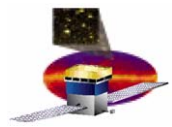


GLAST Large Area Telescope

Instrument Science Operations Center Monthly Status Review

5 January 2006

Rob Cameron
rac@slac.stanford.edu
650-926-2989



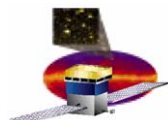
MOR Planning

Gamma Ray Large Area Space Telescope (GLAST) Mission Operations Review

March 15-16, 2006

Building 26, Room 205

NASA/GSFC



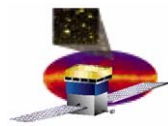
MOR Agenda: Day One

1 – Introduction	Lehtonen	8:00 am
2 – Mission Overview	Vernacchio	8:10 am
3 – Observatory Overview	Leibee	8:30 am
4 – Ground System Overview	Lehtonen	9:00 am
5 – Networks	Dew	9:30 am
6 – Security	Sigman	9:55 am
B R E A K		
7 – Mission Readiness Testing	ALL	10:10 am
8 – Mission Operations Overview	Pumphrey	10:25 am
LUNCH		
9 – Mission Operations Readiness	Jennings	11:00 am
10 – Launch and Early Orbit Operations	ALL	NOON
B R E A K		
11 – Normal Operations	FOT	1:00 pm
12 – Operations Simulations	Burk	2:00 pm
	ALL	3:00 pm
	FOT	3:15 pm
	Deyarmin	4:45 pm

REVIEW

<<<< End of Day One >>>>

5:00 pm



MOR Agenda: Day Two

13 – Science Operations

12a – GSSC Operations

Norris 8:00 am

12b – LISOC Operations (LAT)

Cameron 8:30 am

12c – GIOC Operations (GBM)

Padiyas 9:00 am

14 – GLAST Reentry

Ford 9:30 am

B R E A K

ALL 10:00 am

15 – FSW Sustaining Engineering

Andrews 10:15 am

15a – Spacecraft

“

15b – Large Area Telescope (LAT)

“

15c – Gamma Ray Burst Monitor (GBM)

“

16 – Issues and Concerns/Forward Plan

Lehtonen 11:15 am

17 – Concluding Remarks

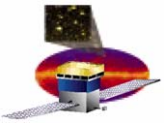
Lehtonen 11:25 am

BOARD CAUCUS & CONCLUDING COMMENTS

11:30 am

<<<< End of Day Two >>>>

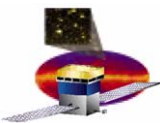
NOON



MOR Guidelines

4.4 MISSION OPERATIONS REVIEW (MOR)

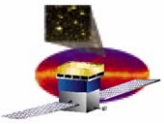
The MOR is the first of the two reviews, which concentrate on the ground system and flight operations preparations. All mission-oriented operations will be addressed including science, spacecraft and ground systems operations. The overall design and status of the ground system is reviewed to assure that the requirements for science and spacecraft operations support and for data processing and analysis support are understood and that the proposed approach will meet the requirements. The operational interfaces between the ground system and flight system will be reviewed with respect to proper system engineering of operational trade-off, signal link margins, constraints, and modes of operation including safe modes. Mission integration of pre-launch test planning including all planned tests between the flight segment and the ground system will be reviewed. The relationship between planned ground system software releases/capabilities and planned tests with the flight segment will be included. The plans and status for flight operations team and science operations preparations will be presented. The mission operations review should occur prior to significant integration and test of the flight system and ground system and should address the following items:



Items to be addressed by MOR

•Objectives

- Overall schedule and status including: documentation (i.e. spacecraft operations concept, ground system requirements, flight operations and contingency plans and Interface Control Documents)
- Closure of previous reviews (e.g. Project-unique ground system reviews)
- Mission, science, spacecraft, flight software, and ground system overviews
- Flight software maintenance approach
- Flight operations team build up and training plans
- Pre-launch test plans including: RF and POCC compatibility tests, data flow and end-to-end tests, simulations and exercises, launch site and pad tests
- Launch and early orbit overview including deployment activities and coverage
- In-orbit checkout overview
- Project database and procedure development
- Spacecraft and instrument operations constraints
- Spacecraft subsystem level activities
- Mission planning and scheduling
- On-board data memory management
- Real-time operations including: health and safety monitoring, safe mode operation
- Trend analysis plans including reports and archive
- Science operations planning, data processing and analysis
- Ground system requirements and development status
- Mission readiness testing
- Preliminary list of all launch critical facilities and function
- Issues and concerns



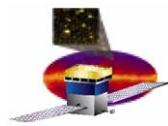
MOR Planning

❑ MOR Rehearsals

- 13 January 2006
 - ISOC: 1:00pm - 1:25pm EST
 - ISOC participation by call-in
 - Outline of presentation
- 9,10 February 2006
 - ISOC participation by call-in
 - First draft of presentation
- 8,9 March 2006
 - ISOC participation by call-in
 - Final draft of presentation

❑ MOR

- 15,16 March 2006
- NASA/GSFC, Building 26, Room 205
- Planned attendees from ISOC: Cameron, Bator



ISOC Presentation Outline

- ❑ ISOC Overview
- ❑ Major Functions of ISOC
- ❑ Operations concepts
- ❑ Organization
- ❑ Facility configuration & ground system interfaces
- ❑ Early mission support
- ❑ Normal mission operations
- ❑ LAT science operations
 - Quicklook processing
- ❑ Development status
 - Software releases
- ❑ Training
 - GRTs, Data Challenges
- ❑ Sustaining Engineering plans