

SHUTTLE CRITICAL ITEMS LIST - ORBITER

SUBSYSTEM : COMMUNICATION & TRACKING FMEA NO 05-2J -21304 -2 REV:01/05/88

ASSEMBLY : FNL A1A3			CRIT. FUNC: 2
P/N RI : ME452-0102-7206			CRIT. HDW: 2
P/N VENDOR:	VEHICLE	102	103 104
QUANTITY : 1	EFFECTIVITY:	X	X X
: ONE-P/L INTERG #1 & #2	PHASE(S):	PL LO	OO X DO LS
: REDUNDANT CONT CIRCUITS			

PREPARED BY:	REDUNDANCY SCREEN:	A-	B-	C-
DES <i>M. Zelon</i> M ZELON	APPROVED BY:	APPROVED BY (NASA):		
REL <i>R. Alvarez</i> R ALVAREZ	DES <i>Bladed</i> 11-1-88	SSM	<i>R. S. S. 1/11</i>	
QE <i>D. Courseen</i> COURSEEN	REL <i>R. Alvarez</i> 11-12-88	REL	<i>[Signature]</i> 2/2	
	QE <i>[Signature]</i>	QE	<i>[Signature]</i>	

ITEM:

SWITCH, PAYLOAD XMTR PWR TOGGLE SWITCH, 2P3T, PAYLOAD INTERROGATOR TRANSMITTER POWER.

FUNCTION:

PROVIDES PANEL CONTROL OF TRANSMITTER POWER LEVEL. THE SWITCH POSITIONS COMMAND HI, MED, AND LOW POWER. 36V73A1A2S4.

FAILURE MODE:

SHORT TO CASE (GROUND) WORST CASE - A CONTAMINANT OR BROCKEN PART MOVES AND SEQUENTIALLY SHORTS TO GROUND SEVERAL INPUT TERMINALS.

CAUSE(S):

VIBRATION, MECHANICAL SHOCK, CONTAMINATION, MISHANDLING, PIECE-PART STRUCTURAL FAILURE.

EFFECT(S) ON:

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

(A,B) LOSS OF ALL CONTROL CAPABILITY (BOTH PANEL AND GROUND COMMAND) FOR BOTH P/L INTERROGATORS BECAUSE THE CONTROL CIRCUIT FUSE IN BOTH LCA'S IS SHORTED TO GROUND.

(C) POSSIBLE LOSS OF PRIME MISSION OBJECTIVE FOR THOSE MISSIONS WHICH REQUIRE RF COMM WITH A PAYLOAD.

(D) NO EFFECT

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.

SHUTTLE CRITICAL ITEMS LIST - ORBITER

SUBSYSTEM : COMMUNICATION & TRACKING FMEA NO 05-2J -21104 -2 REV: 01/05/88

(B) TEST

GROUND TURNAROUND TEST - VERIFY PAYLOAD INTERROGATOR POWER OUTPUT;
PERFORMED TO SUPPORT FLIGHT MANIFEST.

(E) OPERATIONAL USE

NO CREW CORRECTIVE ACTION AVAILABLE.