

## National Transportation Safety Board

Washington, D.C. 20594

## Safety Recommendation

Date: November 30, 1994

In reply refer to: A-94-206

To U.S. Domestic Air Carriers (see attached list)

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The National Transportation Safety Board has had a longstanding interest in commuter airline safety and has issued safety recommendations in the past seeking various actions by government and industry to address needed safety improvements. The recommendations followed the Board's 1972 study of air taxi safety, its 1980 study of commuter airline safety, and investigations of accidents involving commuter airline operations. In response to the recommendations and through other initiatives taken by government and industry, regulatory revisions and other actions have resulted in a greatly improved safety record for scheduled passenger operations conducted under Title 14 Code of Federal Regulations (14 CFR) Part 135: the accident rate per 100,000 departures in 1993 was one-fourth the accident rate observed in 1980.

However, despite past efforts of government and industry to bring about safety improvements, accident rates for commuter airlines continue to be twice as high as the rates for domestic Part 121 airlines. The Safety Board recognizes that certain factors may contribute to the higher accident rate for commuter airlines. Commuter flights generally operate at lower altitudes and thus cannot always evade severe weather by flying over it. Further, facilities at many airports served by commuter airlines do not have sophisticated landing aids or are not as well-maintained as large airports served by major airlines. Nevertheless, the Board believes that additional safety improvements can be made that would have a positive impact on the safety record of commuter airlines.

Recent accidents have highlighted the need for these additional safety improvements, particularly in areas such as pilot training and experience, flightcrew coordination, maintenance and inspection, airline management oversight, and Federal Aviation Administration (FAA) surveillance. In a 26-month period from December 1991 to January 1994, there were 14 fatal accidents involving scheduled commuter flights and commuter airline training flights; 56 persons were killed.

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The consistently higher accident rate demonstrated by commuter airlines, the recent accidents involving commuter airlines, and the public's lack of awareness about the different regulatory standards in the commercial aviation industry (which are based, in part, on the seating capacity of the aircraft), have raised concerns by government and industry about the continued safety of the commuter airline industry and the adequacy of the regulations that govern commuter airlines. A portion of the industry believes that, given the changes and dramatic growth observed in this segment of the airline industry over the past 14 years, commuter airlines should be governed by the same regulations that apply to major airlines. These issues and concerns prompted the Safety Board to initiate a safety study of the commuter airline industry in February 1994. The purpose of the study was to examine the standards and practices of the commuter airline industry, with particular emphasis cn areas where differences occur between the regulatory standards for Part 135 and Part 121 operations.

In the spring of 1994, the Safety Board conducted onsite interviews with airline management, pilots, flight attendants, and mechanics at 21 commuter airlines. In addition to the onsite survey, the Safety Board convened a public forum on commuter airline safety on June 14, 15, and 16, 1994, in Atlanta, Georgia. Thirty seven representatives from government, industry, airlines, trade groups, labor unions, aircraft manufacturers, and training centers participated in seven panel sessions convened to discuss issues and concerns in the following broad areas: (1) flightcrew scheduling and dispatching; (2) flightcrew training and qualifications; (3) aircraft maintenance and inspection; (4) cabin safety; (5) aircraft certification and design; (6) airline management oversight and safety programs; and (7) FAA surveillance and oversight. Using the results of the commuter airline survey, transcript of the public forum, and information from its previous studies and accident investigations, the Safety Board examined the current standards and practices of the commuter airline industry relevant to the safety issues and concerns in these seven areas.<sup>1</sup>

The public's lack of awareness about the differences in regulatory standards between Parts 135 and 121 relates, in part, to the "code-sharing arrangements" between airlines.<sup>2</sup> As commuter airlines increasingly moved into markets that were formerly served by major carriers, or created new markets that provided service not previously available, visible differences between commuter airlines and major airlines began to disappear. The advent of inter-airline code-sharing arrangements was a distinct factor in the loss of individual carrier identities between commuter airlines and major airlines. Commuter airlines that have a code-sharing arrangement with a major airline typically paint their aircraft with the color scheme of the major

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<sup>&</sup>lt;sup>1</sup> For a detailed discussion of these areas, see: National Transportation Safety Board. 1994. Commuter airline safety Safety Study NTSB/SS-94/02. Washington, DC.

<sup>&</sup>lt;sup>2</sup> The term "code-sharing" refers to the practice by commuter airlines of using the two-letter designator code of a major airline to list their flights in airline reservations systems.

airline, and they do business under a company name that closely resembles the major airline, such as "Northwest Airlink," "Delta Connection," "United Express," "American Eagle," and so on. Although these names might imply ownership and control by a major airline, this is not necessarily the case. A code-sharing arrangement may or may not involve some degree of ownership of the commuter airline by its major airline code-sharing partner.

The distinction between commuter and major airline operations previously apparent to the traveling public has been blurred by code-sharing arrangements because of several factors: (1) the close association of some commuter airlines with a major carrier in specific markets; (2) inter-airline agreements between commuter airlines and the major carriers, whereby the major airline will ticket and handle baggage for passengers who connect with commuter flights; (3) integrated listings in the Official Airline Guide; and (4) routine referral of passengers by travel agents and major carriers to affiliated commuter airlines that service small, isolated markets.

As this segment of commercial aviation has continued to grow, the airlines have become known as regional airlines. Regional airlines may conduct flight operations under Part 135 (which applies to aircraft with 30 or fewer passenger seats) or Part 121 (which applies to aircraft with more than 30 passenger seats), or both, depending on the type(s) of aircraft they operate.<sup>3</sup>

In the 1980s, the regional airline segment of commercial aviation grew dramatically. Data from the Regional Airline Association (RAA) indicate that in 1980, regional airlines provided service to nearly 15 million passengers.<sup>4</sup> By 1993, the number of passenger enplanements had increased to over 52 million, and nearly 70 percent of U.S. communities offering scheduled air service depended exclusively on a regional airline as the originating or terminating source of air transportation. Between 1980 and 1993, the number of aircraft in use by the regional airline industry had grown from 1,339 to 2,208.

With continued growth in passenger traffic, regional airlines increasingly have integrated larger, more sophisticated aircraft into their fleets. According to the RAA, as larger aircraft have been introduced, the average seating capacity for regional airlines has increased from 13.9 seats per airplane in 1980 to 23 seats per airplane in 1993. Although regional airlines have steadily added more of the larger capacity aircraft, operated under Part 121, to their fleets in recent years, the largest percentage of their aircraft still contain 10-19 seats, and operations of these aircraft are conducted under Part 135. According to the RAA 1994 annual report, in 1993,

<sup>&</sup>lt;sup>3</sup> The terms "regional" and "commuter" are often used interchangeably. As used in this letter, "commuter" refers to all scheduled passenger service operations conducted under Part 135.

<sup>&</sup>lt;sup>4</sup> Regional Airline Association. 1994. 1994 annual report. Washington, DC.

52 percent of the available seat miles in the regional segment of the industry continued to operate under 14 CFR Part 135.

The trend toward code-sharing arrangements with major airlines has also continued. In 1993, according to the RAA 1994 annual report, there were 48 codesharing arrangements between commuter airlines and major airlines, and 36 (72 percent) of the 50 largest commuter airlines had a code-sharing arrangement with at least one major airline.

Although the association with major airlines has been advantageous to the commuter airlines, many passengers are not aware of the regulatory and operational differences between the major and commuter carriers, nor are they aware that many major airlines that have a code-sharing arrangement with a commuter airline may have no direct oversight of flight operations, maintenance, or safety of their code-sharing commuter partner.

Code-sharing arrangements between commuter airlines and major airlines vary from simply marketing agreements to full ownership of a commuter airline by its code-sharing partner. A commuter airline's association with its code-sharing partner is often reflected by a company name and color scheme that are similar to those of the major airline, ticketing and baggage handling for connecting passengers, integrated listings in published flight schedules, and referral of passengers by major airlines to affiliated commuter airlines. Thus, code-sharing arrangements have created and fostered a public perception that a commuter airline is fully owned by the major airline, and the traveling public holds the major airline accountable for the safe operation of the commuter airline. Therefore, there is an obligation on the part of each code-sharer to act accordingly through establishment of a safety program that incorporates communication and coordination between the major airline and the codesharing commuter airline to provide the traveling public with a level of safety concern commensurate with the public's expectations.

The Safety Board believes that code-sharing arrangements between major airlines and commuter airlines generally represent a positive development in commercial aviation. These arrangements potentially increase access for commuter airlines to technology and resources, such as training simulators, that otherwise would not be available or that would be cost-prohibitive. The Board recognizes that the safety of commuter air carrier operations does not depend on establishing a codesharing arrangement, nor does the establishment of a code-sharing arrangement guarantee the highest level of safety necessary for a commuter airline operating passenger service. A commuter airline that combines a corporate philosophy in which safety is paramount with a commitment to provide the necessary resources to achieve the highest level of safety may do so without a code-sharing arrangement.

Nevertheless, the Safety Board believes that a major airline participating in a code-sharing arrangement with a commuter airline has a responsibility for operational oversight of its partner that includes a program of regular safety audits of flight operations, training programs, and maintenance and inspection. Thus, the Safety Board believes that the U.S. Department of Transportation should require U.S. domestic air carriers certificated under 14 CFR Part 121, when involved in a codesharing arrangement with commuter airlines, to establish a program of operational oversight of their code-sharing partners that (a) includes periodic safety audits of flight operations, training programs, and maintenance and inspection; and (b) emphasizes the exchange of information and resources that will enhance the safety of flight operations.

Considerable time may elapse before such a requirement is adopted and implemented. In the interim, the Safety Board believes that the major airlines should take action to establish such a program of operational oversight. Further, the Board believes that the RAA should encourage its member airlines to assist U.S. domestic air carriers with which they have a code-sharing arrangement to establish a program of operational oversight by the air carrier.

The Federal regulations that govern the safety of flight represent the minimum acceptable standard of safety by which all airlines must operate. The Safety Board believes that the standards for safety should be based on the charactistics of the flight operations, not the seating capacity of the aircraft, and that passengers on commuter airlines should be afforded the same regulatory safety protections granted to passengers flying on Part 121 airlines. In this regard, the Board believes that the regulations contained in 14 CFR Part 135 have not kept pace with changes in the commuter airline industry. The commuter airline segment of commercial aviation can no longer be viewed as an industry primarily comprising small air carriers that operate small, 10-seat airplanes to provide essential air service to remote communities. Today, many commuter airlines operate extensive route systems, and use highly sophisticated transport category aircraft, the safe operation of which depends upon crewmembers who should be qualified and trained to the same standards as are required of crewmembers who fly Part 121 operations. Further, the proliferation of code-sharing arrangements has given rise to coordinated air service between commuter airlines and major air carriers that should be governed by a single regulatory standard, wherever possible.

However, the Safety Board recognizes that the commuter airline industry is diverse, and that some requirements necessary to improve the standard of safety in one aspect of the industry, may be impractical in other aspects. The Board believes that scheduled Part 135 air service that uses high performance, transport category aircraft should be operated under the same regulatory standards that govern the Part 121 air carriers. Consequently, the Safety Board believes that the FAA should revise the Federal Aviation Regulations such that all scheduled passenger service conducted in aircraft with 20 or more passenger seats be conducted according to the provisions of 14 CFR Part 121. Additionally, scheduled passenger service conducted in aircraft with 10 to 19 passenger seats should be conducted in accordance with 14 CFR Part

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121, or its functional equivalent, wherever possible. The Board believes that these regulatory changes, in combination with the FAA's anticipated revisions to the flightcrew training requirements that will create a single training standard for flightcrews, will enhance the safety of commuter airline operations to a level that is equivalent to current operations conducted under Part 121.

Therefore, as a result of this study, the National Transportation Safety Board recommends that the U.S. domestic air carriers:

Establish a program of operational oversight with commuter airline code-sharing partners that (a) includes periodic safety audits of flight operations, training programs, and maintenance and inspection; and (b) emphasizes the exchange of information and resources that will enhance the safety of flight operation. (Class II, Priority Action) (A-94-206)

Also as a result of the study, the Safety Board issued safety recommendations to the U.S. Department of Transportation, the Federal Aviation Administration, and the Regional Airline Association.

The National Transportation Safety Board is an independent Federal agency with the statutory responsibility "...to promote transportation safety by conducting independent accident investigations and by formulating safety improvement recommendations" (Public Law 93-633). The Safety Board is vitally interested in any actions taken as a result of its safety recommendations and would appreciate a response from you regarding action taken or contemplated with respect to the recommendation in this letter. Please refer to Safety Recommendation A-94-206 in your reply.

Chairman HALL and Members LAUBER and HAMMERSCHMIDT concurred in this recommendation.

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