

UNITED STATES OF AMERICA
NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

ISSUED: July 3, 1972

Adopted by the NATIONAL TRANSPORTATION SAFETY BOARD
at its office in Washington, D. C.
on the 7th day of June 1972

FORWARDED TO:)
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)
Honorable John H. Shaffer)
Administrator)
Federal Aviation Administration)
Washington, D. C. 20591)

SAFETY RECOMMENDATIONS A-72-78 thru 81

A fatal aircraft accident, which the National Transportation Safety Board is currently investigating, and a recent aircraft incident have indicated to the Board that a safety problem exists on twin-engined general aviation aircraft which have baggage compartments located in the nose section.

The accident involved a Beechcraft 65-B80, N841NS, which crashed on takeoff from Albuquerque, New Mexico, on May 19, 1972. Our preliminary findings indicate that the nose cargo door opened during takeoff. Pieces of loose cargo and the door were struck by the left propeller. The pilot feathered the left propeller and declared his intention to land. The aircraft crashed from a left turn following takeoff. All nine occupants sustained fatal injuries.

This aircraft was equipped with a safety interrupter switch which is designed to preclude starting of the left engine if the nose cargo compartment door is not properly latched. However, maintenance records indicate that the system had been inoperative for some time. This switch was found in the wreckage; however, the severity of the ensuing ground fire following the crash precluded the investigators from making any determination of its condition prior to the crash. This aircraft did not have any cargo restraining devices in the nose cargo compartment.

The incident, which involved a Beechcraft B-99 aircraft utilized for air taxi operations, was similar in nature except that the pilot made a

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successful emergency landing on the remaining runway. That aircraft was equipped with a cargo restraint system which was not in use, and with a door warning system which was inoperative.

The Board is concerned over this instance which has occurred despite the safeguards designed into the aircraft. The Board believes that double failure protection on these doors is required in view of the catastrophic consequences if this cargo door opens in flight. We understand that Beech Aircraft Corporation has recommended that the owners of Beech 99 aircraft with nose section cargo compartments install an external lock to provide double failure protection. Alternatively, a safety chain could be installed to prevent the door from opening fully in flight if it should become unlatched. The Board further believes that 14 CFR 23.787 (b) which provides for a cargo restraint system, if made applicable to nose section cargo compartments, would prevent cargo from shifting outward through an inadvertent opening of the cargo compartment door in flight.

To preclude further accidents/incidents of this type, the Safety Board recommends that the Federal Aviation Administration:

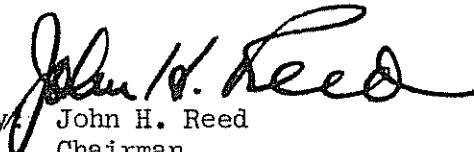
1. Provide for double failure protection by means of a secondary locking device or cargo restraint system on those cargo doors where inadvertent opening in flight would seriously jeopardize the safety of flight of the aircraft or the safety of its occupants on all so affected aircraft.
2. Issue an alert to all air taxi operators, advising them of the hazards associated with the improper security of cargo doors.
3. Consider rulemaking under Part 135 to require a door warning system, double locking devices, and cargo restraint systems for those cargo compartment doors where inadvertent opening in flight would seriously jeopardize the safety of flight of the aircraft or the safety of its occupants.
4. Evaluate the applicability of 14 CFR 23.787 (b) for this type of nose cargo compartment and the attendant hazard of cargo shifting such as occurred in this accident.

This matter has been discussed with representatives of your Flight Standards Service. Our Bureau of Aviation Safety Staff is available for additional discussion if desired.

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These recommendations will be released to the public on the issue date shown above. No public dissemination of the contents should be made prior to that date.

Reed, Chairman, Laurel, McAdams, Thayer, and Burgess, Members, concurred in the above recommendations.


By: John H. Reed
Chairman