
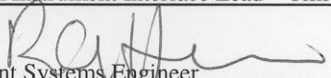



reel'd - 8-18-03
approved - 8/25/03

 SPECTRUMASTRO	GLAST Mission Interface Change Notice (ICN)		ICN No. 010
			SHEET <u>1</u> OF <u>3</u>
ORIGINATOR: Tim Morse	PHONE: 480-892-8200	DATE: 8-1-03	
CHANGE TITLE: LAT Survival Feeds		ORG: Spectrum Astro	
DOCUMENT NUMBER	TITLE	VERSION	
1196-EI-Y46311-000	LAT-SC ICD	A	
REASON FOR CHANGE: The spacecraft power distribution system has been changed to replace the FET switches and fuses with Solid State Power Controllers with internal circuit breakers to provide over current protection to the LAT unregulated survival heater feeds. In addition, additional detail has been added to the interface schematic to define the feed routing and treatment of multiple wires for each feed.			
PROPOSED CHANGE: Update Figure 6-3 to include the SSPCs with circuit breakers, show that the two survival feeds are treated independently with one feed supplying power to the survival heaters located on the +Y side of the LAT and the other feed supplying power to the -Y side. Additionally show that each feed uses two pairs of wires in the SC harness that are connected together at the LAT before being routed to all heaters. Update Figure 6-5 to show the trip curves for the SSPCs shown in Figure 6-3.			
INSTRUMENT IMPACT <input type="checkbox"/> Cost <input type="checkbox"/> Schedule			
SPACECRAFT IMPACT <input type="checkbox"/> Cost <input type="checkbox"/> Schedule			
ORIGINATOR SIGNATURE:			
APPROVAL SIGNATURES:			
Spectrum Instrument Interface Lead - Tim Morse	Spectrum Program Manager - Chris Clark		
 Instrument Systems Engineer	 Instrument Program Manager		

6.3.2.2 Unregulated Feeds

The SC feeds shall be sized to provide the following unregulated power:

- a. Feed 7 – 8A for the primary Survival Heaters.
- b. Feed 8 – 8A for the primary Survival Heaters.
- c. Feed 9 – 8A for the redundant Survival Heaters.
- d. Feed 10 – 8A for the redundant Survival Heaters.

The LAT shall not use unregulated power to maintain LAT operational temperatures.

The unregulated power survival heater feed interface is shown in Figure 6-3. The primary feeds are shown, redundant feeds are identical.

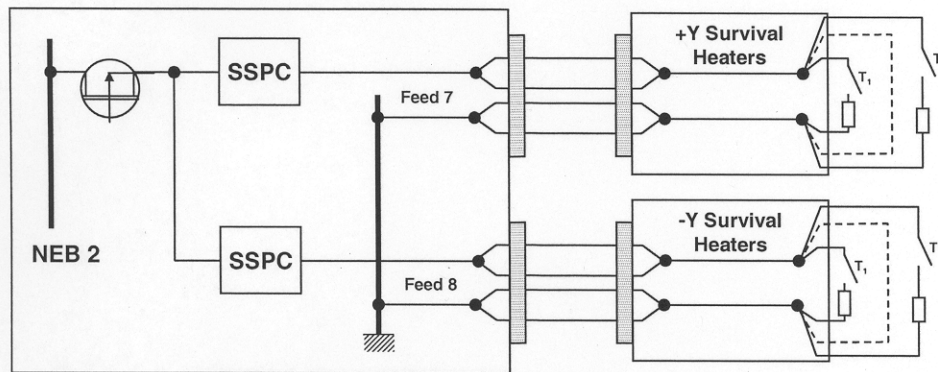


Figure 6-3. Unregulated Power Interface Schematic

6.3.2.3.3 Unregulated Survival Heater Overcurrent Protection

The Unregulated Survival Heater feeds are protected by 10A circuit breakers in the Solid State Power Controllers (SSPC). The SSPC trip curves are shown below in Figure 6-5.

Deleted: 15A fuses

Deleted: fuse blow

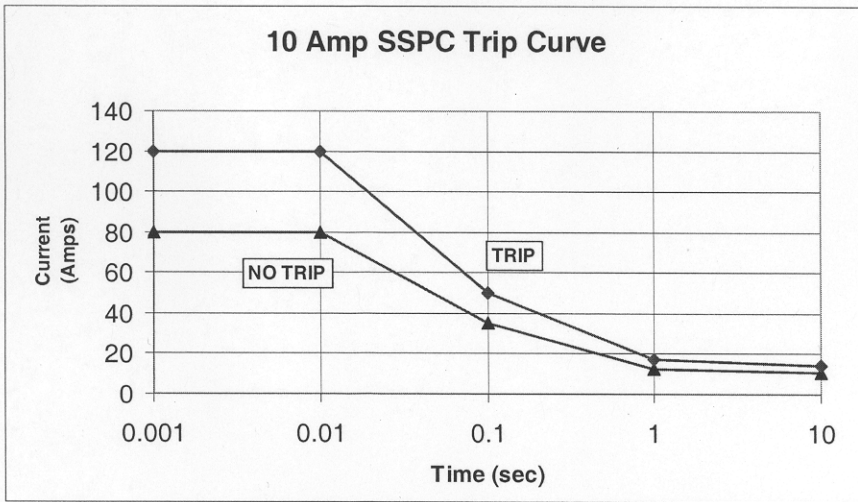


Figure 6-1. Unregulated Survival Heater 10amp_Trip Characteristics

Deleted: 15amp

Deleted: Fuse