

SHUTTLE CRITICAL ITEMS LIST - ORBITER

SUBSYSTEM : EPO&C - COMM. & TRACK. FMEA NO 05-6PK-20217 -2 REV: 12/9/87

ASSEMBLY : PNL A7A1
P/N RI : ME452-0102-7201
P/N VENDOR:
QUANTITY : 1
: ONE

	VEHICLE	102	103	104
EFFECTIVITY:		X	X	X
PHASE(S):	PL	LO	CO X	CO LS

CRIT. FUNC: 15
CRIT. HEW: 2

PREPARED BY: *[Signature]* R DAVIS
DES M ALVAREZ
REL J COURSEN
QE

REDUNDANCY SCREEN: A-PASS B-PASS C-PAS.
APPROVED BY: *[Signature]* 11/15/87
DES *[Signature]*
REL *[Signature]* 2-17-87
QE *[Signature]*

APPROVED BY (NASA):
SSM *[Signature]*
REL *[Signature]*
QE *[Signature]*
SSM KBR 1-21-88

ITEM:
SWITCH, TOGGLE, DPDT, 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. 36V73A7A1554.

FAILURE MODE:
FAILS CLOSED, PREMATURE CLOSED, SHORT TO GROUND, CONTACT TO CONTACT SHORT.

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

EFFECT(S) ON:
(A) SUBSYSTEM (B) INTERFACES (C) MISSION (D) CREW/VEHICLE

(A) LOSS OF POWER PANEL CONTROL FOR PORT RMS WRIST AND ELBOW CAMERA

(B) WORST CASE - SHORT TO GROUND OF EITHER OF THE 2 POWER SIDE CONTACTS (1,4) THIS OPENS C355 AND REMOVES POWER TO THE PORT RMS PAN/TILT UNIT.

(C,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.

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(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.