

STATEMENT OF THE HONORABLE DONALD D. ENGEN, FEDERAL AVIATION ADMINISTRATOR, BEFORE THE HOUSE COMMITTEE ON SCIENCE AND TECHNOLOGY, SUBCOMMITTEE ON TRANSPORTATION, AVIATION, AND MATERIALS, CONCERNING THE RESEARCH, ENGINEERING AND DEVELOPMENT PROGRAM AND THE NATIONAL AIRSPACE SYSTEM PLAN, MARCH 19, 1985

Mr. Chairman and Members of the Subcommittee:

It's a pleasure to appear before you again. I have with me today: Al Albrecht, the Associate Administrator for Development and Logistics; Frank Frisbie, Deputy Associate Administrator for Development and Logistics, who is directing our National Airspace System (NAS) Plan effort; Neal Blake, the Deputy Associate Administrator for Engineering.

We will review our fiscal year 1986 budget request and future program requirements in the Research, Engineering and Development (R,E&D) Program and our progress in the implementation of related programs in the National Airspace System (NAS) Plan.

This is an extraordinary year for Federal budgeting and our programs are no exception. The need to curb the Federal deficit has generated an unprecedented degree of fiscal scrutiny of every Federal program; our programs, appropriately, have undergone that same kind of rigorous

review within the Administration. Our requests for FY 1986 in both R,E&D and Facilities and Equipment (F&E), reflecting the need for fiscal prudence, are below the levels set forth in the authorizing legislation, consistent with the President's important budgetary goals for FY 1986.

I don't want to suggest that it was a simple task for us to pare down our budget requests; it was not. As I will describe in a moment, it required that we take a particularly hard, objective look at our programs and reorder our program needs in a way that the most critical needs were dealt with first. Of course, any research and development process is a dynamic one, regardless of budgetary changes, and it is necessary to oversee and manage needed changes so that they remain consistent with the established end objectives. We have done that with our current budget requests. Both requests will keep our research programs and the work needed to support the NAS Plan essentially on schedule.

To achieve the \$18 million difference between the R,E&D authorization and request levels, I set two basic priorities: one, we must continue to emphasize safety; two, we must provide continuity of support to the NAS Plan. These are the

fundamental ground rules we have used, and will continue to use, to manage our programs consistent with the need for fiscal restraint. Insofar as our R,E&D funding is concerned, the Advanced Automation Program alone has a requirement for slightly more than 53 percent of the R,E&D request. I have directed that we continue our emphasis on this program because of its critical nature. Consequently, the funds available for other programs are limited, meaning there are constraints in applying the remaining funds toward non-safety or non-NAS Plan efforts. Therefore, we will shift program emphasis in the following ways: we will defer for a few months some of the longer range types of efforts in the aircraft safety area; we have deferred advanced research and technology efforts such as the application to aeronautical purposes of advanced capabilities in satellites, sensors, and displays; we have curtailed some non-safety related airport R&D; we have adjusted the Weather Program to concentrate on the most critical and immediate requirements; and we have deferred contract efforts on Flight Service Automation enhancements.

The annual updating of the NAS Plan is in progress, and we plan to make the initial distribution of the update in April. There will be no major changes in the plan. Our overall cost estimate for the implementation of the plan will remain at

\$11.7 billion. Funding requirements will be adjusted to reflect the fact that the F&E authorization for fiscal years 1982 through 1987 will not be fully utilized by the end of FY 1987.

From an overall perspective, I believe we are making solid progress in the upgrading and modernization of the air traffic control system. This includes Research and Development as well as Facilities and Equipment projects which evolve largely from the R&D. I am pleased to report that, of these major programs, the Host, Advanced Automation, ASR-9, Mode-S, and Voice Switching and Control System (VSCS) are not only on schedule but within the budget we have allocated to them. We are now evaluating the production proposals and will award the Host production contract in July; the Advanced Automation System design competition activities are continuing on schedule; we have issued the request for proposals for VSCS and ASDE-3; we have exercised the options for the FY-1985 quantities on the ASR-9 and Mode-S; and we have awarded two contracts for the equipment fabrication and execution of the TCAS limited implementation program. I intend to continue to personally monitor these programs on a recurring basis to assure a continued emphasis on both timeliness and cost consciousness.

With respect to the Microwave Landing System (MLS), we project a possible 9 month delay in getting delivery of the first production unit because of the contractor's delays in achieving a design which is acceptable to us. If this occurs, we intend to offset the delay by accelerating efforts during the production run, so that, overall, MLS implementation should be completed on schedule. This illustrates the point I made earlier about how, independent of budgetary issues, any effort to upgrade technology is a dynamic process in which changes are inevitable; the difficulty is in managing those changes in a way that the end objective is met.

Alternative studies are being conducted of the FSS and NEXRAD programs. We are currently studying the possibilities of turning some or all of the flight service station functions over to the private sector. We have initiated the study, and anticipate its completion by the end of May. At this time, I do not plan any major changes of direction in our flight service station modernization program. I assure you we will review carefully whatever information is developed during the course of the study.

We are not requesting FY 86 funding in F&E for the FSS automation effort and have deferred the contract work on enhancements in R,E&D until completion of the study. We do

not anticipate these deferrals will compromise our overall ability to pursue the program to its conclusion, should the study confirm that no fundamental change in direction is appropriate.

The National Weather Service (NWS) will soon conduct studies involving technical alternatives and related economic considerations regarding the NEXRAD Program. Specifically, they are seeking to verify whether any "off-the-shelf" technology exists which would meet specified operational requirements. Although funding for limited production contracting has been deleted from both the NWS and FAA FY 1986 requests, we have continued our efforts on the evaluation of a competitive design runoff to preclude unnecessary delays if the current direction of our program is confirmed by the study.

Before closing, Mr. Chairman, I want to make an observation which I believe is significant concerning the future direction of our research and development efforts. I am concerned that concentration on supporting the NAS Plan may be at the possible expense of a research and development program that should be looking into the system needs for the year 2010 and beyond. In other words, have we focused too sharply on the immediate tasks at hand, forcing us into a catch-up game later

on to meet the needs of the next century? Therefore, I have directed that, to ensure that we pay adequate attention to longer range R&D, we develop a comprehensive plan envisioning the needs of the early decades of the 21st Century. That effort has been underway for several months, and will be completed by October. I am sure you will share my interest in such a project, and we will be pleased to discuss our plans with you in detail as they evolve.

Mr. Chairman, that concludes my overview of our R,E&D and NAS Plan activities. Tomorrow, Al Albrecht, Neal Blake, and Frank Frisbie will fill you in on the details of various R&D programs. To complete our presentation today, with your permission, I would like Frank to discuss the status of the System Engineering Integration (SEI) contract, our FY 86 R,E&D and NAS Plan program resource requirements, and our management efforts to complete the overall upgrading and modernization of the air traffic control system in a timely and economical manner. When he has completed his briefing, we will be pleased to answer your questions.