

CIL
EMU CRITICAL ITEMS LIST

12/24/91 SUPERSEDES 88/31/90

ANALYST:

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NAME P/N QTY	CRIT	FAILURE MODE & CAUSES	FAILURE EFFECT	RATIONALE FOR ACCEPTANCE
PACKAGING (SOP), EVEN 200 ----- 6V799045-B0 (1)	2/1R	200FMO1: External gas leakage, SOP/PLESS interface connector. CAUSE: Seal failure.	END ITEM: Suit gas leakage to ambient. BPE INTERFACE: Leakage of primary oxygen supply to ambient. Premature depletion of primary oxygen supply. MISSION: Terminate EVA. CREW/VEHICLE: None for single failure. Possible loss of crewman with loss of SOP.	A. Design - The static seals at either end of this connector are radlet "O" seals, fabricated of silicone. This "O" ring seal design configuration dimensions and ripidness of assembly provide squeeze under all loading conditions for this item. B. Test - Certification Test - The item completed the 15 year structural vibration and shock certification requirement during 10/83, EC 42885-619 (dimensional) has been incorporated and certified since that time. C. Inspection - All details, gases and test facilities are cleaned and inspected to 983150 EHSOA to preclude contamination. Details, including the O-Rings, S-Ring grooves, and sealing surfaces are 100% inspected per drawing dimensions and surface finish characteristics, details are manufactured from material with certified physical and chemical properties. D. Failure History - none. E. Ground Turnaround - Tested per FEMU-R-001, preflight gas structural and leakage. F. Operational Use - Crew Response - EVA: Since EVA termination is required as soon as sop fa flowing, crew could abort EVA when excessive SOP rate is detected. Training - Standard EMU training covers this failure mode. Operational Considerations - EVA checklist procedures verify hardware integrity and systems operational status prior to EMU. flight rules define go/no go criteria related to EMU pressure integrity and regulation. flight rules define EMU as lost for loss of operational SOP. Real Time Data System allows ground

CIL
EMU CRITICAL ITEMS LIST

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NAME P/N QTY	CNT	FAILURE MODE & CAUSES	FAILURE EFFECT	RATIONALE FOR ACCEPTANCE
	2/00	200FH01:		monitoring of EMU systems.