

NATIONAL TRANSPORTATION SAFETY BOARD  
WASHINGTON, D.C.

ISSUED: January 25, 1974

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Forwarded to:

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

SAFETY RECOMMENDATION(S)

A-74-1 & 2

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About 1108 e.d.t. on July 31, 1973, Delta Air Lines Flight 723, a DC-9-31, crashed into a seawall while executing an ILS flight director approach to runway 4R on the Logan International Airport in Boston, Massachusetts. The aircraft struck the seawall 165 feet to the right of the approach light system centerline and about 3,000 feet short of the displaced runway threshold. The impact point was below and to the right of the 200-foot decision height area on the ILS glide slope.

On October 23-25, 1973, the National Transportation Safety Board conducted a test in a DC-9 simulator at the Delta Air Lines Training Department in Atlanta, Georgia. The test revealed that if the mode selection switch is moved slightly past the Approach mode detent toward the Go-Around (G/A) mode, the G/A mode indication will be displayed on the Sperry Flight Director model No. Z-5-534. Even if the selector is returned to the Approach mode, the G/A mode will continue to be displayed. This condition was found to exist in line aircraft also. Since there is no annunciator panel in a DC-9, some time can elapse before the G/A mode indication is recognized. It is conceivable that such an inadvertent selection might have been made in Flight 723.

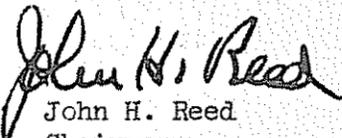
In the G/A mode, the ILS signals are eliminated from the flight director system and may be regained only by switching to the Standby (SB) or Flight Instrument (FI) modes, and then back to the VOR/LOC or Approach modes.

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

1. Require that the Sperry Flight Director mode selection switch be modified to prevent inadvertent selection of the G/A mode.
2. Require an annunciator panel whenever any flight director system is installed. The panel would indicate electronically the mode in which the flight director is operating, regardless of the position of the mode selector switch.

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

  
By John H. Reed  
Chairman

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.