DSG Meeting Minutes – Wednesday, June 18, 2014

Antonioli, Mary Ann:

- Assisted with Hall B DC HV check on one section of DC R2.
  - Cleaned up the HV cables.
- Fabricated and tested Hall B SVT HV cable #11.
- Laminating cables for Hall B SVT slow controls.
- Made changes to the "Empty Target" Hall D slow controls flowchart.
- Calculated expected leakage current for each module side at the planned depletion voltage (85 V) and entered values into the sensor spreadsheet for modules P26-P38.

Bonneau, Peter:

- Developing DSG website and wiki page (work in progress).
  - The DSG wiki page can be found here: https://wiki.jlab.org/dsgwiki/index.php/Main_Page.
  - The temp DSG webpage can be found here: https://userweb.jlab.org/~bonneau/DSG_Test_temp/
- Assigned silicon sensors for Hall B SVT production modules P26 – P50.
- Showed Mary Ann how to use the sensor excel file to calculate the expected leakage current for a Hall B SVT module side at the planned depletion voltage (85 V).
  - Increase of current over the total expected leakage for a side of a module is possibly due to other components such as backing structure and HFCB and/or fabrication process. Quiescent current is a good indicator of module quality.
- Reviewed Hall D target controls flowcharts with Mary Ann.
- Discussed EPICS programming of the Hall B SVT slow controls with Pam Kjeldsen (Accelerator Controls Group).
  - Reviewed with Pam some of the Hall B SVT documentation posted on our website regarding crates, LV, HV, and VME modules.
- Installed FactoryTalk View (PLC HMI development software) on desktop computer and personal laptop.
  - Confirmed that dongle license works on multiple systems without the need for networked-based license servers.
- Installed RSlinx (PLC communication program) as part of the HMI development package.

Butler, Dave:

Hall D

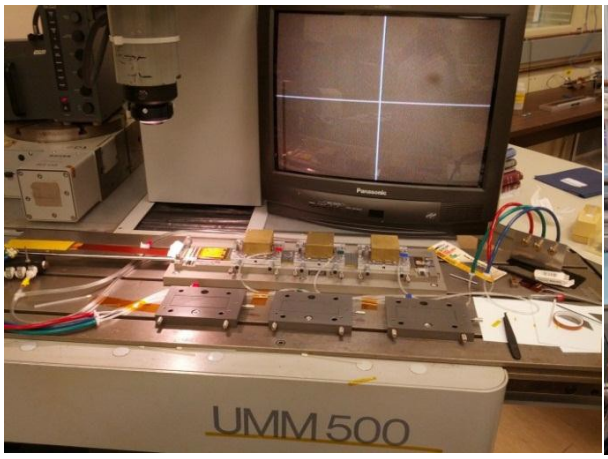
- Hall) Solenoid's Hardware Quench Detector's Digital Potentiometer Control
  - Finished programming the serial communication for the digital potentiometer.
  - Acquired resistance data from 0 A to 1500 A in 100 A increments.
  - Fit acquired data.
  - Verified, by adding the resolution of the potentiometer to each side of the fit that the resolution was within the error range of the original data set, which was acquired by manual potentiometer adjustments during commissioning.
  - Put the measured data in the procedure for testing the quench detector.
- Using the PLC program, set the cryogenic valves to initial cool down positions.
- Worked on EPICS screens for the vacuum system and strain gauge readings of the magnet control in the counting house.
- Moved the slow controls systems from the temporary network switches to the final switches.

- Debugged a crash in the FCAL interlock system.
  - Determined that the sensor power supply box (supplied by Indiana University) had a faulty voltage regulator which caused the sensors to fail. The PLC system reacted properly and shut down power to the PMT bases. The sensor power supply box was replaced and the system was brought back on-line

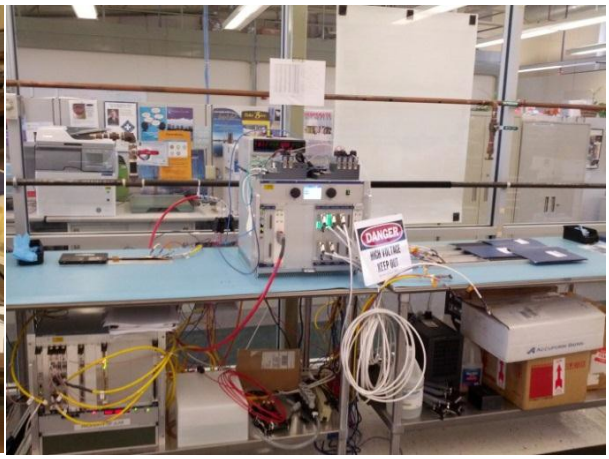
Eng, Brian:

Hall B SVT

- Started Hall B SVT module production shift at FNAL on 06/19/14.



Module Assembly@ Fermi



HFCB Test Stand @ Fermi

- Performed final inspection of backing structures: 017A, 19A, and 20A.
- Tested HFCBs (chip placement and encapsulation): 031, 039, and 041.
- Completed fabrication of module P22.
- Started fabrication of module P23.
  - Bottom sensors placed.
- Upgraded OS/software on DAQ and slow controls computers, upgraded firmware on MPOD crate.

Jacobs, George:

Hall B

- Installed the LTCC gas panel on FWD Carriage in Hall B.
- Began assembly of DCGAS solenoid valve panel.
- Debugged CAEN HV crate.
- Wrote new HV test procedure for DCs which use the CAEN main frame and HV distribution panels.

Leffel, Mindy:

- Reworked 20 Hall B CTOF PMTs (53 complete).
  - Added jumper wires to 20 Hall B CTOF PMT circuit boards.
- Populated two humidity temperature sensor (HTS) boards (10 of 12 complete).
  - Soldered on temperature cables, attached plug side of disconnect, and tested continuity.
- Completed the Arc Flash/SAF603N1 portions of the Qualified Electrical Worker training

McMullen, Marc:

- Checked 6 Hall B SVT HFCBs.
  - One HFCB's J3 connector repaired.
  - All 6 HFCBs shipped to Fermilab for module production.
- Approved manufacturing change to solder mask layer on HFCB V2.2.
- Installed LV cables on Hall B DC R2S6.
- Installed dehumidifier in Hall B SVT control room.
- Modified dry storage box to prevent modules from falling behind the shelving.

Mann, Tina:

- Inspected Hall B DCs' signal output graphs.
  - Debugged and repaired components, based on the signal output reading.
- Completed Web-based Electrical Safety Awareness training.

Sitnikov, Anatoly:

- Checked Hall B DC HV channels for R2S5.
  - Found that 6 channels were damaged.
- Passed Electrical Safety Awareness

Teachey, Werth

Hall D Target

- Installed Factory Talk v6.10 for creating PLC GUIs for the Hall D target on my laptop.
- Installed network and power to the Hall D target PLC in the Hall D target cart.
- Started the front end logic in ladder logic to control the Fill, Warm, and Empty states of the Hall D target.