GLAST Mission
Interface Change Notice (ICN)

ORIGINATOR:  Tim Morse  PHONE:  480-892-8200  DATE:  10-2-03

CHANGE TITLE:  LAT-SC System Grounding  ORG:  Spectrum Astro

DOCUMENT NUMBER  TITLE  VERSION
1196-EI-Y46311-000  LAT-SC ICD  A

REASON FOR CHANGE:
Grounding was incorrectly defined, mixing power grounding methodology and electrical bonding resistance at the mechanical interfaces. This change separates the two into different requirements.

PROPOSED CHANGE:
The SC shall provide a structure or an electrically conductive ground plane, known as the chassis ground, as a ground reference for the GLAST Observatory. The GLAST SC provides a Single Point Ground (SPG) for PDU primary power referencing, to minimize primary power current in SC structure during normal SC operations. The Observatory chassis ground shall not be used to conduct intentional primary power load current.

The LAT shall provide a single point ground for the SC PRU that has less than 2.5 mOhms between power returns and
chassis. Within the SC PRU, its regulated power 28 VDC return line shall be isolated from Observatory structure by at least 1 Megohm.

The electrical bonding between the SC upper ring and the LAT grid shall be less than 2.5 milliohms at each interface.

INSTRUMENT IMPACT
☐ Cost  ☐ Schedule

SPACECRAFT IMPACT
☐ Cost  ☐ Schedule

ORIGINATOR SIGNATURE:

APPROVAL SIGNATURES:

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