

Failure Modes and Effects Analysis/Critical Items List

FMEA No:	OSS-STS76-01	Originator:	G. Hall	Project:	STS-76 DTO 671
Part Name:	Hook, Large	ORU Part #	SED39128383-301	Quantity:	4
Part #:	SED39128378-301	ORU Part Name:	Common Waist Tether Assy	System:	EVA
Drawing:	SED39128378	Subsystem:	N/A	Effectivity:	STS-76

Criticality:

Critical Item?	Yes	No	X
Criticality Category	1R/3		

Redundancy Screens:

- A - Pass
- B - Pass
- C - Pass

Function: Provides interface between the EVA crewmember (EMU D-ring) and the Safety Tether Assy
 Failure Mode: Hook inadvertently opens during EVA
 Cause: Hook latch fails unlatched

Remaining Paths: 1. Second spring failure Effect/Mission Phase: EVA, while docked
 2. Third spring failure
 3. Fourth spring failure
 4. Paddle depressed and lever actuated
 5. Use Safer to return to Orbiter. When undocked, orbiter pickup becomes additional path.
 Note: The two lock springs and two lever springs must fail and the paddles depressed and the lever actuated to cause inadvertent opening of hook.

Corrective Action: None.

-Failure Effects-

End Item: Loss of safety restraint for EVA crewmember
 Interface: N/A
 Mission: N/A
 Crew/Vehicle: Possible loss of crewmember due to separation from Orbiter

Hazard Information:

Hazard:	Yes	No	X
Hazard Organization Code:	N/A		
Hazard Number:	N/A		

Document N^o 18901-20131B
 Release Date 10/30/95
 Revision Date 02/26/96
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Failure Modes and Effects Analysis/Critical Items List

FMEA No: OSS-ST576-01	Originator: G. Hall/OSS	Project: STS-76 DTO 671
Part Name: Hook, Large	ORU Part # SED39128383-301	Quantity: 4
Part #: SED39128378-301	ORU Part Name: Common Wais Tether Assy	System: EVA
Drawing: SED39128378	Subsystem: N/A	Effectivity: STS-76
Time to Effect: N/A		
Time to Detect: N/A		
Time to Correct: N/A		
Failure Detection/Flight: N/A		

Remarks:

-Retention Rationale-

(A) Design: N/A
 (B) Test: N/A
 (C) Inspection: N/A
 (D) Failure History: N/A
 (E) Operational Use

Prepared By: G. Hall/OSS	Revision: B	Date: 02/26/96
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