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NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D.C.

ISSUED: April 21, 1983

Forwarded to:

Honorable J. Lynn Helms Administrator Federal Aviation Administration Washington, D. C. 20591

SAFETY	RECOMMENDATION (S
	A-83-33

On August 2, 1982, Sundstrand Data Control, Inc., issued Service Bulletin No. 23 (Document No. 012-0118-123) "Indicating/Recording Systems -- Digital Flight Data Recorder (DFDR) Model 573A -- Connector Check/Replacement." The service bulletin stated: "It has been determined that some DFDR's were manufactured with connectors containing unsuitable sockets.... Under conditions of vibration, connectors with the wrong sockets may cause DFDR's to operate intermittently." The service bulletin instructed owners of the DFDR's on how to examine them for the type of connector socket used and how to replace any unsuitable sockets. The erroneous installation cannot be determined by examining equipment serial numbers; it can only be isolated by carrying out the examination outlined in the service bulletin. This type DFDR is installed on such aircraft as the Boeing 747 and the Douglas DC-10.

The National Transportation Safety Board is aware that the Federal Aviation Administration (FAA) intends to issue a Notice of Proposed Rulemaking (NPRM) regarding this problem. We believe that because a DFDR will not operate properly with the faulty connectors and because of the immense value of the DFDR record in aircraft accident investigations, an airworthiness directive (AD) should be issued promptly. Therefore, the Safety Board recommends that the FAA:

Issue an airworthiness direction (AD) making mandatory an inspection (as soon as practical depending on availability of spare units and the capability to replace the defective units) for incorrect sockets specified in Sundstrand Data Control Service Bulletin No. 23, (Document No. 012-0118-123) dated August 2, 1982, titled "Indicating/Recording Systems -- Digital Flight Data Recorder (DFDR) Model 573A -- Connector Check/Replacement," and require replacement of incorrect connectors at the earliest possible date. (Class II, Priority Action) (A-83-33).

BURNETT, Chairman, GOLDMAN, Vice Chairman, and McADAMS and ENGEN, Members, concurred in this recommendation. BURSLEY, Member, did not participate.

Jim Burnett Chairman