

106 1224

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

ISSUED: August 8, 1980

Forwarded to:

Honorable Langhorne M. Bond
Administrator
Federal Aviation Administration
Washington, D.C. 20591

SAFETY RECOMMENDATION(S)

A-80-64 through -75

On January 31, 1980, the National Transportation Safety Board completed a 4-day public hearing on commuter airline safety. The hearing followed an extensive 4-month special investigation of the commuter industry and the elements which affect commuter airline safety. The special investigation included an on-site survey of 45 commuter airlines throughout the United States, a study of the role and effectiveness of the Federal Aviation Administration and the Civil Aeronautics Board, the influence of the airport environment, financial posture and management structure on individual airlines and on commuter airline safety, and an evaluation of the operational, maintenance, and training programs of the commuter airline industry. The Safety Board used its 1972 "Air Taxi Safety Study" and its commuter aircraft accident investigation experience as a basis to determine the safety issues which were involved and to evaluate the progress the commuter airline industry and the FAA are making toward correcting the deficiencies.

The Safety Board's study of the FAA's role in the surveillance of the commuter airline industry indicates there is a need for special training of FAA inspectors, to conduct surveillance of commuter airliner. In addition, the staffing levels at FAA offices responsible for commuter airline surveillance and the workload requirements of the individual inspectors generally do not provide for the accomplishment of effective commuter airline surveillance unless other safety-related, general aviation activities are curtailed. The findings concerning FAA workloads were the subject of several Board recommendations in previous years and were an important finding in the recent special investigation and hearing. The Board also received much testimony that the FAA should standardize surveillance procedures so that each region, district office, and inspector has the same interpretation of FAA regulations and procedures. In addition, the Board concluded that procedures should be revised to provide surveillance of maintenance activities during the work shifts when maintenance is performed. For example, there were indications that very little maintenance surveillance was conducted during the night shifts when the bulk of maintenance activities were performed.

2762B

AAS-80-1

The Safety Board believes that the revision of 14 CFR 135 has upgraded safety standards for commuter airlines. However, the Board believes that Part 135 should be amended to strengthen the requirements for the training of pilots, especially for training in emergency procedures, weight and balance, and center of gravity. These safety deficiencies, coupled with a lack of knowledge by some flight operations personnel on dispatch procedures, have contributed to several accidents in recent years. Finally, the Board believes that 14 CFR 135 should be amended to increase the frequency of determining the aircraft empty weight and center of gravity for aircraft used in commuter operations.

In addition to the upgrading of pilot training programs, the Safety Board believes that 14 CFR 135 should be revised to establish a minimum number of multiengine flight hours for a pilot-in-command of a multiengine aircraft used in commuter operations. The Universal Airways accident at Gulfport, Mississippi, on March 1, 1979, and the Comair accident at Cincinnati, Ohio, on October 8, 1979, reinforced the Board's belief that a pilot's inexperience in reciprocating multiengine aircraft can affect performance in emergency situations.

The Board's survey of commuter-served airports revealed that those airports served by certificated route air carriers are better equipped with approach and landing aids. For example, 67 percent of the airports served exclusively by commuter airlines do not have a precision instrument approach facility, while 16 percent of these airports have no instrument approach facility. The Board believes that the safety of the public which travels on commuter airlines requires equivalent levels of service, and that there should not be an appreciable difference in airport facilities. The qualification criteria for instrument approach facilities, approach lights, visual approach slope indicators, and other facilities should be revised to allow commuter-served airports to achieve a level of safety equivalent to those airports served by certificated route air carriers. The Board believes that the funding for many of the commuter airport improvements could come from the Aviation Trust Fund if the ADAP criteria were amended to provide a larger share of the revenues to commuter-served airports.

As a result of its study, the National Transportation Safety Board reiterates the following recommendations to the Federal Aviation Administration:

Require that pilots involved in 14 CFR 135 operations be thoroughly trained on the performance capabilities and handling qualities of aircraft when loaded to their maximum certificated gross weight or to the limits of their c.g. envelope, or both. (Class II, Priority Action) (A-79-80).

Expedite rulemaking which would make the flight time and duty time limitations, and rest requirements for commuter air carriers the same as those specified for domestic air crewmembers under 14 CFR 121. (Class II, Priority Action) (A-79-81)

Develop, in cooperation with industry, flight recorder standards (FDR/CVR) for complex aircraft which are predicated upon intended aircraft usage. (Class II, Priority Action) (A-78-27)

Draft specifications and fund research and development for a low cost FDR, CVR, and composite recorder which can be used on complex general aviation aircraft. Establish guidelines for these recorders, such as maximum cost, compatible with the cost of the airplane on which they will be installed and with the use for which the airplane is intended. (Class II, Priority Action) (A-78-28)

In the interim, amend 14 CFR to require that no operation (except for maintenance ferry flights) may be conducted with turbine-powered aircraft certificated to carry six passengers or more, which require two pilots by their certificate, without an operable CVR capable of retaining at least 10 minutes of intracockpit conversation when power is interrupted. Such requirements can be met with available equipment to facilitate rapid implementation of this requirement. (Class II, Priority Action) (A-78-29)

In addition, the National Transportation Safety Board recommends that the Federal Aviation Administration:

Establish a separate classification of commuter airline inspectors to conduct commuter airline surveillance. (Class III, Longer Term Action) (A-80-64).

Provide specialized training for inspectors assigned to commuter airlines to insure that inspectors are qualified in the equipment operated and are knowledgeable regarding commuter airline operations. (Class II, Priority Action) (A-80-65).

Allocate GADO resources to insure that all commuter surveillance and general aviation requirements can be accomplished. (Class III, Longer Term Action) (A-80-66).

Establish a procedure for distributing surveillance of commuter airline maintenance evenly during all periods when maintenance is performed. (Class II, Priority Action) (A-80-67).

Require that only actual passenger weights be used in weight and balance computations for reciprocative engine aircraft used in Part 135 flights which are certificated for nine or less passengers. (Class II, Priority Action) (A-80-68).

Amend 14 CFR 135.243 to require a minimum number of multiengine flight hours for a pilot-in-command of a multiengine commuter airline flight. (Class II, Priority Action) (A-80-69).

Amend 14 CFR 135 Subpart B to require that dispatch and flight operations duties are supervised by personnel trained in those functions. (Class II, Priority Action) (A-80-70).

Amend 14 CFR 135.185 to require that aircraft empty weight and center of gravity be determined more frequently. (Class III, Longer Term Action) (A-80-71).

Evaluate and revise as appropriate the criteria for the authorization of single-pilot IFR operations for commuter airlines. (Class III, Longer Term Action) (A-80-72).

Expand the ADAP program to support the development of commuter-served airports. (Class II, Priority Action) (A-80-73).

Revise the qualifying criteria to insure that a larger percentage of commuter-served airports are equipped with instrument landing systems. (Class II, Priority Action) (A-80-74).

Insure, to the extent possible, that airports which are served by commuter airlines are equipped with an instrument approach facility. (Class II, Priority Action) (A-80-75).

KING, Chairman, and McADAMS, GOLDMAN, and BURSLEY, Members, concurred in these recommendations. DRIVER, Vice Chairman, did not participate.



By: James B. King
Chairman