

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

ISSUED: September 28, 1977

Forwarded to:

Honorable Langhorne M. Bond
Administrator
Federal Aviation Administration
Washington, D.C. 20591

SAFETY RECOMMENDATION(S)

A-77-65 and 66

On April 4, 1977, Southern Airways, Inc., Flight 242, a DC-9-31, crashed at New Hope, Georgia, after penetrating an area of severe thunderstorms. The aircraft crashed when its crew attempted to land on a highway; 70 persons died and 24 persons were injured. Investigation of the accident disclosed two problems involving the dissemination and use of meteorological information which we believe warrant corrective action.

One of the primary methods of alerting pilots to potential severe weather is the issuance of SIGMET's (Significant Meteorological Information). Currently, SIGMET's are transmitted over navigation aid (NAVAID) radio frequencies upon receipt and at 15-minute intervals for the first hour after receipt and at 30-minute intervals for the remainder of the effective period of the advisory. Air traffic controllers notify pilots of SIGMET's. The navaid transmissions are live broadcasts and occasionally are interrupted, delayed, or missed if other work required of the flight service specialists takes precedence. The time interval between broadcasts is such that, at jet speeds, a flight may cross a SIGMET area between transmissions and miss the opportunity of being advised of severe weather within the area.

In view of the severity of the weather phenomena described in SIGMETS and the shortcomings of current procedures for relaying them to pilots, the Safety Board believes that each SIGMET should be transmitted more often in order to make the advisory immediately available to the pilot after he has been notified of it. One method might involve the repetitive transmission of a recorded SIGMET at more frequent intervals than are currently prescribed.

The Severe Thunderstorm Watch Bulletin or Tornado Watch Bulletin (WW), issued by the Severe Local Storms Unit of the National Severe Storms Forecast Center, delineates areas of potentially severe weather. These watches are transmitted on teletype by the FAA through the Weather Message Switching Center. Testimony received at the Safety Board's hearing into the Southern

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Airways accident indicated that WVs are not made available automatically on the circuits used by air traffic control facilities, because they are transmitted for the entire nation simultaneously and the cost of communications time to receive these messages and man-hours to sort them was judged prohibitive.

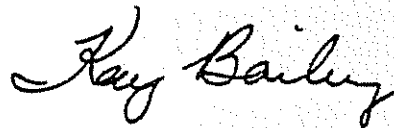
The Safety Board recognizes the need to conserve communications time and manpower, but we also believe that the information included in the WVs is vital to aviation safety and should be made available to controllers and relayed to flightcrews. Moreover, we believe this improved availability could be achieved by coding the watch bulletins based on geographic applicability; watch bulletins transmitted to any one air traffic control facility would apply to that facility's area of responsibility.

Based upon the above, the National Transportation Safety Board recommends that the Federal Aviation Administration:

Transmit SIGMET's more frequently on nav aids so that pilots can receive more timely information about hazardous weather. (Class II-Priority Followup) (A-77-65)

Code, according to geographic applicability, Severe Thunderstorm Watch Bulletins and Tornado Watch Bulletins issued by the National Severe Storms Forecast Center so that they may be transmitted to appropriate air traffic control facilities by the FAA Weather Message Switching Center; thus, air traffic control facilities can relay the earliest warning of severe weather to flightcrews. (Class II-Priority Followup) (A-77-66)

BAILEY, Acting Chairman, McADAMS, HOGUE, and HALEY, Members, concurred in the above recommendations.



By: Kay Bailey
Acting Chairman