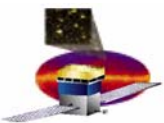


GLAST Large Area Telescope:

Electronics, Data Acquisition & Flight Software W.B.S 4.1.7

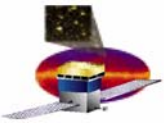
Face-to-Face Feb 05

Gunther Haller
haller@slac.stanford.edu
(650) 926-4257



TEM/TPS Status & Schedule

- **Status**
 - Three Flight Tower-Electronics Modules/Tower Power Supplies received
 - Fully assembled
 - Thermal-cycled
 - Vibration tested (one of them to qualification levels)
 - First unit finished thermal-vacuum testing
 - Second unit in thermal-vacuum testing
 - Both units finished EMI/EMC testing
 - No issues/problems
 - Qual unit to go into qual EMI next week
 - Balance of 19 TEM/TPS in surface-mount assembly at vendor
- **Schedule**
 - 2/17/05 First TEM/TPS to I&T
 - 2/25/05 Second TEM/TPS to I&T
 - 4/22/05 Third TEM/TPS to I&T
 - One week lag between delivery of consecutive assemblies
 - 7/26/05 Last TEM/TPS to I&T
- **TV testing of 19 units**
 - With 1C/min ramp rate and 10-4 Torr vacuum, might be able to cycle in 48h
 - If we upgrade chamber to be able to hold 2 TEM's, best case is 1 TEM/day
 - Thermal fixture needed for inside chamber



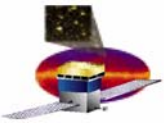
PDU Status and Schedule

- **Status**
 - Design/documentation complete
 - Enclosures fabricated
 - All parts received (except recalled International Rectifier regulator, due end of February)
 - Assembly contract awarded
 - All parts kitted and audited by assembly vendor
 - Assembly started
- **Schedule for proto-flight**
 - Mid March: unit assembled, pre-coat, ready for test
 - Early April: unit fully assembled, ready for environmental test
- **Schedule for Flight Unit**
 - 5/15/05 Precoat PDU assembly ready for electrical test
 - 5/30/05 Complete assembly ready for environmental test
 - 7/1/05 Flight PDU to I&T
- **Tester**
 - Designing analog mux card for TV test



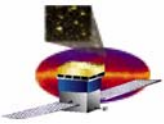
GASU Status and Schedule

- **Status**
 - Design/documentation complete
 - Enclosures fabricated
 - All components/parts received
 - Assembly contract awarded
 - Parts being kitted
 - Flight assembly to start 3/10/05
- **Schedule for proto-flight**
 - End of March: unit assembled, pre-coat, ready for test
 - Mid April: unit fully assembled, ready for environmental test
- **Schedule for Flight Unit**
 - 5/20/05 Precoat GASU assembly ready for electrical test
 - 6/10/05 Complete assembly ready for environmental test
 - 7/13/05 Flight GASU to I&T
- **Tester**
 - Tester in design/debug
 - Designing analog mux card for TV test
 - Lots of harness assembly to be done for these cards
 - Ordered 450-pin feed-thru for chamber



SIU/EPU Status and Schedule

- **Status**
 - Design/documentation complete
 - Enclosures fabricated
 - All components/parts received except BAE RAD750 CPU
 - Uses recalled International Rectifier regulator
 - Boards to be sent back to BAE
 - Reworked boards expected 3 weeks after they receive components; June 05
 - Assembly contract out for RFP
- **Schedule**
 - In next 3 weeks: assembly of cCPI connectors onto sample flight boards
 - Three different assembly methods
 - Analysis at GSFC
 - Decision which method to use for flight assembly
 - 6/1/05 Precoat cCPI boards ready for electrical test
 - 7/28/05 Complete assembly ready for environmental test
 - 8/19/05 First Flight SIU/EPU to I&T
 - 8/24/05 Second flight SIU/EPU to I&T
 - 8/27/05 Third flight SIU/EPU to I&T
 - 8/30/05 Fourth flight SIU/EPU to I&T
 - 9/2/05 Last flight SIU/EPU to I&T
- **Tester**
 - In design



Issues

- **Details of TV testing of GASU & PDU**
- **AUSTIN EEPROM DPA problems**
- **Delivery of Omnirel linear regulator for RAD750, PDU**
- **Qualification of cCPI press-fit connector assembly using solder process**
- **Delivery issue with GASU PS Zener protection diode for ACD voltage (April delivery, might eliminate the part)**