FAILURE MODES AND EFFECTS ANALYSIS

ASSY NOMENCLATURE: LAUNCH ENTRY SUIT (LES)
ASSY P/N: [illegible]

SYSTEM: Crew Escape System
SUBSYSTEM: Launch Entry Suit

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NAME AND DRAWING	FUNCTION	FAILURE MODE AND CAUSE	MISSION PHASE	FAILURE EFFECT ON: END ITEM	FAILURE EFFECT ON: MISSION	FAILURE EFFECT ON: CREW/VEHICLE	FAILURE DETECTION FLIGHT GROUND	CORRECTIVE ACTION TIME AVAILABLE/TIME REQUIRED	CRIT. HW/F	HAZARDS/REMARKS
		3.2.3 Rupture Cause • defective material • overstress	Pad egress	Excessive consumption of EOS supply if redundant/relief valve fails	N/A*	Loss of crewmember if redundant/relief valve fails	No O_2 flow	None	3/1R	Anti-suff valve will provide ambient air
3.3 Oxygen Manifold (Suit Mounted)	Interconnects all O_2 from Orbiter supply and EOS	3.3.1 Orbiter O_2 supply On/off valve fails open Cause • contamination • defective material	Abort	None	N/A*	None	None	None	3/3	The on/off valve controls only the Orbiter O_2 supply to the crew escape equipment
		3.3.2 Orbiter O_2 supply On/off fails closed Cause • contamination • defective material	Abort	No Orbiter O_2 supply to suit if unable to reconnect Orbiter O_2 supply hose to EOS connection	N/A*	Loss of crewmember if unable to reconnect Orbiter O_2 supply hose to EOS connection	No audible O_2 flow	Connect Orbiter O_2 supply hose to EOS connection Minutes/seconds	2/1R	The EOS side of the manifold is designed such that it cannot be closed
		3.3.3 External leakage Cause • contamination • stress corrosion	Pad egress	Greater consumption of EOS supply	N/A*	None	None	None	3/3	Leak rate is [illegible]

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