

SHUTTLE CRITICAL ITEMS LIST - ORBITER

SUBSYSTEM : COMMUNICATION & TRACKING FMEA NO 05-2A -21946 -2 REV: 01/06/88

ASSEMBLY : PNL A1A3
 P/N RI : ME452-0102-7201
 P/N VENDOR:
 QUANTITY : 2
 : TWO
 : A/G 1, A/G 2

VEHICLE	102	103	104
EFFECTIVITY:	X	X	X
PHASE(S):	PL	LD	OO X DO LS

CRIT. FUNC: 2
 CRIT. HDW: 2

PREPARED BY:
 DES ~~XXXXXXXX~~ R K P LEE
 REL ~~XXXXXXXX~~ A MASAI
 QE ~~XXXXXXXX~~ 1-7-88

REDUNDANCY SCREEN: A- B- C-
 APPROVED BY: APPROVED BY (NASA):
 DES ~~XXXXXXXX~~ 1/13/88 SSM ~~XXXXXXXX~~ 1-26-88
 REL ~~XXXXXXXX~~ 1-17-88 REL ~~XXXXXXXX~~ 1-26-88
 QE ~~XXXXXXXX~~ QE ~~XXXXXXXX~~

ITEM:

SWITCH, S/L A/G TOGGLE SWITCH, A/G BUSES FOR SPACELAB INTERFACE, DOST.

FUNCTION:

D & C MANUAL CONFIGURATION OF THE AUDIO DISTRIBUTION SYSTEM (ADS) VIA THE RIGHT ATU & MS ATU. SELECTS THE AIR-TO-GROUND BUSES (A/G 1 & A/G 2) FOR SPACELAB (S/L) INTERFACE, ON-OFF. DEDICATED SWITCHES, ONE FOR THE A/G 1 BUS AND ONE FOR A/G 2 BUS. THE SPACELAB INTERFACE IS ONLY ACTIVE WHEN THE SPACELAB IS INSTALLED PER THE FLIGHT MANIFEST. A/G 1 - 36V73A1A3S26, A/G 2 - 36V73A1A3S27.

FAILURE MODE:

SHORT-TO-CASE (GROUND)

CAUSE(S):

PIECE PART STRUCTURAL FAILURE, CONTAMINATION, VIBRATION, MECHANICAL SHOCK, PROCESSING ANOMALY.

EFFECT(S) ON:

(A) SUBSYSTEM (B) INTERFACES (C) MISSION (D) CREW/VEHICLE

(A, B) FUNCTIONAL DEGRADATION. LOSS OF CAPABILITY TO SELECT ANY OF THE AUDIO DISTRIBUTION BUSES FOR THE SPACELAB INTERFACE EXCEPT CAUTION AND WARNING TONES.

(C, D) LOSS OF MISSION IF AUDIO IS REQUIRED FOR SPACELAB INTERFACE.

DISPOSITION & RATIONALE:

(A) DESIGN (B) TEST (C) INSPECTION (D) FAILURE HISTORY (E) OPERATIONAL USE

(A, B, C, D) REFER TO APPENDIX A, ITEM # 1, TOGGLE SWITCH

(B) TEST

GROUND TURNAROUND TEST - AUDIO SPACELAB OPERATION VERIFICATION - PERFORMED TO SUPPORT FLIGHT MANIFEST.

SHUTTLE CRITICAL ITEMS LIST - ORBITER

SUBSYSTEM : COMMUNICATION & TRACKING FMEA NO C5-2A -21946 -2 REV: 01/06/88

(E) OPERATIONAL USE

A WIRELESS UNIT CAN BE INSTALLED AT THE AIRLOCK ATU'S TO PROVIDE AUDIO CAPABILITY FOR THE SPACELAB.