

National Aeronautics and Space Administration
and
U.S. Department of Energy

JOINT OVERSIGHT GROUP

TO: Mr. David Betz, NASA/Goddard Space Flight Center; and
Mr. Daniel Lehman, Director, Construction Management Support Division, SC-81

Date: December 7, 2001

RE: Request to Conduct a Preliminary Design Review and Baseline Review of the
GLAST LAT Project

The DOE/NASA Joint Oversight Group (JOG) for the Large Area Telescope (LAT) project on the Gamma-ray Large Area Space Telescope (GLAST) mission requests that a Preliminary Design Review and a Baseline Review be conducted on January 8-11, 2002, at the Stanford Linear Accelerator Center (SLAC). The LAT is the principal scientific instrument to be flown on the NASA GLAST mission, scheduled for launch in 2006. It is being designed and built by an international collaboration. Professor Peter Michelson, who holds a joint appointment at Stanford University and SLAC, is the Spokesperson for the LAT Collaboration and Principal Investigator for the LAT project. He has overall responsibility for the technical, cost, and schedule management of the LAT. SLAC is the Host Laboratory for the LAT Project, providing technical and management support.

The purpose of the review is to carry out an integrated examination of each subsystem, the technical progress overall, and the cost, schedule and management planning of the GLAST/LAT project. The committee should evaluate all aspects of the project, keeping in mind the issues highlighted from past reviews. In performance of a general assessment of progress, current status, and the identification of potential issues, the committee should address the following specific items:

1. **Technical Progress:** Review the technical progress at the system and subsystem levels in order to assure that the proposed design and associated implementation approach satisfies the system and subsystem functional requirements. Review the LAT performance requirements and the adequacy of designs and resources allocated in order to meet the project's scientific goals.
2. **Cost Estimates:** Is the cost estimate consistent with the plan to deliver the LAT with the stated technical performance? Is the contingency adequate for the risk?
3. **International Contributions:** What is the status of the international contributions, and what is the schedule for finalizing these commitments? Are these consistent with the schedule?

4. Schedule: Is the proposed schedule reasonable and appropriate in view of the technical tasks and projected funding profiles? Have the various subsystem schedules been incorporated in a well-understood way, relative to product flow, critical paths, and linkage between various activities?
5. Management: Evaluate the management structure, including the relationships to the GLAST Mission organization and relationships with foreign entities, as to its adequacy to deliver the LAT within specifications, budget, and schedule.

We appreciate your assistance in this matter. As you know, these reviews are an important element of the NASA/DOE joint oversight of the GLAST/LAT Project and help to ensure that the U.S. astroparticle physics program remains robust and meets its commitments on cost and schedule.

You are asked to submit a formal report by March 11, 2002. The committee members are asked to contribute draft sections of this report by the end of the closeout of the review, January 11, 2002.

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