

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

ISSUED: August 16, 1978

Forwarded to:

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

SAFETY RECOMMENDATION(S)

A-78-66

On July 9, 1978, a McDonnell Douglas DC-3 crashed shortly after takeoff from the Richmond, Indiana, Airport, with 40 parachutists on board. As a result the aircraft was damaged heavily and 11 of the 42 persons on board were injured; 4 of these injuries were serious.

The aircraft had made an uneventful 30-minute flight earlier and had been refueled to 120 gallons before this takeoff. The engines were started, checks were completed, and the aircraft was taxied to runway 23.

After the application of takeoff power during the takeoff roll, the flightcrew began to bring the tail up and found that they were unable to move the elevator control forward. As the throttles were being closed, the aircraft rotated to an extremely nosehigh attitude and became airborne. When the aircraft had reached an altitude of about 50 feet, it started a sharp bank to the left and crashed on the left side of the departure runway.

The National Transportation Safety Board's investigation of the elevator control system revealed evidence that the swaged terminals on the elevator "up" cables had rubbed where the cables pass through a bulkhead at fuselage station 63, below the cockpit floor, and were "hanging up" there.

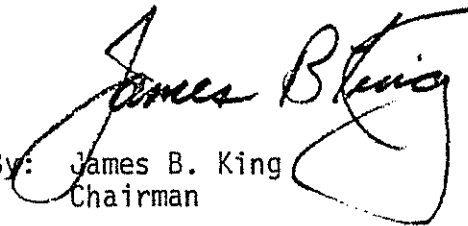
During examinations of several other DC-3 aircraft, the Safety Board was able to cause the swaged terminal on one of the elevator control "up" cables on one aircraft to lodge at the opening in the bulkhead at fuselage station 63. We also noted that in some of the aircraft the opening for the elevator "up" cables had been enlarged.

The Safety Board is aware that as a result of this accident the Federal Aviation Administration has issued an in-house Maintenance Alert Directive to inspect the elevator "up" cables on its DC-3 aircraft at fuselage station 63 within 10 flight-hours. In addition, the Safety Board is aware of the General Notice (GENOT) issued by the FAA on August 1, 1978, which applies to DC-3 aircraft operated in the United States. However, because of the circumstances of this accident and because of the potential for future accidents in other countries, the National Transportation Safety Board recommends that the Federal Aviation Administration:

Issue an immediate Airworthiness Directive requiring an inspection of the DC-3/C-47 elevator "up" cables for interference where they pass through the bulkhead at fuselage station 63. Those aircraft which are found to have cables which can interfere with the bulkhead should be corrected before their next flight. (Class I Urgent Action) (A-78-66)

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

By: James B. King
Chairman

A large, stylized handwritten signature in black ink, appearing to read "James B. King". The signature is written over the typed name and title.