

CRITICAL ITEMS LIST (CIL)

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

FAILURE MODE: Loss of SOFJ Material

FAILURE EFFECT:

- b) Loss of mission and vehicle/crew due to structural failure caused by overheating. Loss due to debris impacting Orbiter in critical areas.
- c) Loss of life caused by ET impacting outside the footprint due to early breakup during reentry. Loss due to debris impacting Orbiter in critical area during TAL abort.

TIME TO EFFECT: Seconds

FAILURE CAUSE(S):

- A: Material Deficiency
- B: Process Deficiency

REDUNDANCY SCREENS: Not Applicable

FUNCTIONAL DESCRIPTION: This foam is applied between Intertank stringers to provide a smooth surface for the oncoming sprayed foam.

<u>FMEA ITEM CODE(S)</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY</u>	<u>EFFECTIVITY</u>
5.6.1.1	80973018416	Foam Application Intertank	1	LWT-54 & Up

REMARKS:

CRITICAL ITEMS LIST (CIL)
CONTINUATION SHEET

SYSTEM: Thermal Protection System
SUBSYSTEM: Intertank
FMEA ITEM CODE(S): 5.6.1.1

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

RATIONALE FOR RETENTION

STP1503, 1518, 1532, 1536, 3001, 3003 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 Intertank Foam TPS Application is certified. Reference RCS's MMC-EI-TN08-L-T006, 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.