

GLAST

The Gamma-ray Large Area Space Telescope

**Mission Status
Users Committee Meeting
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See:
<http://www.glast.gsfc.nasa.gov>
and links therein



Topics

- **Context**
- **Spacecraft**
- **Launch vehicle**
- **Flight Software Milestones (AI from previous meeting)**
- **Ground system**

- **[Other elements covered in separate talks]**



Context: GLAST Observatory



Two GLAST instruments:

LAT: 20 MeV – >300 GeV

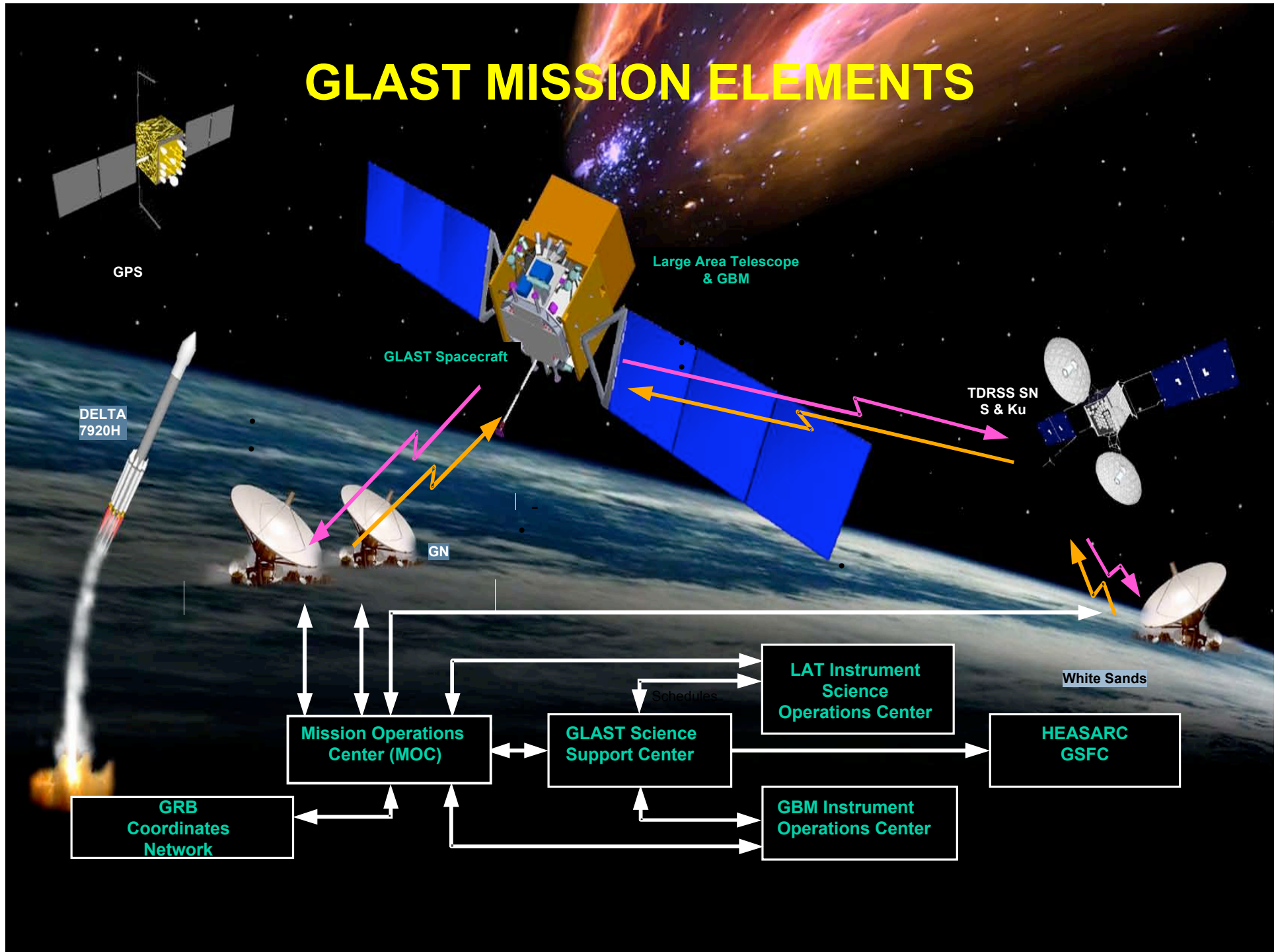
GBM: 10 keV – 25 MeV

Spacecraft

General Dynamics C4

Systems (Spectrum Astro)

GLAST MISSION ELEMENTS





Spacecraft Status

- **Flight structure fabricated and qualified.**
- **Harness integrated**
- **Integration of components into spacecraft in process.**
- **Life test (cycling) of solar array q-board is continuing with ~1/3 of the 5-year equivalent life complete.**
- **HQ approved replacement of critical release mechanisms that had recent test failures on other programs; used for solar arrays and Ku-band antenna.**



Launch Vehicle

- ATP for launch vehicle.
- First Mission Integrated Working Group (MIWG) meeting at Kennedy Space Center (KSC) in July.
- GLAST Launch site processing working group meeting in October at KSC.
- Mission plans to use excess lift capacity to reduce orbit inclination.
 - Reduces backgrounds and time in SAA slightly
 - Reduces false trigger rate in GBM due to “electron precipitation” events



Mars Rover “Opportunity”
on the launch pad
Delta II - Heavy



Ground System

- **Coordinated activity ramping up across all the elements**
- **Mission Operations Center (MOC)**
 - **Facility integration proceeding at GSFC**
 - **2nd release of MOC software completed on schedule**
- **Regular “GOWG” (GLAST Mission Operations Working Group) meetings**
- **Two Ground Readiness Tests successfully completed**
- **Held Operations Technical Interchange Meeting at SLAC 14-15 Sept**
- **Front-end processors successfully tested and shipped to White Sands.**



Summary: THE LOOK AHEAD

- All elements of the GLAST mission are completing the fabrication phase and are well into integration.
- LAT and GBM assembly complete by early 2006.
- Delivery of the instruments for observatory integration spring 2006.
 - LAT June 1; GBM May 1
- Observatory integration and test spring 2006 through summer CY07.
- Major conference, first GLAST Symposium, being planned for early 2007. International Organizing Committee formed.
- Launch in September 2007... Science Operations begin within 60 days.

