

STATEMENT OF ANTHONY J. BRODERICK, ASSOCIATE ADMINISTRATOR FOR AVIATION STANDARDS, BEFORE THE SENATE COMMITTEE ON GOVERNMENTAL AFFAIRS, SUBCOMMITTEE ON INVESTIGATIONS, CONCERNING AVIATION SAFETY. MARCH 13, 1986.

Mr. Chairman and Members of the Subcommittee:

I am pleased to appear before the Subcommittee today to discuss various aviation safety issues with you. You have asked me to describe in a brief statement the kinds of challenges I see which are facing the FAA and the airline industry. I would be pleased to do that.

My view of where the FAA needs to focus additional effort and attention is based on a significant amount of internal review and analysis of the agency performed over the last two years. Through a variety of efforts, including the National Air Transportation Inspection (NATI) Program-- a part of which was an evaluation of the NATI data conducted as background for the first NATI report that has come to be known as the "retired inspectors' report," the Secretary of Transportation's Safety Review Task Force, the General Aviation Safety Audit, and FAA Project SAFE, which seeks to pull together a variety of actions into one manageable program, I believe we have achieved a very good understanding of what efforts need to be taken to improve the overall quality and

efficiency of our safety efforts. I would like to take a few moments to describe where we see the need to focus our efforts and what our plans are to do so.

Before discussing what I see as areas in need of further emphasis, however, I believe it is important to highlight for you the aviation environment within which the FAA is working. Our airspace system serves some 325 scheduled airline operators who use more than 550 airports and enplane more than 300 million passengers each year. More than 200,000 aircraft use our Nation's airways. Over 4,000 of these aircraft are operated by the scheduled air carriers. There are about 1,200 pilot schools and over 150 maintenance technician schools. Over 700,000 pilots are active in our airspace, and more than 100,000 mechanics are certified to work on aircraft. There are nearly 4,500 repair stations certificated by the FAA. The FAA's responsibilities touch on each of these areas, as well as on operating and maintaining the most sophisticated and busiest air traffic control system in the world. The safety record achieved over time by the United States indicates convincingly that the FAA has been very successful in fulfilling these varied responsibilities, though there are areas where we recognize we need to do more.

Inspector Staffing and Training

Perhaps our key conclusion from the reviews that we conducted was

that the largest impediment to performing the appropriate amount and kind of safety surveillance of the industry was the inadequate staffing level of our aviation safety inspector workforce. The number of safety inspectors had eroded over time, and, with increased work resulting from deregulation, a workload imbalance had resulted. As an initial step toward correcting that imbalance, the Secretary authorized the FAA to hire an additional 166 safety inspectors in FY 1984. Subsequently, we performed more detailed analyses of what our requirements were, and recommended that the inspector workforce be increased by an additional 500 people. The Secretary agreed with this recommendation last September, and we fully expect to achieve this goal of increased staffing levels over the next three fiscal years. We also have completed a detailed functional evaluation of our field inspection activity which will enable us in the future to link staffing requests to actual workload.

We also concluded that it was necessary to make improvements in the quality of training afforded our inspector workforce, to assure their familiarity with practices of a deregulated airline industry and to improve their knowledge and understanding of FAA regulatory requirements and inspection techniques. Our inspector support staff just this year completed its revision of the initial indoctrination courses provided our newly-hired inspectors at our Academy in Oklahoma City, and that new training is now being provided. They are currently in the process of revising this

program further to achieve additional improvements, including development of a complete 30-volume handbook series for our inspectors. Moreover, as I noted earlier, we have been engaged in an extensive effort to delineate every function performed by our inspector workforce to define what specific skills, knowledges, and abilities are needed to perform acceptably as an inspector. Through this comprehensive effort, we are seeking to redefine the duties of our inspector positions as needed, to improve our ability to match people with the job, and to improve our delivery of the tools they need.

Before going further, Mr. Chairman, I should note that I have great confidence in our current inspector workforce, but that I also recognize it has proven extraordinarily difficult for them to do the job they would like to do and to remain current in their knowledge of all facets of their jobs, given the heavy workload that has faced them.

Increasing the numbers of inspectors and support personnel available to us, along with increasing the skills through better training of that workforce, will provide significant help to us in increasing our surveillance capabilities, and, in my view, represents the single most important step we in the FAA can make toward enhancing the quality of our safety efforts.

Standardization

A recurring theme of Administrator Engen's has been the need to increase standardization within the FAA. In our analyses of the agency's operations, we have concluded that standardization has indeed been lacking. The decentralization of authority had gone too far. We have found inconsistencies in the application of our regulations from one office to another, and, sometimes, with respect to complex areas of our regulatory program, even from one inspector to another within the same office. Further, with respect to the decentralized approach to surveillance activities conducted in the field, there has not been sufficient central program direction given to our overall agency surveillance efforts, defining areas where to focus increased surveillance and specifying general levels of surveillance needed to provide adequate coverage of the aviation industry.

We have a variety of activities underway to achieve greater standardization. We have already completed and furnished to our field offices a comprehensive surveillance work program to be followed this fiscal year in all regions. That program, for the first time, identifies by type of inspection the minimum numbers of inspections which should be conducted annually for each operator by each office throughout the country. Further, we have established a list of detailed in-depth inspections to be accomplished by teams of FAA inspectors. In addition to our

ongoing surveillance program, all major air carriers will be subject to detailed, in-depth operations and maintenance inspections on about a two- or three-year cycle. Additional one-time special focus inspections have also been scheduled for engine repair facilities and overseas military charter operations this year. To ensure greater standardization in the application of our regulatory requirements, we are revising the entire set of internal handbooks used by our inspector workforce to provide more detailed guidance to them in performing their jobs, and will also increase our efforts to identify and change out-of-date regulations and supporting guidance materials.

There are a variety of other efforts we are undertaking to achieve greater standardization, and I would be pleased to elaborate on them at your request. The ones I have just outlined are illustrative of the kinds of efforts we are making across the board within our flight standards organization. This is a time of dramatic change for us, and our workforce truly welcomes the opportunity we have been given by Secretary Dole and Administrator Engen to bring about these needed improvements.

EVALUATION/FOLLOW-UP/MANAGEMENT INFORMATION SYSTEMS

Another area in which we have recognized the need for added effort has several aspects to it. We need to do a better job of evaluating ourselves--the quality of our overall surveillance,

inspection, and follow-up efforts. We need to assure that there is adequate follow-through in correcting problems that are found through our surveillance efforts. And when we find evidence or indications that a given type of problem is occurring too frequently, we need an improved, centralized management system that facilitates the collection and dissemination of that key information. As I will briefly describe, we have programs in place that address these needs.

In terms of evaluating our efforts, we have hired a manager to develop a staff reporting to the Director of Flight Standards who will be responsible for monitoring the efficiency of our flight standards programs and the guidance we are issuing to the field. This effort will be fully functional by this June. The staff will also be responsible for programs to monitor industry trends and changes in order that FAA training and surveillance programs can be altered as necessary to track and accommodate the changes in the work environment.

With respect to our ability to assure that adequate follow-up is taking place throughout the system, that will be enhanced both by our new evaluation system, which will assess our effectiveness in this area, and by the further implementation of automated management information systems. We have been working for a number of years to fully develop and implement a system referred to as the Aviation Safety Analysis System (ASAS). Through the automation provided by this system we expect not only to increase

the productivity of our inspector workforce, but to provide a national data base of near real-time information concerning, among other things, inspections of operators and enforcement histories. This will permit immediate access to significant information without regard to geographical or jurisdictional boundaries and will permit management at all levels to evaluate the safety and effectiveness of our programs. We have recently completed the implementation of 12 national ASAS software subsystems. Over the next year, we will continue software system development activities, intensify our efforts in long-range system architecture planning, investigate more effective training methods, and place more emphasis on our planning and use of human resources throughout this program.

HUMAN RESOURCE MANAGEMENT

I have already addressed some elements associated with the management of our human resources, which are our most important resource within the FAA, but thought it was worthwhile nevertheless to set this out as a separate area needing further efforts on our part. In the FAA, although we work with a tremendous amount of sophisticated equipment and are involved with many issues at the leading edge of technology, we simply cannot accomplish our job without people.

I mentioned earlier that our safety inspectors have been saddled

with an intense workload. We are working to correct that imbalance. We are also taking steps to assure that our workforce is adequately trained and prepared to deal with all the requirements of their positions. As I have also noted, we intend to better define those requirements and then track what those position requirements should be, so that we are not asking people to perform tasks for which they are not adequately prepared. I believe we also need to do more to support the Administrator's clear efforts to assure our inspector workforce that they will be supported by higher level management for taking prompt and, if need be, tough action against operators who violate our regulations. Administrator Engen has met with many inspectors to make this point, and, indeed, our recent enforcement record should show clearly that efforts to deal strictly with safety violators will be supported at the highest levels. Nevertheless, we need to continue to get that message out to our workforce to help assure that the employee on the spot will take necessary corrective action and not let areas in need of improvement go unattended.

INDUSTRY

You have also asked me to briefly indicate what problem areas we see in the industry. Deregulation of economic constraints on entry into the airline business has produced major changes in our workload environment. This has been especially so, and came as somewhat of a surprise to most industry observers, in airlines

which operate large aircraft. Many of these new operators came well-equipped to deal with the high public responsibility that comes with providing common carriage by air. Unfortunately, some did not come so well-equipped. Perhaps the biggest single problem our inspector workforce has faced is the demand which was suddenly thrust upon them to explain the rules and regulations and accepted practices to the management of many new entrants. The initial certification of these carriers, and the ongoing management of those certificates, has proven to be extremely labor intensive. Innovative ways of doing business have also provided difficulties. The proliferation of contract maintenance, for example, has been difficult to deal with and has also caused a large workload: we had to educate inspectors to the new way of doing business and to alert airline management to the complexities and problems that such innovation could create.

The dynamics of the industry, while providing an economic benefit to consumers, have caused an added workload for the FAA and a need to adjust to new ways of conducting business. The numbers of new entrants have created additional workload for us both in terms of initial certification and ongoing surveillance. Further, the relative ease today of changing route structures contrasted with the relative inflexibility of the former economic regulatory regime means that we need to continue to adjust to industry changes in conducting an effective surveillance program. This has not always proven easy, but it is a problem for us to manage, not

a problem with the industry. The added inspector workforce will help us to deal with this issue. In the interim, we are working to better balance our efforts by assuring we are accomplishing the most important surveillance and inspection work before addressing certification work and related activities.

I believe it's also worth expanding upon a point we have noted above. Again, not a problem with the industry, but one we need to recognize better within the FAA to enable us to address it by adjusting our practices as necessary. That change concerns the orientation of some of the key management officials within the industry. Traditionally, much of airline management consisted of individuals who rose through the ranks and who had been exposed over time to the aviation environment. Today, with the relative ease of creating a new airline operation, there are many individuals occupying top level positions whose experience within the industry is limited. Some of these individuals may not possess a full awareness or appreciation of the comprehensive network of procedures and systems that must be in place and carefully managed to provide an appropriate safety environment. In my view, there needs to be a greater educational process within industry to affirm to these individuals the need to assure that adequate and continuing management focus is directed toward all facets of their operations. Industry groups such as the Air Transport Association, National Air Carrier Association, and Regional Airlines Association are excellent sources of background

information for airline management, and we expect new airlines to take advantage of such efforts. In the coming months, the FAA will be providing assistance to the Office of the Secretary of Transportation to assist OST in ensuring that those personnel being used by new airlines in top level management positions affecting safety, such as Directors of Operations and Maintenance, are fully qualified before the airlines are found fit by OST to begin operations. For our part, in our routine surveillance programs, we need to better identify early on those operators who are not stressing adequate management oversight of safety systems and procedures so that we can take prompt, corrective action and tailor our surveillance efforts to achieve greater oversight of their activities. This, again, is an area where the current programs we are pursuing in staffing, standardization, evaluation, and management information systems can only better our ability to respond to this kind of change in the operating environment.

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Before closing, Mr. Chairman, I want to observe that, while there are areas in which we recognize the need for further improvements, we have comprehensive programs which accomplish those objectives. Our air transportation system, by any measure, is the safest and most efficient in the world today. Through our current efforts, we intend to make it even better.

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