NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D.C.

ISSUED: December 13, 1973

Forwarded to: Honorable Alexander P. Butterfield Administrator Federal Aviation Administration

Washington, D. C. 20591

SAFETY RECOMMENDATION(S)

A-73-109

The National Transportation Safety Board is investigating a landing incident in which the crew of a Braniff Airlines Boeing 727, N7279, was unable to extend the left main landing gear. This incident, which occurred at Memphis, Tennessee, on August 14, 1973, revealed internal failures in the main gear retract assemblies.

The main gear actuator was disassembled and examined. The detailed examination revealed that the snubber valve assembly was severely damaged. The main feeder tube, P/N 65-17971-1, had fractured through one of the multiple orifice holes in the necked-down portion of the tube. This failure caused the valve sleeve and slide assembly to be released and permitted it to float inside the piston rod. The steel valve slide dropped out of the valve sleeve, and when the gear was extended, the valve slide became lodged between the piston and the cylinder head. Thus, the piston could not fully retract as it should when the landing gear is extended.

Four other instances of such failures have occurred on Boeing 727 aircraft. In those four instances, the flightcrews were able to extend the affected gear to the down-and-locked position.

The Board believes that this type of malfunction is likely to occur on other Boeing 727 aircraft. Therefore, the Board believes that measures to insure against failure of the main feeder tube should be mandatory. The Board understands that the manufacturer is aware of the problem and is considering corrective action.

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

Issue an Airworthiness Directive to require that feeder tube P/N 65-1797-1 be inspected at appropriate intervals to prevent failures, until permanent corrective action can be taken.

Our Bureau of Aviation Safety staff is available for consulation.

REED, Chairman, McADAMS, THAYER, BURGESS, and HALEY, Members, concurred in the above recommendation.

ohn H. Reed

Chairman

THIS RECOMMENDATION 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.