STATEMENT OF THE HONORABLE JAMES B. BUSEY, FEDERAL AVIATION ADMINISTRATOR, BEFORE THE HOUSE COMMITTEE ON PUBLIC WORKS AND TRANSPORTATION, CONCERNING THE NATIONAL AVIATION SYSTEM. MARCH 5, 1991.

Mr. Chairman and Members of the Committee:

I appreciate having the opportunity to appear before the Committee to discuss with you the aviation system of today and what we envision for tomorrow. I am accompanied by the Department of Transportation's Deputy Assistant Secretary for Policy and Program Development Pat Murphy, who is available to respond to questions you may have on financial and economic issues. Today's topic is a particularly important one because it is all too easy to become focused on present problems and to lose sight of the need to take steps now to deal with the issues that will otherwise become tomorrow's problems.

Since I came to the FAA, I have stressed two key points: 1) strengthened planning and 2) use of a systems approach to address problems. Without sound planning, the aviation system will simply fail to meet future challenges. By the same token, we cannot afford to deal with most issues in isolation; we can most effectively solve problems by employing a systems approach, which addresses people, equipment, and procedural issues and how each of these factors relates to one another.

The Secretary set the pace in March 1990 when he issued the National Transportation Policy. Shortly thereafter, I issued my

own strategic plan designed to help us shape the future air transportation system. Today, that plan is complemented by a variety of key planning tools--a Capital Investment Plan, aviation forecasts, an R,E&D Plan, a systems capacity plan, and a Human Factors Plan. Efforts such as these give me increased confidence that we are looking ahead and taking the needed steps to be ready for tomorrow's demands for a more efficient system with increased safety and capacity, which truly serves all users needs in a shrinking world where international cooperation will be more and more accentuated.

THE AVIATION INFRASTRUCTURE--TODAY AND TOMORROW

Today's aviation infrastructure has been outstripped by demand. Many saw it coming, but, despite everyone's best intentions, far-reaching solutions were not found. No major airports have been built since Dallas-Fort Worth in 1974. Gate and terminal space is crowded at many major airports. Noise concerns affect local communities' abilities to stretch capacity at existing airports, and in many cases the ability to grow to match demand has been paralyzed. Six major airports already experience more than 50,000 hours of delay a year; 15 others struggle with more than 20,000 hours of delay annually. This past fiscal year saw traffic continue to increase: domestic revenue passenger miles by 3 percent and passenger enplanements by 2 percent, despite a sluggish economy.

But I don't want to paint a bleak scenario. Despite the challenges that lie ahead of us, we still have not only the best air transportation system we have ever had but the most advanced and efficient one in the world. America remains a world leader in all facets of aviation, and the perserverance, know-how, and ingenuity that put us out in front of the pack will keep us there.

The good news is that we all recognize the need to replace, improve, expand, and modernize today's facilities to meet expected demands. And while not everyone agrees on the best solutions, we have taken recent, major steps to lead us forward. The Congress has continued its support of our efforts to revitalize and modernize the entire air traffic control system, an effort initially set out in the NAS Plan and now captured in our Capital Investment Plan.

Improvements in the airport infrastructure will be aided by new and needed authority to charge Passenger Facility Charges, adding perhaps as much as an additional billion dollars a year in airport financing. Further progress will be possible through an increased airport grant program, for which the authorization level is now set at $1.9 billion dollars for Fiscal Year 1992. Congress has also established the framework for the development of a comprehensive aircraft noise policy that should go far in helping to remove a serious impediment to system growth.

In short, I believe we have good reason for optimism about our future air transportation system given the current level of understanding of the problems we face. The recent Congressional action recognizes the need for action now, and will go far towards helping us adapt the system to accommodate needs. The alternative, of course, is to constrain future demand to meet the system's limitations, a choice we have collectively refused to accept.

For our part, we will continue to aggressively pursue a variety of solutions--technical, procedural, and human performance-related. Right now, for example, we have capacity design teams working with airport operators at 24 major airports. They have already identified more than 400 capacity-increasing projects. Our capacity plan identifies a variety of potential new connecting hub airports that could reduce traffic volume at present, congested hubs, and the availability of PFC's and increased grant funding can help make additional airports a reality.

Technological advances we are working on, such as precision runway monitor systems, offer promise of improving capacity significantly at 47 large airports by enabling us to safely increase the landing rate on close parallel runways during bad weather. The availability of TCAS collision avoidance systems and Microwave Landing Systems will also facilitate the ability to increase safety and capacity in our crowded terminal areas. But, over the

long-term, the most pressing problem is the availability of enough concrete for our planes to land on.

SYSTEM SAFETY--TODAY AND TOMORROW

Safety is, of course, the FAA's very reason for being. It is and will remain the agency's highest priority. Today's air transportation system has evolved, through the hard work and dedication of many, to the safest it has ever been. NTSB data shows accident rates continued their long-term downward trend in 1990 in all classes of aviation. But there is more which can and should be done.

Recent accidents have highlighted the need for additional work to prevent runway incursions. I won't go into the details of our comprehensive program to do that since my technical experts appeared before the Aviation Subcommittee just last week. I would like to say, though, that our Runway Incursion Plan shows how we are using a systems approach to integrate into our strategies all relevant parts of an issue. That plan ties together work on procedures, technology, and human performance, outlines the key players, and sets timetables.

We are continuing to develop and implement key programs across the aviation safety spectrum, many of which this Committee has worked with us on in the past--aging aircraft, cabin safety, air traffic

control improvements, TCAS, and the like. What has changed, though, is some of our emphasis.

We are now looking ahead more in our safety research efforts, engaging in more longer-term research to meet evolving or expected needs. We are also focusing much more heavily on human factors in all that we do. Improvements in human performance represent the greatest single way to reduce aircraft accidents. Technological advances have accelerated at a pace no one would have thought possible, but achieving significant improvements in performance has proven far more complex and elusive. The decade of the 1990's will see far greater concentration of effort on the human factors challenge.

Looking ahead, controllers and pilots will be assisted by vastly improved technology. Air traffic control will be highly automated. Navigation, surveillance, communication, and control will be satellite-based. Communications will be mainly through fast, accurate digital data transmissions. Faster, more accurate weather information will be available through advanced radar technology. Aircraft and aircraft systems will continue to improve as well, providing even higher margins of safety. But I have seen nothing which suggests to me that technology can ever replace the human being in our aviation system. Thus, as I stressed a moment ago, our work must assure that, as all of these technological tools improve, equally significant strides occur in understanding and improving human performance.

SECURITY--TODAY AND TOMORROW

The Members of this Committee have no doubt seen firsthand the evidence of the unprecedented level of strengthened security at our domestic airports, implemented in response to events in the Persian Gulf. This strict security follows on the heels of dramatic improvements we have made in our overall security system in the past two years.

We have reorganized the headquarters security organization to improve policy development and provide tighter follow-up. We have accelerated our security R&D activities to develop effective explosives detection systems, considering a wide range of potential technology. We are operationally evaluating TNA explosives detection units at several airports at this time, and the results from Gatwick using small quantities of explosives are very encouraging. We are also looking at ways to harden aircraft to provide greater protection in the event of an explosion. Work is ongoing as well in terms of enhancing education, training, and performance of security personnel.

Our security efforts, as in other programs, are designed to employ a systems approach, and we have made significant progress in that regard. But, here too, we need to provide greater emphasis on the human side of the equation. No matter how good the technology is that we develop, as long as it requires human intervention, we

must assure that the human performs as well as the machine.

I am confident that we will achieve success in the development of explosives detection systems. I am also confident that we will continue to see significant improvements in integrating people, equipment, and procedures into an aviation security system that will become increasingly effective. On the other hand, to the extent that a climate for terrorism continues to exist, there is reason to expect that those who engage in terrorism will follow the change in technology as well. The greatest prospect for a more secure environment will result from increased global cooperation. We see promise at this time of that possibility, and I am optimistic of a future in which the international community will work more closely together to implement coordinated security improvements and, even more importantly, join together in a united front to stamp out terrorism.

AIRLINE FINANCES AND COMPETITION

Current conditions clearly pose a real threat to the continued existence of some of our major airlines. The fuel cost increases following Iraq's invasion of Kuwait in early August--which fortunately have somewhat stabilized now--coupled with a downturn in the economy and an extreme dropoff in foreign air travel resulting from the war in the Persian Gulf, have put a severe strain on our financially weaker carriers.

However, there is every reason to believe that the significant consumer benefits which have resulted from deregulation will continue. The airline industry as it exists today is more competitive than at any time in history. The Department's comprehensive study of airline competition released last year documented in great detail the reductions in price and the increases in service and competition at communities of all sizes that have resulted from the development of competing nationwide hub and spoke networks. Under a system of hub and spoke networks, each airline can and does compete for traffic in virtually all important domestic markets. Thus more service and competition is possible today with fewer airlines.

Direct financial assistance is not called for and would probably do more harm than good to the competitive process. Assistance to the weaker carriers would distort the normal workings of what is today a very competitive marketplace. Assisting airlines that are unable for one reason or another to compete effectively is likely to result in destructive competition which wastes other airlines' capital resources.

The most productive way for the government to enhance competition in the airline industry is to alleviate obstacles to the competitive process, such as inadequate airport and airway capacity, and to take procompetitive actions when reviewing asset transfers.

COMPETITIVE EFFECTIVENESS IN A WORLD ECONOMY

The United States remains unsurpassed in its ability to move people and products by air, and this ability contributes significantly to our industrial productivity. A great deal of attention has been focused on the success of airline deregulation in creating a wide variety of services and fares for passengers. Our ability to move materials, intermediate and finished products, and spare parts by air, while less conspicuous to the average citizen, also is a significant factor in the productivity of U.S. industry.

This is not merely a function of economic development. Air freight deregulation preceded that of passenger air transportation. A vigorously competitive air freight forwarding industry played an important role in the development of our modern air cargo system. Pioneering innovations like our overnight express package services have spread rapidly to other countries, but are nowhere as highly developed as here in the United States, where they were first introduced. And our combination air services, in addition to providing an extensive passenger transportation network, also provide substantial air freight capacity. One industry source has estimated that over 90 percent of all goods shipped by air can be carried in standard containers that fit in the bellies of passenger-carrying aircraft. The U.S. airline industry carries more domestic air freight traffic than

all other countries of the world combined. In 1989, for example, U.S. airlines carried 58 percent of the world total, or three times as much as the next closest country, the U.S.S.R., with 18.5 percent.

INTERMODAL COORDINATION

One of the principal themes of the Secretary's Statement of National Transportation Policy is the need to view and implement transportation programs in a more coordinated and integrated fashion. I can assure you that improving intermodal coordination is a high priority of the Secretary.

The second phase of the National Transportation Policy Statement effort features a thorough examination of the Department's ability to deal with transportation issues on the kind of intermodal basis that will bring about better coordination between aviation and the other modes. That examination, which is not yet completed by the Department, will culminate in a report and recommendations later this year.

In the meantime, there are a number of efforts already underway in the Department dealing with particular aspects of this issue, including highway and rail access to airports and the comparative effectiveness of a variety of new surface and air technologies in meeting demand in high density, intercity corridors.

Clearly, there is much which can and should be done to facilitate intermodal coordination, so that the most effective, integrated transportation system can be achieved. Further, there is much in the way of information and research exchange that can improved in order to foster a better transportation system for the American public.

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In closing, Mr. Chairman, I would like to thank you for the opportunity to appear before you today. We appreciate the interest of this Committee in improving our air transportation system and look forward to a continued strong working relationship with you and the Members of the Committee to address the many challenges which face the aviation community.

That completes my prepared statement. Mr. Murphy and I would be pleased to respond to questions you may have at this time.