

Document No 18901-70131B
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Failure Modes and Effects Analysis/Critical Items List

FMEA No: OSS-STS76-14	Originator: G. Hall	Project: STS-76 DTO 671
Part Name: Hook, Small	ORU Part # SED33107201-301	Quantity: 1
Part #: SED33108377-301	ORU Part Name: Safety Tether Assy	System: EVA
Drawing: SED33108377	Subsystem: N/A	Effectivity: STS-76

Criticality:

Critical Item? Yes No

Criticality Category 1R/3

Redundancy Screens:

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

Function: Provides adjustable safety tether 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

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FMEA No:	OSS-ST576-14	Originator:	G. Hall/OSS	Project:	STS-76 DTO 671
Part Name:	Hook, Small	ORU Part #	SED33107201-301	Quantity:	1
Part #:	SED33108377-301	ORU Part Name:	Safety Tether Assy	System:	EVA
Drawing:	SED33108377	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:	N/A

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