back-sliding on the protections against putting children in adult jails flies in the face of research showing that children who spend time around bad influences, like adult criminals, have a higher recidivism rate. The co-chair of Vermont's Children and Family Council for Prevention Programs has explained: "If even intermittent contact is allowed, youth will certainly learn more and better ways to act out inappropriately and aggressively."

We should focus on prevention. Right now, S.10 lacks balance. The bill is chock full of punitive measures to prosecute and lock-up children, but skimps on efforts to stop children from getting into trouble in the first place. Focusing on the back end of the juvenile justice system—after children get into trouble—is short-sighted. Any police chief or cop-on-the-beat will tell you that. We should also focus efforts on preventing kids from getting into trouble and intervening at the first warning signs before they enter into criminal activity.

I have heard from numerous law enforcement officials who support a clear earmark for juvenile delinquency prevention programs. They know that prevention programs are key to reducing our Nation's juvenile crime rates. This bill earmarks new federal grant money for a number of enforcement uses, including increasing sanctions, improving juvenile record keeping, mandating drug testing, and juvenile prison construction. No earmark is made for prevention. This is a mistake and will turn out to be a costly one unless we can modify the bill to bring it into balance. If we are going to have earmarks, we must dedicate money for prevention. Prevention programs enhance the skills and competency of troubled juveniles. Such programs help teenagers stay in school and stay out of trouble. Without an earmark, in the competition for dollars, prevention programs will surely lose out.

I urge my colleagues to talk to the police and prosecutors in their home states. I am confident you will hear, as I have, that well-crafted crime prevention and youth development programs do make a difference. I am also sure that you will hear how critical it is to keep juveniles separate from adult inmates and to allow teenagers who have committed a minor offense a real chance to improve their lives.

We should work together in an open and bipartisan manner to consider and improve this juvenile crime legislation.●

#### SALUTE TO RON WILSON AND THE 1998 UNITED STATES OLYMPIC HOCKEY TEAM

Mr. CHAFEE. Mr. President, the 1998 United States Olympic Team will soon depart for Nagano, Japan for the 18th Winter Olympic Games. I know I join my colleagues in saluting the American men and women who have worked so hard to compete at this highest level of international competition.

I rise today to salute a son of Rhode Island, Ron Wilson, who will serve as head coach of the American Men's Hockey team. Hockey is not a sport in Rhode Island, it is a passion. That passion enabled Ron Wilson to achieve All-Star status at East Providence High School, and two-time All-American honors at Providence College, where, as a senior, he led the nation in scoring. His college coach, coincidentally, is also a Rhode Islander. Then-coach Lou Lamoriello is now president of the New Jersey Devils and will also serve as general manager of the U.S. Olympic Men's Hockey team.

Ron Wilson went on to a successful professional playing career in the National Hockey League and Europe. Today, he is the very successful coach of the local entry in the National Hockey League, the Washington Capitals. He is well equipped to lead our team next month in Japan, having successfully coached the U.S. Team in the 1996 World Cup to a major upset of Canada to win that prestigious competition. The victory was the biggest win for the United States since the 1980 Winter Olympics.

Hockey is, as I said, a passion in Rhode Island. Indeed, Coach Wilson will look down his bench and see three other Rhode Islanders on his team—Bryan Berard, Keith Carney, and Matthew Schneider. And the U.S. Women's Hockey team will include a majority of players who played their high school or college hockey in Rhode Island.

The Nagano Games will soon begin, and I extend the heartiest best wishes for success to Coach Wilson, his fellow Rhode Islanders, and all Americans wearing our uniform.●

#### STEVEN N. ADUBATO

● Mr. TORRICELLI. Mr. President, I rise today to extend my best wishes to Stephen N. Adubato on his 65th birthday. Steve's belief in his community and dedication to improving the education standards in New Jersey are just two examples of his lifelong commitment to public service. On his birthday, I would like to convey my thoughts to a good friend and valued colleague.

As the founder and Executive Director of the North Ward Center, Inc., he has created a central location for more