

CRITICAL ITEMS LIST (CIL)

SYSTEM:	Thermal Protection System	FUNCTIONAL CRIT:	1
SUBSYSTEM:	Components	PHASE(S):	b
REV & DATE:	J, 12-19-97	HAZARD REF:	T.02
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 SOFI insulates the ET/SRB cable fairings to prevent prelaunch ice formation.

<u>PNEA ITEM CODE(S)</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY</u>	<u>EFFECTIVITY</u>
5.8.36.1	80971009442	Fairing, ET/SRB Aft, Foam Appl	2	LMT-54 & Up
	80971029440	TPS Closeout Offsite (Views R & S)	1	LMT-54 thru 63
	80971029440	TPS Closeout Offsite (Views 2F, BG, & BL)	1	LMT-64 & Up

REMARKS: The aft ET/SRB TPS applications are grouped as the failure mode, causes and effects are the same.

CRITICAL ITEMS LIST (CIL)
CONTINUATION SHEET

SYSTEM: Thermal Protection System
SUBSYSTEM: Components
FMEA ITEM CODE(S): 5.8.36.1

REV & DATE: J. 12-19-97
DCN & DATE:

RATIONALE FOR RETENTION

STP1513, 1518, 1532, 1536 and 6014 are applicable to this FMEA Item Code. See Page 1 for Retention Rationale specified by these STP's. The following additional Retention Rationale is also applicable to this FMEA Item Code:

DESIGN:

No additional Rationale for Retention is applicable.

TEST:

The Aft ET/SRB TPS Applications are certified. Reference MCS's MMC-ET-TMCS-L-T019, T022, T503, T504 and T507. Refer to the MCS(s) for effectivity data applicable to specific part numbers and material type.

INSPECTION:

No additional Rationale for Retention is applicable.

FAILURE HISTORY:

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