

FMEA
EMU FAILURE MODE, EFFECT ANALYSIS

12/24/95 SUPERSEDES 12/24/94

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	EXIT	REMARKS/ HAZARD	REF
DISPLAY AND CONTROLS ELECTRONICS, ITEM 35B ----- SV792291-27 (1)	Provides current limiting for EVC, feedwater solenoid and CLIV solenoid power. Provides optical isolation and discrete signal conditioning for CVS input diodes and EVC tone diodes. Contains battery current and voltage sense circuits, DCN display, and provides secondary power to DCN display, CVS, and sensors.	SSDFM03: Feedwater valve (137) current limiter fails shorted (input to output). CAUSE: Electrical short in wiring or component.	PREEVA EVA	END ITEM: Loss of overcurrent protection of the DCN for a short in the feedwater power line. GFE INTERFACE: None for single failure. Subsequent failure (short) could cause EMU power failure. MISSION: None for single failure. Terminate EVA for subsequent failures that result in EMU power loss. CREW/VEHICLE: None for single or double failure. Possible loss of crewman with loss of SOP.	FLIGHT: No. GROUND: None.	None. TIME AVAILABLE: N/A TIME REQUIRED: N/A	3/1R A-PASS B-PASS C-PASS	The redundant paths are the electrical system and the SOP. The CVS measures battery current and issues a warning if pre-selected limits are exceeded. Circuit breakers (current limiters) are standby redundant.	None.