

487

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

ISSUED: September 6, 1973

Adopted by the NATIONAL TRANSPORTATION SAFETY BOARD
at its office in Washington, D. C.
on the 22nd day of August 1973

FORWARDED TO:)
Honorable Alexander P. Butterfield)
Administrator)
Federal Aviation Administration)
Washington, D. C. 20591)

SAFETY RECOMMENDATION A-73-66

After the Mohawk Airlines FH-227B accident at Albany, New York, on March 3, 1972, the Federal Aviation Administration issued an Airworthiness Directive prohibiting the further use of the aft-facing stewardess' crew seat mounted against the lavatory wall in all F-27 and FH-227 aircraft. This prohibition was to continue in effect until the seat was modified to comply with the provisions of section 4b.358 of the Civil Aeronautics Manual (CAM).

The prohibition against use of the flight attendant seat was made because the proximity of the occupant's head to the entry door actuating mechanism did not conform to the provisions of CAM 4b.358(b). This provision states that passengers and crew shall be afforded protection from head injuries by one of the following means:

1. Safety belt and shoulder harness.
2. Safety belt and elimination of all injurious objects within striking radius of the head.
3. Safety belt and a cushioned rest which will support arms, shoulders, head, and spine.

Additionally, the proximity and orientation of the carry-on luggage rack directly opposite this flight attendant seat was cited in the Airworthiness Directive.

Honorable Alexander P. Butterfield (2)

During our investigation of the recent accident involving an Ozark Air Lines FH-227 at St. Louis, Missouri, our investigators examined the flight attendant crew seat attached to the aft galley structure next to the cargo loading door.

Because of the many similarities with respect to the impact parameters of this and the previously mentioned "Mohawk" accident, they assessed the hazard potential of this seat as compared to the previous seat installation which had been restricted. In our view, the Ozark installation does not conform to the provisions of CAM 4b.358 in that the occupant's head is 18 inches from the actuating mechanism and upper track of the cargo door. Moreover, there is no protective padding provided at this location. The flight attendant station is not equipped with a shoulder harness. There are no cushioned supports for the shoulders or head which might prevent lateral movement.

Also, the seat location is directly opposite the passage to the cargo compartment. Although this passageway is blocked by cargo netting, the openings in the netting are large enough (8 inches by 8 inches) to allow smaller cargo parcels to pass through. Additionally, the top of this netting is located approximately 8 to 11 inches from the ceiling, allowing passage of articles in turbulence or emergency conditions.

Finally, the design of this flight attendant seat is such that, in our view, it does not meet the requirements of CAM 4b.362(g) and CAM 4b.362-6(a). The seat pan folds downward against the bulkhead in the stowed position. When in use, the seat is supported by an over-center retraction mechanism and a bar, which is attached to the side of the seat pan with a keyhole arrangement. In this position, the seat reduces the passageway width of the cargo door exit to 12 inches. The semipermanent support of this flight attendant seat, therefore, is not in conformance with FAA policy as it applies to CAM 4b.362(g), since it is not springloaded for automatic retraction when the seat is vacated to allow a 20-inch passageway leading to this exit.

In view of the above, the National Transportation Safety Board recommends that the Federal Aviation Administration:

Issue an immediate Airworthiness Directive prohibiting the use of all flight attendant seats in F-27 and

FH-227 aircraft until these stations are modified to comply with the applicable regulations.

McAdams, Thayer, and Haley, Members, concurred in the above recommendations. Reed, Chairman, and Burgess, Member, were absent, not voting.

William R. Haley, Acting

By: John H. Reed
Chairman