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

ISSUED: March 3, 1972

Adopted by the NATIONAL TRANSPORTATION SAFETY BOARD at its office in Washington, D. C. on the 25th day of February 1972.

## FORWARDED TO:

Honorable John H. Shaffer Administrator Federal Aviation Administration Department of Transportation Washington, D. C. 20591

## SAFETY RECOMMENDATIONS A-72-21 thru 24

The National Transportation Safety Board is currently investigating a fatal accident which occurred near Fairfield, Idaho, on February 20, 1972, involving a Beech Model 65B-80 airplane.

Preliminary investigation of the accident has disclosed that a separation of the aircraft's left outer wing panel occurred in flight and that the separation was associated with an intense fire in the left engine. The fire had progressed from the engine nacelle through the wheel well and subsequently resulted in sufficient heat impingement upon the wing spars to weaken them to the point of failure.

The Board has also been advised of a similar fatal accident which occurred near Alice Springs, Australia, on January 20, 1972, involving a Beech Model 65-80 airplane. Information received by the Board from the Civil Aviation Authority of Australia indicates that there was an engine nacelle fire preceding the in-flight separation of the airplane's wing.

The Board is concerned that flammable fluids which can be ignited in the engine compartments can result in uncontrolled fires causing extensive damage to the aircraft structure.

In order to preclude the recurrence of similar accidents the Board recommends that the Federal Aviation Administration:

- 1. Initiate a review of the certification and design criteria of Beech Model 65 and similar models, as applicable to powerplant installation fire protection provisions.
- 2. If it is found that these criteria are inadequate, initiate corrective action to ensure adequate fire protection of the powerplant installation and the adjacent airplane structure.
- 3. Review the design and certification criteria of Part 23 of the Federal Aviation Regulations applicable to the fire protection of powerplant installations for adequacy and effect appropriate regulatory changes if deemed appropriate.
- 4. Advise all owners and operators of Beech Model 65 airplanes of the occurrence of two accidents wherein an engine fire resulted in separation of the airplanes' wings within 2 to 3 minutes. Operators should further be advised to take all possible measures to insure integrity and airworthiness of the powerplant installation to reduce the probability of an in-flight fire.

This matter has been discussed with personnel of your Flight Standards Service.

Our Bureau of Aviation Safety staff is available for additional discussion of this matter if desired.

These recommendations will be released to the public on the issue date shown above. No public dissemination of the contents of this document 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