

## DSG Meeting Minutes – Wednesday, August 13, 2014

### **Antonioli, Mary Ann:**

- Retested **Hall B SVT** humidity temperature sensor board #4. Board tested OK.
- Drew in AutoCAD the block used on the **Hall B SVT** slow controls patch panel.
  - The drawing will be labeled with the wiring connections to aid in the patch panel hook-up.
- Entering calculated total sensor currents of a side in spreadsheet for **Hall B SVT** modules P45–P82.
- Terminated cables and hooked them up to back panel connectors 6 and 7 of the **Hall B SVT** HV distribution box. Terminated and hooked up drain wires between back panel connectors and barrier blocks and front panel CPC rows 1– 4 and barrier blocks.
  - All wiring between front and back panel CPCs is completed.
- Drew in Visio a top-level diagram of the **Hall D FCAL** dark room slow controls.

### **Bonneau, Peter:**

- Worked on the **Hall B LTCC** automated test station.
  - Added multiple test run capabilities for an individual mirror under test.
  - Updated default test files to include the multiple test run feature.
  - Recompiled with the new multiple run option and installed the executable program.
  - Added test station to DSG group to correct access problems for different operators.
- Corrected sensor database for module production because of damage to **Hall B SVT** sensors during assembly at FNAL.
  - Issued new sensor assignments for the remainder of the **Hall B SVT** production for modules P45 – P82.
- Discussed with Dave and Werth the integration issues with the **Hall D Target Controls** NBX serial converter to GPIB interface.
- Troubleshooting dongle-based licensing errors with the **Hall B** and **Hall D** PLC development software.
  - Discussions with Mike Cole from Electrical Equipment Company and Colin Fradd from Rockwell concerning the setup of another development workstation
  - The license and some controller files were found to be missing or corrupt on the dongle.
  - The files were restored on the dongle and it now works properly.
  - It is important to eject the USB connection before removing the dongle to avoid file corruption.
- Working with engineers from National Instruments, specifically PAC system for the **Hall B SVT** Gas / Interlock system.
  - The new National Instruments PAC - cRIO-9030 system features a 1.33 dual-core Intel Atom processor, next generation Xilinx Kintex-7 70T FPGA's, and runs NI Linux Real-Time operating system with embedded user interface and local HMI capabilities.

### **Butler, Dave:**

- Completed the **Hall D Solenoid** pre-power checklist and started the powered Solenoid checklist.
- Discussed with Mary Ann **Hall D FCAL** block diagrams to start a documentation package.

## **Eng, Brian:**

- Set up workstation to develop PLC-based **Hall B HPS** interlock system.
  - Set up and updated Windows 7 in VirtualBox on Mac mini to install PLC software. Initially installed RSLogix 5000, but had issues with FactoryTalk being unable to get a license. Allen-Bradley representative came out next day and fixed the USB key.
  - Installed RSLinx (which is on a different DVD) to communicate with the controller.
  - PLC controller has been configured and assigned an IP on Hall B network.
- Continued testing unpopulated **Hall B SVT** HFCBs.
  - Tested differential lines until a total of 8 were found with no issues.
  - Completed all tests (visual and remaining electrical).
  - The eight HFCBs (plus data and triax connectors) were sent to Compunetix for population.
- Debugging failed gain scans on FNAL **Hall B SVT** test station controller.
  - After temporarily inserting additional debugging messages in elog code, found failure was due to the plotting program (testchan); after reverting the elog code and recompiling testchan, gain scan program has been running without any issues.

## **Jacobs, George:**

- AES travel 4–9 Aug for **Hall B Magnet** conductor QA.
- Coordinated moving and re-organization of items in ESB in preparation for moving the **Hall B DC** R3S4 to the EEL room 124 clean room.
- Coordinated moving and re-organization of items in EEL room 124 clean room to make space for **Hall B DC** R3S4.
- Continued supervising the installation of the **Hall B DC GAS** supply lines from the gas shed to Hall B.

## **Leffel, Mindy:**

- Reworked two **Hall B CTOF** PMTs for a total of 105.
- Continued working on **Hall B LTCC** Winston cone calibration and test setup/procedure.
- Completed measurement of first **Hall B LTCC** Winston cone.

## **McMullen, Marc:**

- Testing **Hall B SVT** production modules at Fermi.
  - Module P36 completed.
  - Shipped P29 – P35 to Jlab.
- **Hall B SVT HFCB:**
  - Released V2.2 for remaining production run (57 units).
  - Retested HFCB #43 after rework on Nanonics J2 connector
    - Sent for encapsulation after testing.
  - Testing the 10 HFCBs received from Compunetics.
  - Cleaning the residue left on the pads by the precut Kapton tape.

## **Mann, Tina:**

- Working on **Hall B LTCC** laser alignment and learning to use new data acquisition program for calibration and testing of Winston cones.
  - Tested and packed Winston cone.

### **Sitnikov, Anatoly:**

- Assembling fixture for cutting and polishing 1.5 mm boron-silicon fibers for **Hall B CTOF**
  - Completed fixture for testing prototype to calibrate CTOF detector.

### **Teachey, Robert (Werth):**

- Completed and made a presentation for the **Hall D Target Controls** in the Hall D Target meeting.
  - Link to presentation: [http://clasweb.jlab.org/instrumentation/Werth/HallD/HallD\\_Target\\_Controls\\_8\\_7\\_14.pptx](http://clasweb.jlab.org/instrumentation/Werth/HallD/HallD_Target_Controls_8_7_14.pptx)
- Troubleshooting communication chain between **Hall D Target Controls** PLC to NBX Serial ASCII converter and onto GPIB interface.
  - Communication works with connection to a PC using Hyperterminal and with M95\_Keyboard and Labview.
  - Using logic analyzer to analyze NBX output RS232 output.