FMEA
EMU FAILURE MODE, EFFECT ANALYSIS 01/02/90 SUPERSEDES / / 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 --- 6VT92291 (1)	Provides current limiting for EVC, feedwater solenoid and CLIV solenoid power. Provides optical isolation and discrete signal conditioning for CWS input discretes and EVC tone discretes Contains battery current and voltage sense circuits, DCH display, and provides secondary power to DCH display, CWS, and sensors.	350FM26: DC/DC converter current limiter fails shorted (input to output). CAUSE: Electronic component failure.	PREEVA EVA	END ITEM: Loss of overcurrent protection for DCH for short circuits in DC/DC converter output circuits. SPE INTERFACE: Loss of overcurrent protection for CWS, sensors, and BIDS. A subsequent unprotected short circuit in the EMU would cause the EMU power return P.C. trace in the DCH to fuse, causing a loss of all EMU electrical power. MISSION: None for single failure. Terminate EVA for subsequent failure which cause a 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. 7.3.5.2.1.1. 3 DC/DC Converter Current Limiter Test.	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; Unable to power EMU from either battery or SCU.	None.