

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

ISSUED: February 6, 1974

Forwarded to:
Honorable Alexander P. Butterfield
Administrator
Federal Aviation Administration
Washington, D. C. 20591

SAFETY RECOMMENDATION(S)

A-74-5&-6

The National Transportation Safety Board's continuing investigation of the Pan American World Airways, Inc., B-707 freighter accident at Boston, Massachusetts, on November 3, 1973, has disclosed an unsafe condition that should be corrected.

Although the cockpit voice recorder indicates that crewmembers were wearing smoke goggles during the final phases of the flight, the Board's investigation indicates that the captain may have had difficulty seeing because of smoke.

The captain's medical records revealed that he was required to possess corrective glasses while flying. The Board examined smoke goggles from other Pan American B-707 aircraft which were the same type as the goggles used by the crewmembers of the accident aircraft. The examination disclosed that if a crewmember wore corrective glasses, the smoke goggles would not fit properly at the temples and, therefore, would not provide the needed protection against smoke.

Additionally, an examination of smoke goggles used by Pan American and several other air carriers on transport aircraft disclosed that they do not comply with the provisions of FAR Part 25.1439. Specifically, some of these smoke goggles do not adequately protect the flightcrew from smoke when worn either with or without corrective glasses. Other smoke goggles in use restrict the wearer's vision appreciably.

The accident aircraft was certificated under Part 4b of the Civil Air Regulations at a time when smoke goggles were not required to be designed to accommodate a user wearing corrective glasses.

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Subsequent amendments to Part 4b (Amendment 4b-8) and paragraph 25.1439 of the currently effective FAR Part 25 provide that smoke goggles shall allow for corrective glasses to be worn.

FAR Part 25.1439 provides that smoke goggles must be designed to protect the flightcrew from smoke, carbon dioxide, and other harmful gases and allow for the wearing of corrective glasses. The Safety Board believes that this safety requirement should apply to all transport category airplanes, notwithstanding the regulations applicable at the time of aircraft certification.

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

1. Require that transport category airplanes certificated under Part 4b of the Civil Air Regulations prior to the effective date of Amendment 4b-8 comply with Part 25.1439 of the Federal Aviation Regulations;
2. Require that a one-time inspection be made of all smoke goggles provided for the flightcrew of all transport category airplanes to assure that these goggles conform to the provisions of Part 25.1439 of the Federal Aviation Regulations.

REED, Chairman, McADAMS, and HALEY, Members, concurred in the above recommendations. THAYER and BURGESS, Members, were absent, not voting.

By: 
John H. Reed
Chairman

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SAFETY BOARD
DEPARTMENT OF TRANSPORTATION
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