

STATEMENT OF THE HONORABLE LANCHORNE BOND, ADMINISTRATOR,  
FEDERAL AVIATION ADMINISTRATION, BEFORE THE HOUSE SCIENCE AND  
TECHNOLOGY COMMITTEE, CONCERNING OVERVIEW OF THE FISCAL YEAR  
1981 BUDGET PROGRAM, JANUARY 29, 1980.

Mr. Chairman and Members of the Committee:

It is a pleasure to appear before you to discuss our Engineering and Development Program. While the FAA has not appeared before the full Committee in past years, we have been aware of its high interest in our programs through its deliberations on the reports submitted by the Subcommittee on Transportation, Aviation, and Communications. We appreciate the assistance of the Committee. You have been supportive and have provided sound guidance in several key areas.

We are scheduled to provide Congressman Harkin's Subcommittee on Transportation, Aviation, and Communications with our Semi-Annual Report on our Research and Development Programs in mid-February. Since that report will be in rather fine detail, I will, this morning, provide you with a general overview of the program and dwell for a few moments on several major topics of particular interest.

A measure of any R&D organization is its responsiveness to those who will utilize the products it develops. This

morning I had the pleasure of opening a two-day conference which will provide FAA's initial response to user and industry views on what our air traffic control system should be to meet the demands for services through the Year 2000. The first step of this process, which we call the New Engineering and Development Initiatives, was to assemble the various segments of the user and industry community and solicit their views on a large number of issues. The user/industry community established five working groups comprised of some of the most talented operational and technical experts to address the issues within their areas of expertise. The Working Groups, operating independently of the FAA, developed an extensive set of recommendations covering the entire spectrum of requirements for the 1990's and beyond. Their recommendations, unedited by FAA, were then provided to the entire community for its review and comment. We have the comments and are now responding to them.

I am extremely pleased that the Working Groups' recommendations and the user community comments are overwhelmingly supportive of our ongoing and planned E&D Programs to meet the requirements of the 1990's and beyond. Our user constituency is too wide and diverse in its

interests to develop a total consensus for each of our programs, but when viewed from an overall standpoint, the recommendations come out strongly in support of our programs. The result reflects the time and effort that have been spent with the users over the years to explain our programs, solicit their input, and apprise them of our progress. We're not perfect but we've made major strides in involving our customers in our E&D programs.

Our programs are, in the main, continuing to progress in accordance with our plans. The Discrete Address Beacon System (DABS) and its companion, Automatic Air Traffic Advisory and Resolution Service, are reaching the end of their development phase, and we are requesting funding in FY 1981 for the procurement of the initial production units in the facilities and equipment appropriation. Our Beacon Collision Avoidance Systems (BCAS) are continuing on schedule; we plan to issue the national standard for the active version of the BCAS in October of this year. Our advanced computer program, which will update our automated facilities, is progressing basically on schedule. This is a huge effort which will involve all of our automated en route centers, and, eventually, our automated terminals. The cost of R&D plus procurement activities will be over \$1 billion

over the next ten years. We are currently undertaking the front end system analyses, conceptual studies, requirements documentation, and preliminary specification development.

Our flight service station automation program has now moved into the contractual stage. We have just awarded three design verification contracts, under which the contractors will compete for the eventual production award to automate our busiest flight service stations. This product of our E&D program will, when fully implemented, provide better services to general aviation and accommodate a doubling of the number of services provided, and do it with a specialized work force that is smaller than we have today. Our FY 1981 facilities and equipment request includes the funding to proceed with this long overdue, high productivity program. Other programs, such as Discrete Address Beacon System (DABS), Automated Traffic Advisory and Resolution Service (ATARS), Beacon Collision Avoidance System (BCAS) the Microwave Landing System (MLS) and Airport Surface Detection Equipment are now or will in the next several years be moving from development to implementation. They are key elements in future air traffic control systems. Further products will include the advanced computers I previously mentioned, air and ground data communications,

electronic digital voice and data communications switching equipment, "real-time" display of hazardous weather data on the controllers scopes, higher levels of automation to relieve the controllers of routine tasks -- the list can go on. All of these efforts are directed towards improving safety and productivity, and reducing costs.

That is a very large development program I have just sketched. Obviously, there must be resources available in a timely manner if our goals of improved safety and productivity and reduced costs are to be realized. The Congress currently has before it proposed legislation concerning the updating and renewal of the Airport and Airway Trust Fund (ADAP). Within the proposed legislation is a mechanism through which our E&D programs can be funded, consistent with our plans for the future. The proposed authorization levels for the five year period 1981-1985 will total \$500 million.

The aviation industry is a vital part of the U.S. economy, and it's important that our E&D programs assist in its further development. The health of the U.S. aviation industry was a major concern in 1976. High on the list of concerns was a fear that the U.S. airlines would not be able

to raise the necessary capital to purchase new high technology, fuel-efficient aircraft to replace the fleet of older narrow body aircraft.

The events of the last three years have proven these concerns to be unfounded. Concurrent with the overall improvement in the economy and airline economic deregulation, U.S. airlines have experienced three consecutive profitable years. Not only have they ordered increased numbers of current production aircraft, but they have also supported the introduction of a new generation of high-technology aircraft, the B-757 and the B-767.

Furthermore, new production models of older jets (particularly the L-1011 and the B-747) are employing new technology to make them more fuel efficient. The newly introduced DC-9-80 employs a variation of the JT8D engine derived directly from the National Aeronautics and Space Administration's (NASA) research on quieter, more fuel-efficient engines.

While it is still true that the foreign manufacturers are making inroads into the U.S. manufacturer's domain with new aircraft sales to foreign airlines, there is no reason to believe that any intervention by the U.S. Government is

warranted. We are already providing partial subsidies to foreign airlines through low cost loans by the Export-Import Bank. Domestically, all but the large U.S. trunk carriers are eligible for up to \$100 million in loan guarantees for the purchase of new aircraft. It is interesting to note that most of the eligible certificated carriers have been able to obtain new equipment financing without the Federal loan guarantees.

The U.S. avionics industry is currently in a relatively strong position, but much stronger competition can be anticipated over the next five years, as the other electronics exporting nations continue to adopt our current technologies to sell to our current customers. Our continued leadership in this area will likely be highly dependent upon our development and exploration of technological advances. With the growth in new airframes, and increased demand for services, one can confidently expect U.S. industry operating under the free enterprise system to meet this challenge successfully.

Earlier today, Dr. Frosch, the Administrator of the National Aeronautics and Space Administration (NASA), appeared before you. The FAA and NASA are moving into a stage of

cooperation that is bringing more joint efforts in highly complex areas. An example would be the human factors aspects of providing pilots with air traffic control data in the cockpit.

Mr. Chairman, that concludes my prepared statement. Mr. Al Albrecht, our Associate Administrator for Engineering and Development and I are prepared to answer any questions you may have.