

CRITICAL ITEMS LIST (CIL)

SYSTEM: Thermal Protection System  
 SUBSYSTEM: Components  
 REV & DATE: J, 12-19-97  
 DCN & DATE:  
 ANALYSTS: B. Burkes/R. Leuto

FUNCTIONAL CRIT: 1  
 PHASE(S): a, b  
 HAZARD REF: T.02

FAILURE MODE: Loss of SOFI Material

FAILURE EFFECT: a) Loss of mission and vehicle/crew due to excessive delta pressure across forward LH2 dome.  
 b) Loss of mission and vehicle/crew due to overpressure causing structural failure of Intertank.

TIME TO EFFECT: Seconds

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

REDUNDANCY SCREENS: Not Applicable

FUNCTIONAL DESCRIPTION: This foam provides thermal protection for the LO2 feedline flex section inside the Intertank from prelaunch environments.

<u>FMEA ITEM CODE(S)</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY</u>	<u>EFFECTIVITY</u>
5.8.2.1	80973028406	Feedline, LO2 flex, TPS Appl	1	LWT-54 & Up

REMARKS:

CRITICAL ITEMS LIST (CIL)  
CONTINUATION SHEET

SYSTEM: Thermal Protection System  
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RATIONALE FOR RETENTION

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STP1513, 1536, 3004, 3008 and 5013 are applicable to this FMEA Item Code. See Page 1 for Retention Rationale specified by these GTP's. The following additional Retention Rationale is also applicable to this FMEA Item Code:

DESIGN:

No additional Rationale for Retention is applicable.

TEST:

The LO2 Flex Feedline TPS Application is certified. Reference RCS's MMC-ET-TM08-L-1008, T504 and T507. Refer to the RCS(s) for effectivity data applicable to specific part numbers and material type.

INSPECTION:

Launch Site:

Inspect LO2 Feedline - Visually Inspect for TPS integrity (CHR50 File IV).

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.