

FMEA
EMU FAILURE MODE, EFFECT ANALYSIS

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12/24/95 SUPERSEDES 12/24/94

ANALYST:

NAME P/N QTY	FUNCTION	FAILURE MODE & CAUSES	MISSION PHASE	FAILURE EFFECT	FAILURE DETECTION FLIGHT/GROUND	TIME TO EFFECT/ ACTIONS	CRIT	REMARKS/ HAZARD	REF
DISPLAY AND CONTROLS ELECTRONICS, ITEM 350 ----- SV792293-27 (1)	Provides current limiting for EVC, feedwater solenoid and CLIV solenoid power. Provides optical isolation and discrete signal conditioning for CMS input diodes and EVC tone diodes. Contains battery current and voltage sense circuits, DCN display, and provides secondary power to DCN display, CMS, and sensors.	3SDFM02: Electrical short in primary EVC current limiter (input to output). CAUSE: Electrical short in wiring or electronic component.	PREEVA EVA	END ITEM: Loss of overcurrent protection for DCN for short circuits in EVC power circuits. CFE INTERFACE: None for single failure. Any subsequent short in the EVC power lines would cause fusing of EMU power return P.C. Trace in DCN. This would result in loss of all EMU electrical power. MISSION: None for single failure. Terminate EVA if second failure occurs which causes loss of EMU power. CREW/VEHICLE: None for single or double failure. Possible loss of crewman with loss of SOP.	FLIGHT: No. GROUND: None.	None required. TIME AVAILABLE: N/A TIME REQUIRED: N/A	3/IR A-PASS B-PASS C-PASS	The redundant path is the SOP. Circuit breakers (current limiters) are stand by redundant.	None.