

GLAST SWG Telecon 7/15/2003

Attended:

David Band
Guido Barbiellini
Elliott Bloom
Lynn Cominsky
Chuck Dermer
Brenda Dingus
Neil Gehrels
Kevin Grady
Steve Horowitz
Neil Johnson
Don Kniffen

Giselher Lichti
Chip Meegan
Jonathan Ormes
Martin Pohl
Steve Ritz
Steve Thorsett
Kathy Turner
Al Vernacchio

Norman Rioux
Jay ???

Welcome and opening comments by Jonathan.

Kevin Grady – Project Manager:

- Personnel changes – Jack Libee is the new Systems Manager
- In the last 3 months, there have been several major reviews, including the LAT CDR at Stanford where 3 technical issues were raised. Also the Mission PDR was held in June. A combined review, GSFC Code 300 and HQ teams. Received favorable comments. Later this summer, there will be 5 presentations to be given as the first step in the Confirmation process.
- Malindi may not be capable of handling the downlinks. Other options are the NASA Space Network and commercial X-band stations that have K-U Band capability. There is a possibility of X-band and K-U Band combined capability. No decision has to be made at this very moment. But will have to decide in the next couple weeks whether to stay with just the X-band or go with a 40 K-U Band. There will be downlinks with a combined band or at the 40 megabites.
- Have delivered spacecraft simulators to both the LAT and the GBM. GBM to Huntsville and the LAT to NRL.
- Debris Analyses – debris range – 13.5 square meter range, slightly above 10,000 to 1 (human casualty). With minor change can get below threshold. Could possibly eliminate the propulsion system. Would like this settled by the end of August.
- May want to raise mission orbit to: 565 kilometers.
- Major schedule change: reworking baseline schedule for LAT -- 3 month impact to LAT.
- Looking ahead: In the next few weeks: CDR on GBM Electronics at Marshall; Systems review at GSFC on July 22; 3-mechanical issues for LAT will be closed out: and a Confirmation review.
- Vibrations test on the LAT tracker to take place in the next couple weeks in Italy – this is an important milestone.

Steve Ritz and Norman Rioux – Requirements Update:

- Requirement - 75° slew in 10 minutes for autonomous repointing; With 3/4 wheels operating, it meets the requirements 79% of the time. Could use 1) fatter wheels or 2) more sophisticated software to get a higher percentage. 25-30% probability of wheel failure over a period of 5 years.
- Pointing knowledge – may need a spin-off subgroup to think about raising the spec from 10 arc seconds to 20 arc seconds or even 40 arc seconds. Would lose some science at 20 or 40 arc seconds. Extreme cases are driving problems. Could reformulate spec to be met some percentage (e.g. 80%) of the time. We need a list of knowledge vs. science loss. Need small group to do analysis: Steve R., Martin, Tune, and Isabelle to start. This would be more of an assessment than actual simulation. This is a design issue so the assessment needs to be done in the near future.

Question? Don asked if de-scope plan needed at confirmation? Kevin could have plan set up by then but doesn't think it would have an impact at that time. Later on it might be useful.

- Norman talked about “on-orbit” data storage and latencies:
 - 36 hours on spacecraft
 - 12 hours observatory MOC-IOC
 - 24 hours receipt of data on ground and to begin processing.

36 hours on spacecraft could be reduced to 18 hours. Question would be “what to do with the extra 18 hours?”

4 -- 6 downlinks a day.
KU Band would provide more dumps per day. There are 2 dumps per day at the present time with TDRSS.

- Norman talked about Burst Alert latency (Information only)
 - The goal is 4 seconds or less, it's now at 7 sec. It's an issue of cost vs. science benefits.
 - Latency – TDRSS demands access system. DSL: reliability, security and back-up.

Peter Michelson (Steve Ritz reporting) – LAT Team Report:

1. Doing a formal presentation at the DOE review, rebaselining schedule and cost.
2. LAT is re-looking at de-scope plan as part of the overall mission confirmation process and the LAT rebaselining process (no actions are being considered now) – options are: 1) accept a limited number of towers with reduced performance; 2) much more drastic is to delete 2 LAT towers or; 3) delete 4 LAT towers; and 4) relaxing pointing knowledge.
3. LAT Engineering Model work proceeding.
4. LAT is preparing for the September meeting in Rome.

Chip Meegan – GBM Team Report:

Preparing for the CDR, August 5-6, at Marshall. This involves the DPU and flight software.

Giselher reported on the GBM status in Germany –

- 1) On 6/25, MPE received financial contribution; Contract in process.
- 2) Minor problem with the sodium iodine crystals; to solve problem, the housing design was revamped. More information on their website: www.mpe.mpg.de
- 3) Have already placed order for parts, etc.

Kathy Turner – DoE:

LAT has proposed new baseline, schedule change.

Mid August is the NASA confirmation meeting, frantically preparing for that meeting.

Don Kniffen – HQ:

1. User's Group has 10 members so far. The first meeting will be held at GSFC on October 22-23, 2003. The agenda will consist of: looking at data rights, transient policy, PDMP, and the SSC plan.
There are no Europeans as members; Giselher will submit some names.
2. PDMP is looking good, minor comments have been submitted. Data rights have been addressed. This is part of the presentation at the September meeting.
3. Steve Horowitz reported on the International agreements:
 - 1) Italian agreement in the office.
 - 2) French agreement being reworked since the loss of CNES.
 - 3) Swedish agreement also being reworked.
 - 4) Japan moving along nicely.
 - 5) DLR is still in the signing process.

David Band – SSC:

1. The first review for the SSC is approaching; SSC operations review will be combined with the ground system review.
2. Will report to the User's group; will treat it as an informal PDR, will discuss science tools, etc. An Action Item will be to empower user's to work with GLAST data; will put together a plan and present again at the Rome Meeting.
3. PDMP has been revised and circulated. Some parts are outdated and Nick White would like this addressed.

Comment: Elliott asked about "validation of sky survey." Don said that the AO stated an opportunity to get involved. The face-to-face is where this subject should be discussed. Elliott will not be in Rome. Point was made that "just getting data and not contributing anything, need some type of service to the mission." This can be inserted in the AO. Elliott to send written suggestion to David Band for the PDMP.

Lynn Cominsky – EPO:

- 1) The Active Galaxy Poster's have been printed and are available along with the educator guides.
- 2) GLAST poster also available
- 3) Cube order has been submitted and should be ready by the end of September.
- 4) GLAST Brochure draft has been sent to some of the SWG members.
- 5) The GLAST telescope: Pepperwood site construction is being funded by XMM. The telescope itself was funded by GLAST.
- 6) Have received 30 applications for the Ambassador program.
- 7) Have submitted a proposal to NSF to greatly expand the TV show.
- 8) Lynn will not be in Rome, but will give her presentation to Neil to present.

Neil Gehrels – PR:

- 1) J.D. Myers is taking care of sending the booth to various meetings.
- 2) Running out of the brochure that Seth Digel originated. Needs to be updated and re-printed.
- 3) Brenda Dingus' GRB Nature paper showing EGRET results is being presented as a press release. Results are related to GLAST.
- 4) The combined booth (Swift and GLAST) will be sent to the GBM meeting in Santa Fe.

Martin Pohl – LAT/SWG Workshop in Rome:

Has been working with Seth Digel and have come up with a list of speakers, including Marco Tavani. The Workshop will include clusters and supernova remnants.

Neither Martin or Seth will be able to attend the Workshop – looking for someone to handle the meeting in Rome.

Martin will be moving to Iowa State University in the very near future.

Jonathan Ormes – SWG Face-to-Face:

The Face-to face will be held in Rome. September 15-16, will be the LAT meeting; the 17th, will be the Workshop, and the 18th will be the SWG meeting.

Will review the Action items at the Face-to-face.

Meeting Adjourned.

8/28/03