

Log 877

NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D.C.

ISSUED: July 5, 1978

Forwarded to:

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

SAFETY RECOMMENDATION(S)

A-78-41 42

On September 12, 1977, a Douglas DC-7BF crashed immediately after takeoff from Yakutat Airport, Yakutat, Alaska. All four crewmembers were killed and the aircraft was destroyed. The aircraft had been operated under the provisions of 14 CFR 91, Subpart D (Large and Turbine-Powered Multiengine Airplanes).

The National Transportation Safety Board's investigation of this accident revealed that the aircraft was improperly loaded; that the proper lease agreements had not been arranged; that the aircraft was not maintained in accordance with 14 CFR 91.217 (a); that there was no evidence that the copilot met the provisions of 14 CFR 91.213 or 14 CFR 61.55; and that no qualified flight engineer was on board.

Before this accident the Safety Board had investigated an accident involving a Convair 880-22M at Miami International Airport. The aircraft, which was operated under 14 CFR 91 Subpart D, crashed on takeoff when the pilot was unable to rotate the aircraft as a result of improperly loaded cargo. In addition, the investigation revealed that the basic operating weight and the weight and balance of the aircraft were incorrect in the records of the aircraft.

These are but two examples extracted from the records of 65 accidents which occurred from 1972 to 1976 involving aircraft operated under 14 CFR 91 Subpart D. (The Safety Board's review did not include the aerial application or fire control categories.) These 65 accidents resulted in 98 fatalities since, in many instances, the aircraft was hauling only cargo and crewmembers. These data revealed that the maintenance of the aircraft was either a cause or a factor in 46 percent of the accidents. This percentage of maintenance involvement is extremely high when compared to other categories of operations and indicates that a significant number of operators of 14 CFR 91 Subpart D aircraft are not maintaining their aircraft properly.

Many Subpart D aircraft are old, surplus air carrier or military aircraft. They are bought as cheaply as possible to make a profit for the owners. It is not unusual to find inadequate maintenance programs, crews which are minimally qualified, and confusing or illegal leasing arrangements. Frequently, FAA surveillance of Subpart D operators is difficult because of the instant creation of companies and the interchange of pilots.


We believe that the problems associated with Subpart D operators will grow as the number of surplus air carrier aircraft grows. Airlines are phasing out older B-707's, DC-8's, DC-9-10's, B-727-100's and turbopropeller aircraft. As these more complex and sophisticated aircraft replace the older DC-3's -4's -6's and 7's, the need for more reliable maintenance programs, pilot qualifications and training, and surveillance will increase correspondingly. For this reason, we believe it is necessary for the FAA to review and update all aspects of 14 CFR 91 Subpart D.

Consequently, we believe the requirements of Subpart D must be revised to assure that they provide adequate levels of safety to the crews which operate the aircraft and to the general public at and around the airports from which Subpart D aircraft operate. The review and revision should include maintenance program requirements, leasing stipulations, flightcrew qualifications, flight and duty time limitations, operational control, and weight and balance procedures.

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

Revise 14 CFR 91 Subpart D to assure that an adequate level of safety is provided wherever these rules are applicable. (Class III, Longer-Term Action) (A-78-42)

KING, Chairman, McADAMS, HOGUE, and DRIVER, Members, concurred in the above recommendation.


By: James B. King
Chairman