

STATEMENT OF JOSEPH M. DELBALZO, EXECUTIVE DIRECTOR FOR SYSTEM DEVELOPMENT, FEDERAL AVIATION ADMINISTRATION, BEFORE THE HOUSE COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY, SUBCOMMITTEE ON TRANSPORTATION, AVIATION, AND MATERIALS, CONCERNING THE FAA'S RESEARCH, ENGINEERING, AND DEVELOPMENT PROGRAMS. APRIL 12, 1989

Mr. Chairman and Members of the Subcommittee:

Thank you Mr. Chairman. Let me say at the outset how delighted I am to be here. This Committee has made significant contributions to our Agency over the years, and particularly so in the last year with the passage of the Aviation Safety Research Act of 1988. I know that you had hoped Secretary Skinner could be here today. The Secretary is looking forward to sitting down with you in the future and discussing a variety of issues.

The FAA appreciates the support this Subcommittee has provided for our efforts to restructure our R,E&D program. There have been many changes since we last met and I would like to provide you with a broad overview of our program, where we are today and where we hope to be in the near and distant future.

In the past decade, the air transportation system in the United States has undergone a massive transformation. The rigidly regulated system of airline routes and fares has given way to an economically deregulated system. Where at one time entry into a market could be denied for a variety of reasons, we now have a

Concurrent with the increase in traffic, the level of delays also increased. Delays in the system increased by 34.5 percent between 1978 and 1987, growing from an average of 5.8 minutes per operation to 7.8 minutes per operation over that time period. Delay increases at the hub airports exceed the national average.

On the ground the congestion in and around the airports grew as the number of passengers enplaned in domestic flights grew by 68 percent. This has placed increased pressure on airport infrastructure and the interface between the airport and the off-airport road system.

A new threat against the safety of passengers emerged as international terrorists turned to attacks against civilian aircraft and their passengers. As systems to detect carry on weapons improved and became more effective and efficient, the threat turned from hijackings to bombings. Since mid-1982, there have been 16 incidents worldwide involving bombs and commercial aircraft, including the tragic bombing of Pan Am 103 over Lockbie, Scotland, on December 21, 1988.

All of these, and other forces, resulted in strains on the ability of the system of airports and airways to accommodate the new growth. FAA computers were running out of capacity to handle the workload. Vacuum tube based equipment was becoming more costly and difficult to repair and maintain. New aircraft, employing new