

SHUTTLE CRITICAL ITEMS LIST - ORBITER

SUBSYSTEM : EPD&C - COMM. & TRACK. FMEA NO 05-6PK-20217 -1 REV:12/9/87

ASSEMBLY : PNL A7A1 CRIT. FUNC: 1R  
P/N RI : ME452-0102-7201 CRIT. HDW: 2  
P/N VENDCR: VEHICLE 102 103 104  
QUANTITY : 1 EFFECTIVITY: X X X  
: ONE PHASE(S): PL LO OO X OO LS

REDUNDANCY SCREEN: A-PASS B-PASS C-PASS  
PREPARED BY: APPROVED BY: APPROVED BY (NASA):  
DES *CPD* R JAVIS DES *[Signature]* 12/19/87 SSM *[Signature]*  
REL *MA* M ALVAREZ REL *[Signature]* 12-18-87 REL *[Signature]*  
QE J COURSEN QE *[Signature]* 12-18-87 QE R *[Signature]* 12/18/87  
SSM M D *[Signature]* 1-21-88

ITEM:  
SWITCH, TOGGLE, OPDT, PORT RMS CAM SELECTION, POSITIONS ARE WRIST-ELBOW.

FUNCTION:  
THE WRIST POSITION PROVIDES A SIGNAL TO THE PORT RMS VIDEO SWITCH, WHICH ENABLES POWER TO THE RMS WRIST CAMERA. THE ELBOW POSITION PROVIDES A SIGNAL TO THE PORT RMS VIDEO SWITCH, WHICH ENABLES POWER TO THE RMS ELBOW CAMERA. 36V73A7A1S54.

FAILURE MODE:  
FAILS OPEN, PREMATURE OPEN.

USE(S):  
VIBRATION, MECHANICAL SHOCK, CONTAMINATION, PROCESSING ANOMALY, PIECE-PART FAILURE.

EFFECT(S) ON:  
(A) SUBSYSTEM (B) INTERFACES (C) MISSION (D) CREW/VEHICLE  
(A,B) LOSS OF RMS WRIST AND ELBOW VIDEO.  
(C) POSSIBLE LOSS OF MISSION OBJECTIVES DUE TO LOSS OF CRITICAL VIDEO.  
(D) AFTER THIS FAILURE AND FAILURE OF THE RMS JETTISON SYSTEM, LOSS OF CREW/VEHICLE DUE TO INABILITY TO POSITION THE ELBOW TV CAMERA FOR ENTRY WHICH WOULD PREVENT CLOSURE OF THE PAYLOAD BAY DOORS.

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 - VERIFY PORT RMS TV CAMERA SELECTION FROM THE D & C PANEL. PERFORMED TO SUPPORT FLIGHT MANIFEST.

SHUTTLE CRITICAL ITEMS LIST - ORBITER

SUBSYSTEM : EPD&C - COMM. & TRACK. FMEA NO 05-6PK-20217 -1 REV:12/9/87

(E) OPERATIONAL USE

FOR MISSIONS WHERE THE PAYLOAD INTERFERES WITH THE ELBOW TV CAMERA, THE ELBOW CAMERA WILL NOT BE MOVED FROM THE STOWED POSITION UNTIL THE PAYLOAD IS DEPLOYED.