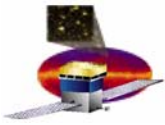


GLAST Large Area Telescope: LAT System Engineering

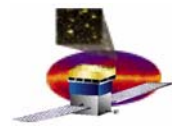
Pat Hascall
SLAC

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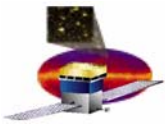
Issues List

- **Goal is to convey issue closure and status**
- **Need your help to detect unintended side effects or issues that need additional work and to ensure that need dates are correct**
- **We will cover the issues list every week**
- **Nomenclature**
 - **ASAP for a due date means that hardware build is being held up**
- **Review of issues list resulted in the following briefing topics**
 - **Verification Plan update summary of changes (4 Nov)**
 - **Briefing on ACD flexure modifications (11 Nov)**



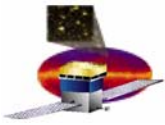
Issues

No.	Title/Description	Description/Status	Need Date	Actionee
1	Cal grid interface design not complete	Peer review held. Recommended mod to bolt pattern to the spacecraft approved through CRB.	Closed	M. Nordby
2	X-lat to electronics thermal interface not complete	Design nearly complete, still a few issues to work out. Peer review expected by end of October (Nov 5)		N. Nordby
3	Technical baseline	Drawing Tree completion by end of Oct. All drawings under CM prior to flight build.	1 Jan 04	P. Hascall
4	Tracker/tem/temps flex cable layouts	Conceptual redesign is complete, need to update drawings. Peer review 28 Oct	ASAP	M. Nordby
5	EMI/EMC design	Following items will be implemented to mitigate EMI/EMC issues: E Ni plating on metal to metal surfaces, Cal to implement presented design mods EMI gaskets per discussions with Fred, Venting unchanged	ASAP	F. Blanchette



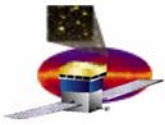
Issues (Continued)

No.	Title/Description	Description/Status	Need Date	Actionee
6	CAL dual PIN photodiode wire bonds suspect	Have remedial action for two suspected causes (tinning and thermal shock).	Closed	W. Johnson
7	Qualification of plastic encapsulated ASICs	Document to support qualification determined, DAQ has agreed to dates.		G. Haller
8	GTRC TOT timeouts	Cause understood. Fix would require GTRC redesign or correct in TEM.	ASAP	R. Johnson
9	GTRC extra clock delay	Fix to GTRC to correct understood. Fixing clock rise time is not enough.	ASAP	R. Johnson
10	Tracker EM program completion	Planned vib test in mid Nov and TV test starting early December using thermal model.	19 Dec 03	R. Johnson



Issues (Continued)

No.	Title/Description	Description/Status	Need Date	Actionee
11	ACD TDA flexure / fiber interference	Rerouted fibers, tapered flexures and moved some flexures. Performing final analysis, drawings in review. –Present in Engineering review 11 Nov	11 Nov	D. Thompson
12	ACD – LAT interface definition not complete (blanket attachment, grounding, cable tie downs, optical survey mounts)	Cable tie downs to be addressed by the LAT. Remainder in work at low priority.		M. Nordby
13	Tracker MCM attachment and wire bonding	Test boards from preproduction group to be sent to Italy for inspection to verify solution	1 Dec 03	R. Johnson
14	X-LAT heat pipe must be internally SPF tolerant	Decision made to add u shaped heat pipes. Peer per AI 2 on 5 Nov.	31 Oct 03 Closed	M. Nordby



Issues (Continued)

No.	Title/Description	Description/Status	Need Date	Actionee
15	Radiator integration clearances not sufficient	Resolution will impact either Grid wing cutouts or Radiator cut outs Likely solution is to slot clearance holes in radiator.		M. Nordby
16	Fly away instrumentation not finalized	Locations must be finalized to be able to assess impacts to Tracker and Grid. Internal accels and strain gauge counts and locations to be updated by 31 October. Finals needed by ??		Hascall
17	New coupled loads results may create negative margins	Results under evaluation. Min margin areas reviewed to determine MUF required. Positive margin shown on critical interfaces (still issue on shear plates)	10 Oct	J. Ku
18	Grid-DAQ interface issues (grounding and EMI)			
19	EMI/EMC requirements and test	System analysis tool under development, requires subsystems help. Will result in test requirements documented in the Performance Verification Plan		F. Blanchette