



SHUTTLE CRITICAL ITEMS LIST - ORBITER

SUBSYSTEM :EPD&C - MAN ARM S&RL JETT FMEA NO 05-61D-2030 -1 REV:08/17/88

EFFECT(S) ON (CONTINUED):

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

(C,D) AFTER PRIMARY RMS STOW SYSTEM HAS FAILED, A JETTISON/GUILLOTINE SWITCH MULTIPOLE FAILURE OPEN OR MULTIPOLE SHORT TO CASE RESULTS IN BOTH A AND B SYSTEM PICS NOT RECEIVING THE NECESSARY FIRE 1 AND FIRE 2 SIGNALS TO TRIGGER PIC FIRING FOR A GIVEN RMS. A MULTIPOLE SWITCH FAILURE CLOSED WOULD RESULT IN PREMATURE FIRE COMMANDS BEING RECEIVED BY SYSTEM PICS BEFORE THEY HAD COMPLETED ARMING. FAILURE EFFECT IN EITHER CASE: AFFECTED RMS WILL NOT BE JETTISONED; PAYLOAD BAY DOORS CANNOT BE CLOSED FOR ENTRY; PROBABLE LOSS OF CREW/VEHICLE.

DISPOSITION & RATIONALE:

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

(A-D) DISPOSITION AND RATIONALE

REFER TO APPENDIX A, ITEM NO. 1 - TOGGLE SWITCH

(B) GROUND TURNAROUND TEST

"RMS JETTISON VERIFICATION", VERIFIES THAT THE PYRO INITIATOR CONTROLLER (PIC) ARM, FIRE, AND SWITCH SCAN CIRCUITS ARE OPERATIONAL. TESTS ARE PERFORMED FOR ALL FLIGHTS WHEN THE RMS IS FLOWN AND WITH ALL PYROS SAFED AND NSI NO-GO SIMULATORS INSTALLED.

(E) OPERATIONAL USE

NONE