

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

ISSUED: July 11, 1972

Adopted by the NATIONAL TRANSPORTATION SAFETY BOARD
at its office in Washington, D. C.
on the 14th day of June 1972

FORWARDED TO:

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

SAFETY RECOMMENDATIONS A-72-102 & 103

The National Transportation Safety Board has under investigation the National Airlines Boeing B-747, Flight 41, turbulence accident which occurred on January 4, 1972, near Grand Isle, Louisiana.

Our investigation has disclosed an area of concern regarding the adequacy of first-aid supplies on board the airplane. The number of first-aid kits, as well as the contents of the kits, appeared to have been inadequate to treat the 38 passengers and four stewardesses who sustained injuries. It was necessary for more than 2 hours to use makeshift arrangements to immobilize fractures, stop bleeding, and dress wounds.

As you know, the requirement for providing first-aid kits is contained in FAR 121.309. Appendix A of Part 121 specifies the type of first-aid kit and the kit contents based upon the capacity of the airplane. Thus, a No. 1 kit is required for airplanes of one to five persons capacity, a No. 2 kit is required for airplanes of six to 25 persons capacity, and a No. 3 kit is required for airplanes of over 25 persons capacity. The types of supplies in these kits are essentially the same; however, the quantities of items are in ratios of approximately one, two, and three, respectively.

Although the rationale of relating kit size to aircraft occupant capacity is logical, it appears to us that the present requirement does not consider adequately the large differences in capacity of

today's airline aircraft. In this regard, it would seem highly unlikely that one kit size would be appropriate for capacities ranging from 26 to the more than 300 passengers. We believe that a ratio specifying some minimum number of revised No. 3 kits should be required for airplanes capable of carrying 26 to 300 plus occupants. Two further considerations are suggested. First, kit size should be kept to a minimum to assure ease of handling in confined spaces. Second, kits should be strategically located throughout the cabin to permit ready access for treatment of in-flight injuries. Also, the location of kits should be considered from the standpoint of accessibility following cabin deformation resulting from survivable takeoff and landing accidents, as well as ditchings.

Although the stewardesses on National Flight 41 were aided by trained medical personnel, assistance of this type is not always available, nor can it be expected. A sufficient supply of materials should be available to permit the treatment of lacerations and immobilization of fractures without having to rely on makeshift arrangements to compensate for the lack of certain supplies. Additionally, existing first-aid kit contents should be augmented by including, for example, larger compresses, adhesive tape, additional triangular bandages, aspirin, tongue depressors, and inflatable splints.

Moreover, although a large percentage of accidents occur in the vicinity of airports, the aforementioned accident illustrates that two or more hours' time may elapse from the time that injuries are incurred until ground-based treatment is administered. Current requirements for on-board medical supplies appear inadequate to afford appropriate means for treatment for such time periods.

In view of the situation illustrated by this accident, the Safety Board recommends that the Federal Aviation Administration:

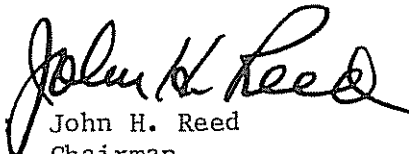
1. Amend FAR 121.309 to provide a more appropriate basis for determining the number, type, and location of first-aid kits required on airplanes capable of carrying more than 25 persons.
2. Upgrade the required first-aid kit contents to ensure satisfactory capability for treatment of fractures and severe lacerations for extended periods of time.

Our technical staff is available for any further information or clarification, if required.

Honorable John H. Shaffer - 3 -

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; McAdams, Thayer, Burgess, and Haley, Members, concurred in the above recommendations.

By  John H. Reed
Chairman

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