

SHUTTLE CRITICAL ITEMS LIST - ORBITER

SUBSYSTEM : COMMUNICATION & TRACKING FMEA NO 05-2A -21944 -2 REV: 01/06/88

ASSEMBLY : PNL A1A3				CRIT. FUNC:	2
P/N RI : ME452-0102-7301				CRIT. HDW:	2
P/N VENDOR:		VEHICLE	102	103	104
QUANTITY : 2		EFFECTIVITY:	X	X	X
: TWO		PHASE(S):	PL	LO	CO X DO LS
: ICOM A, ICOM B					

PREPARED BY:	DES <i>EXP 1-6-88</i> R K P LEE	REL <i>1-14-88</i> A MASAI	QE <i>9.2. 1-7-88</i>	REUNDANCY SCREEN:	A-	B-	C-	APPROVED BY (NASA):
				APPROVED BY:				SSM <i>[Signature]</i> 1-14-88
				REL <i>[Signature]</i> 1-14-88				REL <i>[Signature]</i> 1-14-88
				QE <i>[Signature]</i>				QE <i>[Signature]</i>

ITEM:

SWITCH, S/L ICOM TOGGLE SWITCH, ICOM BUSES FOR SPACELAB (S/L) INTERFACE, DPDT.

FUNCTION:

DSC MANUAL CONFIGURATION OF THE AUDIO DISTRIBUTION SYSTEM VIA THE RIGHT ATU & MS ATU. SELECTS THE INTERCOM BUSES (ICOM A & ICOM B) FOR THE SPACELAB (S/L) INTERFACE, ON-OFF. DEDICATED ICOM BUS SWITCHES, ONE FOR THE ICOM A BUS AND ONE ICOM B BUS. A/A, A/G1, A/G2, ICOM A & ICOM B MAY ALL BE USED FOR INTERCOM. THE SPACELAB INTERFACE IS ONLY ACTIVE WHEN THE SPACELAB IS INSTALLED PER THE FLIGHT MANIFEST. ICOM A-36V73A1A3S29, ICOM B-36V73A1A3S30.

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

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(B) TEST

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

(E) OPERATIONAL USE

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