

STATEMENT OF JOHN S. KERN, ACTING ASSOCIATE ADMINISTRATOR FOR
REGULATION AND CERTIFICATION, FEDERAL AVIATION ADMINISTRATION,
BEFORE THE SENATE COMMITTEE ON COMMERCE, SCIENCE, AND
TRANSPORTATION, SUBCOMMITTEE ON AVIATION, CONCERNING PILOT
TRAINING. AUGUST 3, 1989.

Mr. Chairman and Members of the Subcommittee:

I am pleased to have the opportunity to appear before you today concerning the Nation's supply and training of pilots. This is a subject which affects all of us in the aviation community.

We all recognize that we may be facing a shortage in the numbers of adequately trained personnel available to staff our future civil aviation fleet. For example, last year was the first year in which United States scheduled air carriers hired more pilots from the general aviation sector than from the military. And we see no major change in the trend. Equally important, the cost of pilot training has increased to the point where the flow of new private pilots may be reduced.

We believe that innovation and flexibility in pilot training are important factors in assuring an adequate pool of qualified pilots. In our view, cooperation among air carriers and general aviation, the academic/training community, and the FAA, as safety regulator, is an essential element to promote a climate for positive change in training and testing methods for pilots.

FAA is undertaking a number of efforts in the training area. FAA personnel are working cooperatively with the academic community to

develop appropriate airway science curricula. We are also working on the modernization of our pilot training/qualification regulations to remove impediments to flexibility, creativity, and productivity in training procedures.

We believe, for example, that we should continue to foster use of innovative training devices. The increased use of simulators and related training devices provides many advantages to the aviation community. Not only do they save costly fuel but they provide an enriched training experience for pilots, particularly for procedures that could be risky in actual aircraft operations.

FAA has already taken steps to provide for the use of less costly training devices in commuter training programs, and we are considering further regulatory changes to provide for uniformity and efficiency in all levels of pilot and instructor training where simulators or other advanced training devices may be used. We see continued benefits to pilot training from expanding use of simulators, and the possibility of offsetting length of experience, i.e. flight hours, by adding "quality" of experience.

Through FAA's Airway Science Program, education specialists have assisted colleges and universities in developing aviation curricula and in acquiring equipment to support aviation education. For example, the acquisition of simulators and other facilities at the University of North Dakota reflects one such

cooperative effort among the University, the Federal Government, and an air carrier.

FAA's current regulatory efforts to modernize pilot training are the first major regulatory efforts in this area since 1973. Many of these regulatory initiatives which are underway at FAA to modernize flight crew training procedures reflect the recommendations of the Joint Government-Industry Task Force on Flight Crew Performance. The Task Force was established in August 1987, and its recommendations were issued in June 1988. FAA personnel were among the members of the Task Force's steering committee, and served on the various working groups of the Task Force.

In order to understand exactly what air crew training should achieve, FAA conducted a complete, in-depth review of the tasks required to operate an aircraft in the current aviation environment, and the knowledge and skills required to perform these tasks. This project is called the Job Task Analysis. FAA has been involved in a series of government-industry panels on this project, and has produced a Job Task Analysis Data Base. We have made this data base available to the public for further analysis and comment. The FAA also heard from a panel of industry experts on trends which will affect pilot training in the next 10 years. Further, we will hold four public hearings on this subject during the next two months. These will be held in

Washington, Illinois, and California; and in Florida in connection with the Aircraft Owners and Pilots Association meeting.

FAA is also interested in the long view--requirements that will be placed on air crews as technology evolves into the next century. We will be studying aviation trends that affect crew requirements, so as to form a picture of the aviation environment to be faced by aircrews in the year 2010.

The short run is being considered, too. FAA has received a number of recommendations regarding pilot training from the National Transportation Safety Board. We published our position regarding these recommendation in a Notice of Proposed Rulemaking, which appeared in the Federal Register on May 26. The comment period will close on August 24. Most of these proposals concern increased recency of experience requirements; training curricula requirements for high altitude flight and for airplane type ratings; increased training requirements for stalls and, in the case of flight instructors, spins; a flight instructor endorsement for operation of tailwheel airplanes; and several amendments to the pilot school regulations which are routinely handled by exemption.

We are also involved in a major effort aimed at facilitating the use of advanced training media, technology, and methods. This

effort begins with the Advanced Qualification Program (AQP), which was proposed in an NPRM published last February. The comment period closed last April, and we are working on an evaluation of the comments.

The AQP would simplify and enhance training procedures in a number of ways. The new training path under AQP would constitute an optional, parallel path to training under existing requirements. The focus of this program is on ensuring actual proficiency in performing tasks, rather than on an arbitrarily prescribed number of hours of experience. A key element of the program provides for training in Cockpit Resource Management. This involves leadership and crew coordination techniques, situational awareness, and the ability to use all available resources, including those outside the cockpit.

The AQP program would include training on simulators in which flights could not be aborted due to mechanical, weather, or air traffic difficulties set up in the simulation. Any simulated flight which is begun would have to be completed, as in the real world. This is designed to enhance the psychological ability of air crews to face unexpected difficulties. The procedure is called Line Operational Flight Simulation.

Current training procedures call for generalized training in certain maneuvers which some aircraft are not capable of

performing. This would be eliminated in the revised procedures. The new procedures will be specifically designed to match each make, model, and series of aircraft, and to reflect the maneuvers that a particular aircraft can perform.

We also contemplate ending the current approach of exempting the operation of private training centers--that is, training establishments not controlled by air carriers, such as those operated by Flight Safety International and by SimuFlite or perhaps by a university or college--and instead authorizing and governing them directly by an appropriate regulation.

In addition to modernization of training for commercial pilots, FAA has been modernizing the private pilot training process. The new Recreational Pilot Certification Program will insert a new rung in the training ladder, above Student Pilot and below the Private Pilot Certificate. This program would recognize training involving about 15 hours of flight time, leading to a Recreational Pilot Certificate. The certificate would be oriented toward emphasizing basic flying skills in areas which traditionally cause accidents. We hope that the availability of new pilot certificates, which should be less costly to achieve than a Private Pilot Certificate, will induce more people to commence a flying career, and project that as many as 7,000 additional pilots may be encouraged to begin flight training each year as a result of this effort, with some benefits in the area of the commercial pilot shortage.

In conclusion, I would like to emphasize that FAA views the provision of an adequate supply of aircrews as an important priority. To help achieve that necessary pool of pilots, FAA believes that training requirements should realistically and efficiently match the training technologies available, and not serve as an impediment--either because of cost or unnecessary requirements--to people learning to fly or seeking to achieve increased certification as a pilot. We are committed to working with the aviation community and the academic community to promote programs which encourage young people to learn to fly and which offer the best training possible to ensure a highly qualified pilot community.

Mr. Chairman, this concludes my prepared statement. I would be pleased to answer any questions you may have at this time.