

CRITICAL ITEMS LIST (CIL)

SYSTEM:	Thermal Protection System	FUNCTIONAL CRIT:	1
SUBSYSTEM:	Intertank	PHASE(S):	b
REV & DATE:	J, 12-19-97	HAZARD REF:	T.02
DCN & DATE:			
ANALYSTS:	B. Burkes/R. Lauto		

FAILURE MODE: Loss of SOFI Material

FAILURE EFFECT: b) Loss of mission and vehicle/crew due to debris impacting Orbiter in critical areas.

TIME TO EFFECT: Seconds

FAILURE CAUSE(S): A: Material Deficiency
B: Process Deficiency

REDUNDANCY SCREENS: Not Applicable

FUNCTIONAL DESCRIPTION: This foam prevents ice formation during prelaunch, and provides a smooth fairing surface on the Intertank.

<u>FMEA ITEM CODE(S)</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY</u>	<u>EFFECTIVITY</u>
5.6.4.1	80971018424	TPS Closeout - Cell A Stack	1	LWT-54 & Up
	80971029440	TPS Closeout Offsite (Views BC & BD)	1	LWT-54 thru 62
	80971029440	TPS Closeout Offsite (View BL & BM)	1	LWT-63 & Up
5.6.5.1	80971118414	102 Intertank Interface Foam	1	LWT-54 & Up

REMARKS: The closeout SOFI applications are grouped as the failure mode, causes and effects are the same.

CRITICAL ITEMS LIST (CIL)
CONTINUATION SHEET

SYSTEM: Thermal Protection System
SUBSYSTEM: Intertank
FMEA ITEM CODE(S): 5.6.4.1, 5.6.5.1

REV & DATE: J, 12-19-97
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RATIONALE FOR RETENTION

STP1503, 1518, 1525, 1532, 1536 and 6014 are applicable to these FMEA Item Codes. See Page 1 for Retention Rationale specified by these STP's. The following additional Retention Rationale is also applicable to these FMEA Item Codes:

DESIGN:

No additional Rationale for Retention is applicable.

TEST:

The LN2/Intertank Interface Foam (5.6.4.1) and LO2/Intertank Interface Foam (5.6.5.1) are certified. Reference MCS's MMC-ET-IM08-L-T006, T503, T504 and T507; MCS MMC-ET-IM08-L-T019 (5.6.4.1). Refer to the MCS(s) for effectivity data applicable to specific part numbers and material type.

INSPECTION:

Launch Site:

A, B: Verify surface cleanliness (80971029440).

FAILURE HISTORY:

Current data on test failures, unexplained anomalies and other failures experienced during ground processing activity can be found in the PRACA data base.