

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

FOR RELEASE: 6:30 P.M., E.D.S.T., APRIL 27, 1975

ISSUED: April 27, 1975

Forwarded to:

Mr. James E. Dow
Acting Administrator
Federal Aviation Administration
Washington, D. C. 20591

SAFETY RECOMMENDATION(S)

A-75-39 & 40

On December 19, 1974, an Eastern Air Lines DC-9 (N910E) was involved in an incident at Minneapolis-St. Paul International Airport, Minneapolis, Minnesota. The National Transportation Safety Board's investigation of that incident indicates that corrective action is necessary to prevent the recurrence of similar incidents.

The aircraft was being operated in the landing phase when the crew found that they were unable to lower the nose landing gear in either the hydraulic or manual modes. An emergency landing was made with the nose landing gear in the retracted position. There was no fire, and there were no injuries to the passengers.

Although the reason for the failure of the nose gear to extend in the hydraulic mode was not determined, it should have been possible to lower the nose gear by the manual mode. Our investigation revealed that ice had formed in the nose gear emergency uplock release cable mechanism pressure can which prevented manual extension of the nose landing gear. When the ice was melted and the drain plug was removed, an estimated 1 1/2 cups of water was drained from the pressure can. There have been other reported cases where various liquids had accumulated in this area and subsequently froze.

To alleviate this problem, Douglas Aircraft Company issued DC-9 Service Bulletin 53-91, Revision 1, dated October 9, 1966, which provides for the installation of an additional cover on the pressure can and the permanent removal of the lower pressure can drain plug which will eliminate accumulation of liquids. The Service Bulletin was not accomplished on this aircraft.

Discussions with several air carrier operators disclosed that some had accomplished all or part of the Service Bulletin, while others had not. One carrier had observed liquid level marks within

the pressure can on some of their earlier aircraft which had not been modified in accordance with Service Bulletin 53-91. This same operator believed that the drain hole was not large enough for proper drainage if dirt or other foreign material were to collect in this area.

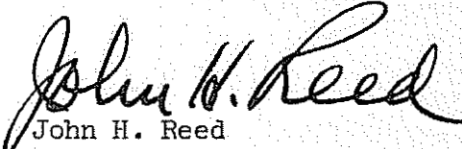
Therefore, the National Transportation Safety Board recommends that the Federal Aviation Administration:

Issue an Airworthiness Directive to require:

- (1) Compliance with Douglas DC-9 Service Bulletin 53-91 (Class II)
- (2) Appropriate enlargement of the existing pressure can drain hole to facilitate moisture drainage. (Class II)

Our staff will be available for further consultation if desired.

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


By: John 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.