

Failure Modes and Effects Analysis/Critical Items List

FMEA No: OSS-ST576-16	Originator: G. Hall	Project: STS-76 DTO 671
Part Name: Tether Cord	ORU Part #: SED33107201-301	Quantity: 1
Part #:	ORU Part Name: Safety Tether Assy	System: EVA
Drawing: SED33107201	Subsystem: N/A	Effectivity: STS-76

Criticality:

Critical Item? Yes X No
 Criticality Category 1R/2

Redundancy Screens:

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

Function: Provides adjustable safety tether interface between the EVA crewmember (EMU D-ring) and EVA slidewire assy.

Failure Mode: Tether cord fails (separates)

Cause: Damage, excessive load

Remaining Paths: Use Safer to return to Orbiter. Effect/Mission Phase: EVA while docked
 When undocked, pickup by Orbiter becomes additional path.

Corrective Action: None

-Failure Effects-

End Item: Tether assembly inoperable
 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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 Page A-33

Failure Modes and Effects Analysis/Critical Items List

FMEA No:	OSS-ST576-16	Originator:	G. Hall/OSS	Project:	STS-76 DTO 671
Part Name:	Cable Assembly	ORU Part #	SED33107201-301	Quantity:	1
Part #:		ORU Part Name:	Safety Tether Assy	System:	EVA
Drawing:	SED33107201	Subsystem:	N/A	Effectivity:	STS-76
Time to Effect:	Immediate				
Time to Detect:	Immediate				
Time to Correct:	Immediate				
Failure Detection/Flight:	Visual				

Remarks:

-Retention Rationale-

- (A) Design: Designed per GDRD, JSC 26626A requirements
- (B) Test: Certification per CARD for CSTA STA JSC 33433
- (C) Inspection: Flight hardware inspections at OSS, PDA, and PLA for proper operation
- (D) Failure History: None
- (E) Operational Use: NOTE: ORU will be used in a critical application.

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