NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D.C.

FOR RELEASE: 6:30 A.M., E.D.T., OCTOBER 29, 1976

(202) 426-8787

ISSUED: October 29, 1976

Forwarded to:

Honorable John L. McLucas Administrator Federal Aviation Administration Washington, D. C. 20591

SAFETY RECOMMENDATION(S)

A-76-134 and -135

On August 4, 1976, a National Airlines B-727, N4622, landed at Miami International Airport, Miami, Florida, with the left main landing gear jammed in an intermediate position in a partially closed gear door. There were no injuries to the crewmembers, and only minor damage to the aircraft; there were no passengers on board. Efforts to extend the gear hydraulically, and manually, by applying "g" loads, were not successful.

The National Transportation Safety Board's investigation of the incident revealed that the main landing gear's uplock universal block (P/N 65-24488-1) had failed at one of its bolt holes because of stress corrosion cracking. As a result, the door and gear movements were out of sequence and the gear became caught in the partially closed door.

The National Transportation Safety Board is aware of three previous stress corrosion fractures of the 65-24488-1 block, which were made from 7079-T6 aluminum alloy. Two blocks failed in flight; however, the landing gear was extended successfully through the use of the manual extension system. The third failed block was discovered during a ground inspection.

After the August 4 incident, National Airlines began to inspect its fleet of B-727's to determine if similar problems existed. Several of the blocks inspected showed signs of corrosion. National Airlines has planned to replace all 7079-T6 aluminum alloy blocks with 7075-T73 aluminum alloy blocks (P/N 65-24488-4). The 7075-T73 alloy is less susceptible to corrosion than the 7079-T6 alloy.

The Safety Board believes that the failure of one or more landing gears to extend properly constitutes a hazard to aviation safety. Therefore, in view of the large number of B-727 aircraft in service in the United States and around the world, which contain the 65-24488-1 blocks, the National Transportation Safety Board recommends that the Federal Aviation Administration:

Issue an Airworthiness Directive requiring that all 7079-T6 aluminum alloy uplock universal blocks, (P/N 65-24488-1) be inspected for signs of corrosion or cracking. All blocks found with signs of corrosion or cracking should be replaced with the 7075-T73 aluminum alloy uplock universal blocks (P/N 65-24488-4) or with an equivalent modification. (Class I-- Urgent Followup) (A-76-134).

Require a periodic inspection of all 7079-T6 aluminum alloy uplock universal blocks (P/N 65-2448-1) and require that they be replaced when signs of corrosion or cracking are discovered. (Class II--Priority Followup) (A-76-135).

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

By: Webster B. Todd,

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.