

8.1 FMEA Number - 01

- o Date - 9-9-86
- o Revision - N/C
- o System - Audio
- o Assembly - Very Lightweight Headset (VLHS)
- o Part Number SED16101291-305
- o Item Name - Microphone
- o Reference Designation - None
- o Quantity per Assembly - 1
- o Function - Receives voice input and converts to electrical signal
- o Failure Mode - Loss of output signal; loss of microphone element function
- o Failure Cause- Transducer wiring or mechanical failure caused by contamination by food, physical abuse, mechanical shock, or transducer failure.
- o Mission Phase - Orbit
- o Failure Effect on End Item - Loss of Communication
- o Failure Effect on Interface - None
- o Failure Effect on Mission - None
- o Failure Effect on Crew - None
- o Failure Effect on Vehicle - None
- o Failure Detection on Ground - Performance Test, Voice Test
- o Failure Detection during Flight - Voice Test
- o Correcting Action - Use spare VLHS, HMM, or LEH
- o Criticality (Hardware/Functional) - 3/IR
- o Time Required to take Corrective Action - Estimated 5 minutes
- o Time Available to take Corrective Action - Variable
- o Remarks/Hazards - The VLHS has proven to be a reliable communication device throughout the Shuttle Program. Spare units are flown for use in case of a failure, and two other means of communication (HMM and LEH) are also on board each mission.

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