

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

ISSUED: June 30, 1972

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

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FORWARDED TO: )  
Honorable John H. Shaffer )  
Federal Aviation Administrator )  
Department of Transportation )  
Washington, D. C. 20591 )  
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SAFETY RECOMMENDATIONS A-72-76 & 77

Preliminary evidence collected during the investigation of the accident involving Delta Air Lines, Inc., DC-9, N3305L, at Fort Worth, Texas, on May 30, 1972, suggests that the vortex turbulence generated by an American Airlines, Inc., DC-10 might have been a factor in the occurrence. The DC-10 had just completed a "touch and go" landing while the DC-9 was on the final approach.

The National Transportation Safety Board is aware of the Federal Aviation Administration's continuing program of alerting the aviation community to the hazards associated with vortex turbulence as outlined in Advisory Circular 90-23B. The Board also recognizes that the controller alerted the DC-9 crew to the possibility of encountering turbulence during their approach and that this advisory was in accordance with the separation criteria stated in FAA Order 7110.29.

Although the investigation to date discloses no evidence that current separation procedures were not followed, the involvement of vortex turbulence is likely in this accident. The flight operations of increasing numbers of heavy jet aircraft present a greater potential for following aircraft to encounter high-energy segments of trailing vortices shed by the heavy jet aircraft. Therefore, the Board believes that there is an immediate need to reassess the vortex avoidance procedures that are now presently in effect.

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

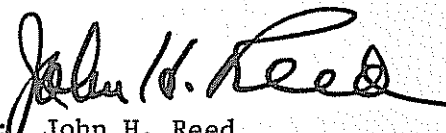
1. Reevaluate wake turbulence separation criteria for aircraft operating behind heavy jet aircraft.
2. Issue alert notices to all pilots and aircraft operators that will stress the urgent need to maintain an adequate separation from heavy jet aircraft.

Special emphasis should be placed on nonradar VFR procedures and the need to provide for time/distance separation.

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

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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