

DSG Meeting Minutes – Wednesday, July 16, 2014

Antonioli, Mary Ann:

- Wrote procedure for checking resistances of [Hall B SVT](#) humidity-temperature-sensor assemblies.
 - Began writing procedure for checking temperature and humidity readings.
 - Moved and set up test stand from EEL 121 to EEL 231.
 - Requested port activation from computer center for internet.
 - Also waiting on hazard task analysis to begin tests.
- Re-fabricated longer [Hall D Target](#) RS232 cable because the pin-out given was incorrect.
- Completed [Hall D Walk-through](#).
- Completed laser training course.
- Re-worked [Hall B SVT](#) HV test cable that was at Fermilab into a production cable.
- Began fabrication of [Hall B SVT](#) HV distribution box.

Bonneau, Peter:

- Worked on the automated test station for the [Hall B LTCC](#) mirrors.
 - Using a Keithley 6571B electrometer with a model 6521 low current scanner, the test station will measure the photodiode currents during the test process.
 - Added GPIB communication, initialization, and file controls to the LabVIEW test program.
- Coordinated programming with Dave and Werth on [Hall D Target](#) PLC controls.
 - Discussed the HMI screens for control and monitoring.
- Held meeting regarding [Hall B SVT](#) slow controls development.
 - After much discussion on subnet network security and system support, the Hall B SVT slow controls will be on an accelerator controlled subnet (129.57.41.XXX). Brent Morris will port the SVT network connections to the accelerator controlled subnet, .41, from the Hall B subnet, .86, in the EEL. This will allow the use of the accelerator subnet without requiring another network switch. However, due to network security, communication between the Hall B subnet and the accelerator subnet is not possible. Another computer in the cleanroom / Counting House will be required for the Hall B SVT slow controls due to the separate subnets. The Controls Group will be working on slow controls of the Mpod HV and LV for Hall B SVT Region 1. In addition, communication between systems for interlocks was discussed.
- Worked with Pam Kjeldsen, Sue Witherspoon, and Anthony Cuffe of the Accelerator Controls Group on the [Hall B SVT](#) slow controls.
 - Installed and tested an Avocent ACS 6004 Advanced Console Server for the remote serial comm port connection with the IOC. Also installed a MVME5100 VME Controller (IOC) for the VME crate. The Accelerator Controls Group could not use our MVME5500 because they don't have a license for the compiler and exclusively use 5100's in all accelerator systems.
- Completed Laser Safety Training (SAF1140).

Butler, Dave:

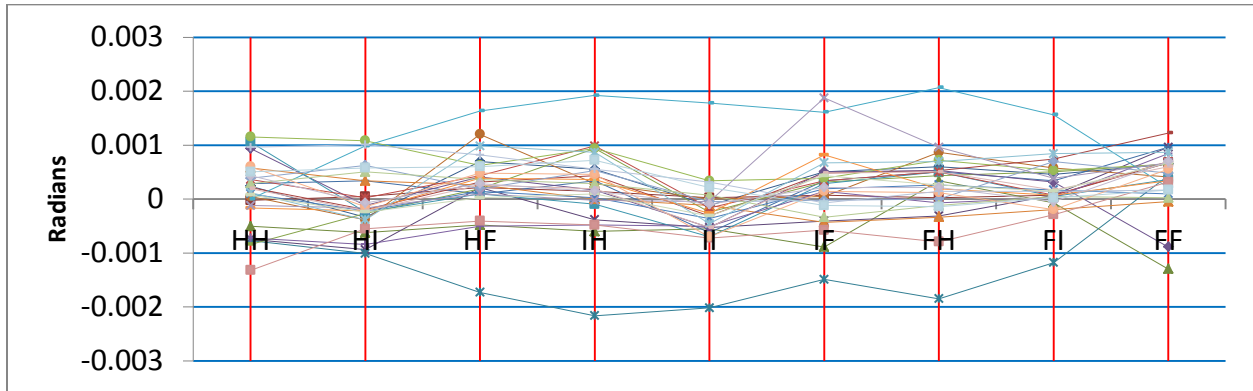
[Hall D](#)

- Installed Development PLC online in the Hall D counting house to help troubleshoot EPICS vs PLC interfaces.
- Updated IP address for EWEB module in the Solenoid PLC to allow alarm text messages to be broadcasted.
- Added CDC temperature data to the PLC archive database.
- Continued working on paperwork for solenoid cool-down / powered operations.

Eng, Brian:

Hall B SVT

- Updated elog and testchan programs used on JLAB network boot single board computers (SBCs) to match more closely the FNAL software.
- Completed LASER training course.
- Involved with the installation, cabling, and testing of modules P5–10 of region 1 of the Hall B SVT.
- Plotted slopes along module width from FNAL CMM data to show twist.



Twist plot of the topside of 29 modules. Modules 5, 17, and 22 (envelope) have large twists – of the order of 150 μm .

Jacobs, George:

- Testing of third Hall B R2 DC completed.
 - Remaining three region 2 chambers are on gas and HV.
- Travel 7-12 July 2014 to AES for soldering Hall B Solenoid coil #4.
 - QA on Solenoid coil #4 for the 14,400 ft long second intermediate coil. The solenoid has two 14,400 ft long intermediate coils. These are the most critical coils for the solenoid because there is no spare conductor of that length. Solenoid conductor soldering runs S3 and S4 for these two intermediate coils are now complete. The most critical specifications on the finished conductor are its exterior dimensions and solder quality. The exterior dimensions are critical for winding the coil according to design. The solder quality is critical to prevent a quench. The most difficult specification to maintain is that of void size between the layers of the conductor. Samples from the beginning of the run are taken and machined such that one layer of the conductor strands are removed revealing the quality of the soldering between layers.



Dark regions on the conductor indicate potential voids.

- Updated [Hall B DC](#) cables document.

Leffel, Mindy:

- Reworked 14 PMTs (85 complete) for [Hall B CTOF](#).
- Continued work on the [Hall B LTCC](#) Winston Cone calibration/test procedure.
- Completed laser safety training.
- Completed [Hall D Walk-through](#).
- Assisted Debbie Campbell with DSG group's property identification.

McMullen, Marc:

- Continued testing 10 HFCBs for [Hall B SVT](#).
 - Sent 9 HFCBs for retest at MicroCraft, CA. The HFCB that failed was not sent back. It will be replaced by Compunetics. Upon return after re-testing, all nine HFCB passed visual and resistance QA and all nine have had voltage applied and current measured.
- Removed cable protector trays from [Hall B SVT](#) assembly area due to safety concerns.
 - New replacement mats have arrived, and are made of rubber.
- Reorganized clean room for [Hall B SVT](#) assembly.
- Contacted Maurizio ([Hall B LTCC](#)) and Vitaly ([Hall B CTOF](#)) to ensure that BList requirements for EH&S are updated.
 - Hall B LTCC has submitted BList task Id 824; started reviewing BList 824.
- Forwarded examples of work control documents to Vitaly ([Hall B CTOF](#)).
- Received panel equipment for [Hall B SVT](#) VME patch panel, terminal blocks, and supplies.
 - The jumpers received will not work.
- Received 7 [Hall B SVT](#) modules from FNAL.
- Shipped [Hall B SVT](#) module crate back.

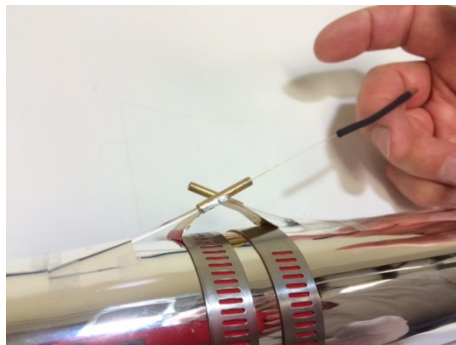
Mann, Tina:

- Completed the last 2 of the ten 25-pin D-sub cables.
- Worked on [Hall B LTCC](#) laser information and Standard Operating Procedure.
- Completed laser training class.

Sitnikov, Anatoly:

[Hall B CTOF](#)

- Building light fiber fixture.



- Wrapping scintillators

Teachey, Werth

- Cleaned and reorganized [Hall B SVT](#) Clean Room PCs and cables.
- Connected and reconfigured the [Hall B SVT](#) Reception Test Stand for two humidity sensors and two RTDs.

[Hall D Target](#)

- Cabled and tested the RS232 cable from the PLC to the Lakeshore 218 temperature monitor in Hall D.
- Cabled and tested the ethernet cable from the PLC to the Lakeshore 336 Heater Controller in Hall D.
- Cabled and powered the target compressor's LCW supply flow meter to the PLC.
- The HMI target control is 60% complete (30 of 50 indicators and buttons complete).
- Debugged the Lakeshore 336 readback issue. The Lakeshore 336 now reads back without any errors in communication.