

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

ISSUED: May 3, 1982

Forwarded to:

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

SAFETY RECOMMENDATION(S)
A-82-43 and -44

On January 25, 1982, Sundstrand Data Control, Inc., issued Service Bulletin No. 012-0296-109, "Communications - Cockpit Voice Recorders/ Models AV-557A, AV-557B, and AV-557C/Tape Deck Housing Connector Check." The service bulletin stated: "It has been determined that some CVRs (cockpit voice recorders) were manufactured with connectors that contain split-ring, rather than full-ring sockets. Using connectors with split-ring sockets may cause CVRs to operate intermittently, give erroneous self test indications, and contribute to sensor or tape-off-reel problems." The Service Bulletin instructed owners of the CVR's how to examine them for the type of connector socket used, and instructed them to contact the factory for replacement of the split-ring sockets. These type CVR's are installed on such aircraft as the Boeing 727, 737, 747, and the Douglas DC-9, and DC-10.

A representative from Sundstrand Data Control confirmed that split-ring connectors were erroneously installed in a number of its cockpit voice recorders and that its plant was currently in the process of replacing them. The erroneous installation cannot be traced by examining equipment serial numbers and can only be isolated by carrying out the examination outlined in the service bulletin.

Since a CVR will not operate properly with a split-ring connector and because of the immense value of the CVR record in aircraft accident investigations, the National Transportation Safety Board recommends that the Federal Aviation Administration:

Issue an airworthiness directive (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 split-ring sockets specified in Sundstrand Data Control Service Bulletin Document No. 012-0296-109, dated January 25, 1982, titled "Communications -- Cockpit Voice Recorders/Models AV-557A, AV-557B, and AV-557C/Tape Deck Housing Connector Check," and require replacement of incorrect connectors at the earliest possible date. (Class II - Priority Action) (A-82-43).

Disseminate immediately the contents and intent of this safety recommendation letter to the Civil Aviation Authorities of foreign countries having jurisdiction over aircraft using the subject Sundstrand cockpit voice recorders. (Class II - Priority Action) (A-82-44)

BURNETT, Chairman, GOLDMAN, Vice Chairman, and McADAMS, Member, concurred in these recommendations. BURSLEY, Member, did not participate.


Jim Burnett
Chairman