

GLAST LAT Project Weekly Report for the week ending March 15, 2001

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*** CALORIMETER (N. Johnson)

CAL Management (Johnson, Acker)

Negotiations with France for new role for Bordeaux group within the CAL program Leadership in a CERN beam test of prototype CAL module has been identified.

A functional-level summary of CAL failure modes and their effects is in progress. (Grove)

Continued work on WBS, WBS dictionary, and schedule in support of understanding of the work ahead and PMCS deliveries.

Work on the WBS in progress (Acker)

Preparation of the meeting with the French institution (Isabelle, Didier, Arache)

CAL CsI Crystal Elements

Received alternative quotes from Hamamatsu with various options for recovering their non-recurrent engineering (NRE) costs by various methods. This permits NRL to proceed with the purchase of some diodes for the VM2 prototype and France can procure the rest.

CsI Crystal Test Stations: (Phlips, Grove)

Test station assembly continues. ADC interface PCB have been received and are being assembled. LabView acquisition and control software is well under way.

Establishment of crystal dimensions was confirmed in final telecon (NRL, Sweden, France)

Update of the drawings (O.Ferreira), and crystal specifications (Phlips, Johnson). Tolerance specifications and performance specifications have been adjusted.

Cosmic Test bench: The improvement of the hodoscope is in progress. New scintillating pieces were milled & polished. Test of the new solution were done. A first step of improvement will be reached next week (P. Bourgeois, Y.Piret..)

PIN Diodes bonding: Visit and discussion were made at CETIM with gluing experts to set up the test plan. Test plan discussed at LPNHE (Gilles) and CdF (C.Chapron, D.Imbault). Samples for transparencies measurements were made. Start of transparencies measurements (radiation influence) (R. Chipaux)

GSE: Gilles works on the specifications for the PEM test bench: the work is in progress.

CAL Pre Electronics Module (Bogaert)

A discussion with CNES experts at Toulouse help to better set up the evaluation & qualification of the structure elements and materials.

VMI Tests: Procedures & results document of the VMI tests is in progress (O. Ferreira).

CAL Analog Front End Electronics (Ampe)

SEU tests were completed at Brookhaven on potential CAL COTS ADCs. Two of the five

FW Weekly Report for the week ending Mar. 15 2001.txt
part types tested showed very promising insensitivities. Two parts from Maxim had no latch ups out to LET of $\sim 80 \text{ MeV/gm/cm}^2$ (gold).

CAL Balloon Flight (Johnson)

Show me the power! No activity from CAL team. Need to complete command script definitions and schedule performance test with new DAQ configuration and software.

CAL Software/Design Verification (Grove, Chekhtman)

The GAUDI algorithm for converting simulated event information from TdCsIData (filled from IRF file) into "tbrecon-like" objects CalRecLogs has been written. Debugging of this algorithm is in progress. An error in tower numbering used in simulation (ModuleId class) has been found.

This error in tower numbering within the simulation brings up the issue of compliance with the project's coordinate and ID standard described in the document by S. Ritz. The new G4 sim of the CAL does not comply and must be fixed. We strongly advocate that all new s/w be in full compliance with the standard.

Work on the new CAL geometry description consistent with the carbon-cell mechanical design is still in progress

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