

FMEA  
EMU FAILURE MODE, EFFECT ANALYSIS

12/24/95 SUPERSEDES 12/24/94

ANALYST:

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Date: 11/15/95

NAME P/N QTY	FUNCTION	FAILURE MODE & CAUSES	MISSION PHASE	FAILURE EFFECT	FAILURE DETECTION FLIGHT/GROUND	TIME TO EFFECT/ ACTION	CRIT	REMARKS/ HAZARD	REF
DISPLAY AND CONTROLS ELECTRONICS, ITEM 350 EV792291-27 (1)	Provides current limiting for EVC, feedwater solenoid and CLIV solenoid power. Provides optical isolation and discrete signal conditioning for CMS input discretes and EVC tone discretes. Contains battery current and voltage sense circuits, DCM display, and provides secondary power to DCM display, CMS, and sensors.	350FM32: Electrical short (input to output) in secondary EVC current limiter.  CAUSE: Electronic component failure.	PREEVA  EVA	END ITEM: loss of over current protection for DCM for short circuits in EVC power circuit.  GFE INTERFACE: None for single failure. Any subsequent short in the EVC power lines would cause fusing of EMU power return P.C. trace in SCN. This would result in loss of all EMU electrical power.  MISSION: None for single failure. Terminate EVA for second failure which results in 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	3/1R  A-PASS B-PASS C-PASS	The redundant path is the SOP. Circuit breakers (current limiters) are standby redundant.	None.