

FMEA
 EMU FAILURE MODE, EFFECT ANALYSIS

01/02/90 SUPERSEDES / /

ANALYST:

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NAME P/N QTY	FUNCTION	FAILURE MODE & CAUSES	MISSION PHASE	FAILURE EFFECT	FAILURE DETECTION FLIGHT/GROUND	TIME TO EFFECT/ ACTIONS	CBIT	REMARKS/ NAFAPAD	REF
DISPLAY AND CONTROLS ELECTRONICS, 112M 350 ----- 9V792291 (1)	Provides current limiting for EVC, feedwater solenoid and CLIV solenoid power. Provides optical isolation and discrete signal conditioning for C/S input discretes and EVC tone discretes. Contains battery current and voltage sense circuits, DCM display, and provides secondary power to DCM display, C/S, and sensors.	350PH24: Electrical short (input to output) in CLIV current limiter. CABRE: Electronic component failure.	PREEVA EVA	END ITEM: Loss of over current protection for DCM for short circuits in CLIV power circuits. C/S INTERFACE: None for single failure. Subsequent failure could cause EMU power loss by fusing EMU power return P.C. trace in DCM. MISSION: None for single failure. Terminate EVA for subsequent failure (short) that results in EMU power loss. CREW/VEHICLE: None for single or double failure. Possible loss of crewman with loss of SOP.	FLIGHT: No. GROUND: Yes. FEMU-R-001, Para. 7.3.3.2.1). 3 EVC and FM Valve Current Limiters test.	None. TIME AVAILABLE: N/A TIME REQUIRED: N/A	3/IR A-PASS B-PASS C-PASS	The redundant paths are the electrical components and the SOP. Circuit breakers (current limiters), are standby redundant.	None.

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