

STATEMENT OF THE HONORABLE DONALD D. ENGEN, FEDERAL AVIATION ADMINISTRATOR, BEFORE THE HOUSE COMMITTEE ON PUBLIC WORKS AND TRANSPORTATION, SUBCOMMITTEE ON INVESTIGATIONS AND OVERSIGHT, CONCERNING NEAR MIDAIR COLLISION REPORTS. JUNE 26, 1985.

Mr. Chairman and Members of the Subcommittee:

I welcome the opportunity to appear before you today on the subject of near midair collisions. I appreciate and share your interest in seeing that near midair collision (NMAC) data are accurately compiled by the FAA. Recently I have taken steps to improve the accuracy and timeliness of our NMAC reporting system. I will elaborate on this point in my statement. I understand the Subcommittee is also interested in the issue of reduced exits aboard the 747. Following my statement, I will be pleased to respond to questions you may have on this issue.

As the Subcommittee is aware, we determined in January that there were discrepancies in our near midair collision reporting system. Although these discrepancies were inadvertent and did not represent an attempt on anyone's part to "filter" data, it nevertheless concerned me a great deal that the reporting system was not as accurate as we could make it. To fulfill my safety responsibilities as Administrator, I need accurate and timely data to monitor system performance, allocate resources, and direct agency priorities. We have over time already directed substantial resources and effort toward preventing midair collisions, even though the threat of such collisions is exceedingly remote. Therefore, the discrepancies in NMAC data did not result in a failure to do anything differently than we

already have. Nevertheless, as I indicated, I was concerned by the inadequacies of the reporting system since I need accurate data concerning all facets of system performance, and I expect no less. Further, the public has a right to demand and receive a full accounting of the performance of the national aviation system. Therefore, I have taken action to improve our near midair collision reporting system to prevent future discrepancies in reports. I would like to take a moment to describe the steps I have taken.

The FAA near midair collision data base has historically contained only data concerning near midair collision reports that have been investigated by our flight standards inspectors. While our reporting program called for preliminary reports of near midair collisions to be reported to Washington Headquarters, this preliminary information was not logged into the computer data base. Instead, final information concerning each incident, following an investigation of the incident, was reported to Washington and logged into the near midair collision data base at that time. This meant that there was a built-in time lag for each incident to be entered into the data base since an investigation had to be completed first. In addition, we discovered that some preliminary reports were not getting to FAA Headquarters.

Recognizing the importance of these incidents being included in our totals, I have now directed that all preliminary reports of

near midair collisions be forwarded to Washington to a central point and logged into the data system upon receipt. We will now be able to access real time data on preliminary plus completed near midair collision investigation reports. There is a danger that over-reporting will convey a false picture just as under-reporting would. I prefer the former to the latter. We will, of course, continue to investigate each near midair collision as we have in the past and to enter valuable findings concerning investigated incidents as we have in the past. The primary benefits, then, of this change are that current numbers of near midair collision reports will be readily available and that all preliminary reports will be contained in one data base making it far less likely for any data discrepancies to occur in the future.

Another key step I have taken concerns the appointment of an auditor to validate the new near midair collision data reporting system. I am appointing an auditor, independent of the FAA, to look at our administrative process for handling the reports of near midair collisions; track data through the system; and report to me on the accuracy and effectiveness of that system. This way I can confirm to myself that the changes I have made are, in fact, doing what I expect.

Having discussed the "process" associated with near midair collisions, I would like to take a few moments now to discuss

the "substance" of near midair collisions. First, I want to make it clear that the threat of being involved in an actual midair collision is exceedingly remote for any airspace user, and that the skies are indeed safe. Commercial aviation remains the safest means of travel. The safest part of your journey between two distant cities is your time spent in an airplane. We cannot be complacent, however, with the high safety levels we have attained. Our objective in the FAA must be to achieve zero midair collisions and we will continue to work diligently on this issue until that goal is attained. Obviously, as long as there are near midair collisions, the possibility of a midair collision exists, although, surprisingly, we have never been able to draw any significant statistical correlation between the numbers of near midair collisions and the number of actual collisions.

Midair collisions historically have occurred at the rate of about 30 each year. That averages to about one midair collision in 3,000,000 flights. Recent years have seen slightly fewer. For the years 1981 to 1984, for example, we experienced 30, 29, 14, and 24 midair collisions, respectively. The number of fatal accidents was, of course, even smaller. We find that the numbers of fatal midair collisions and fatalities were also relatively constant during that time. For the years 1981 to 1984, the respective numbers of fatal accidents and fatalities for midair collisions were: 13 accidents, 47 fatalities; 18

accidents, 59 fatalities; 7 accidents, 22 fatalities; and 14 accidents, 47 fatalities.

NTSB historical data for the five-year period 1977 to 1981 show that the "typical" 30 annual midair collisions break down as follows. About 75% of these events occur at uncontrolled airports. Almost 90% of these accidents involve two general aviation aircraft. Midair collisions primarily occur outside of the air traffic control system. In fact, in almost 70% of these instances, neither aircraft was under any air traffic control.

The data suggest that the possibility of involvement in a midair collision is virtually infinitesimal. Let me elaborate on that point by way of an illustration. FAA and Civil Aeronautics Board data compiled by the National Transportation Safety Board show that in 1984 there were about 43 million hours flown. NTSB data show there were 3180 accidents during that time, in all facets of civil aviation from all causes. That represents a total accident rate, according to the Board, of 7.35 accidents per 100,000 hours flown. The midair collision rate during that year was .056 per 100,000 hours flown. The fatal accident rate from midair collisions was an even smaller .032 per 100,000 hours. The rate is far smaller still for scheduled air carriers, since there has only been one midair collision involving this segment of aviation in the last four years.

Let me assure the Chairman that I am not citing these data to indicate that I consider midair collisions not to be a concern. To the contrary. As long as there is the possibility of one midair collision occurring, we must dedicate ourselves to preventing them. At the same time, though, it is important that the American travelling public be presented a fair portrayal of the safety of our system. As I said earlier, the system is safe. The fundamental purpose of our air traffic control system is to prevent midair collisions by separating aircraft. Air traffic procedures as well as the Federal Aviation Regulations are designed to achieve this objective. When they are not followed, safety suffers. The hard data on actual midair collisions is clear evidence of that fact.

We place a high degree of importance on preventing midair collisions and have taken and continue to take a variety of actions to achieve that objective. For example, within the last year, we have published two articles in our General Aviation News covering "see and avoid" and scanning techniques. We have made near midair collision issues a major emphasis item at all Accident Prevention Seminars which are attended by 450,000 pilots annually. We are rewriting FAA pilot exams to include questions pertaining to visual scanning techniques, and are revising the Flight Instructor refresher clinic curriculum to include more emphasis on see and avoid and visual scanning techniques. We have stressed with our air carrier inspector

personnel the need to assure that carriers' training programs and operating manuals emphasize the importance of maintaining external cockpit vigilance. In conjunction with the Aircraft Owners and Pilots Association, we developed an audio/visual presentation concerning see and avoid and visual scanning techniques. And I met with user groups last August to discuss the see and avoid concept as well as other views and actions for all pilots.

We have also taken action to emphasize to our controller personnel the need to provide traffic and safety advisories to system users. Beyond that, we have proposed the establishment at the busier airports of a new air traffic concept, called Airport Radar Service Areas (ARSAs), to offer a higher level of air traffic service and further reduce the potential for midair collisions. The ARSA concept has already been successfully tested at several major airports, including Baltimore Washington International. We are also continuing work on the Traffic Collision Avoidance System. In short, we have taken a variety of actions to reduce the threat of midair collisions and this will remain a priority with us.

In summary, Mr. Chairman, I would reiterate my concern that the FAA's near midair collision data reporting system must be designed to accurately capture all near midair collision reports made to the FAA. The changes I have recently made are intended

to meet that objective. Further, although the risk of midair collisions is extremely small, we must continue to actively pursue means of reducing it even more. Our ultimate objective must be to prevent any midair collision from occurring, and I assure you that we will continue to vigorously pursue that objective.

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