

NON-CIL 1R ITEMS

SYSTEM: Electrical

REV & DATE: J, 12-19-97

SUBSYSTEM: Temperature

DCN & DATE:

Per NSTS 22206, certain failure modes of the following items in subsystem 3.9 (Temperature) meet the criteria to be designated "Non-CIL 1R". Rationale for Retention is not required.

FMEA Item Codes: 3.9.10.3, 3.9.11.3, 3.9.12.3, 3.9.13.3, and 3.9.14.3.

CRITICAL ITEMS LIST (CIL)

SYSTEM:	Electrical	FUNCTIONAL CRIT:	1R
SUBSYSTEM:	Nose Cone Temperature	PHASE(S):	b
REV & DATE:	J, 12-19-97	HAZARD REF:	E.01, P.04
DCN & DATE:			
ANALYSTS:	J. F. Bowski/A. Oser		

FAILURE MODE: Fails With an Undetected False Bias Output

FAILURE EFFECT: b) Loss of mission and vehicle/crew due to ice debris damage.
Loss of mission and vehicle/crew due to TPS debris and/or nose cone structural damage due to debond.

TIME TO EFFECT: Minutes

FAILURE CAUSE(S): A: Increased Sensor Circuit Resistance
B: Decreased Sensor Circuit Resistance

REDUNDANCY SCREENS: Screen A: PASS
Screen B: N/A - Item nonfunctional in flight.
Screen C: PASS

FUNCTIONAL DESCRIPTION: Connects temperature sensors to the facility GUCA. Data used to control facility heating system during cryo loading.

<u>FMEA ITEM CODE(S)</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY</u>	<u>EFFECTIVITY</u>
3.9.11.3	80931003704-130 (327W05 P3/Splice)	Harnesses	1	LWT-54 & Up
3.9.12.3	80933003704-120 (314W24 J1/J3)	Harnesses	1	LWT-54 & Up

REMARKS: These harnesses are grouped since the failure mode, causes and effects are the same. Items meet criteria for Non-CIL 1R. Rationale for Retention is not required.