

DSG Weekly Report – Feb. 11, 2015

Antonioli, Mary Ann:

Hall B

- Made two Adobe Illustrator diagrams of the **gas system** — for the gas shed and Hall B.
- Tested ten reworked **SVT** R1 slow controls cables and documented traveler.
 - Checked resistance.
 - Verified pins were in proper connector slot.
- Calculated averages of nine **LTCC** Winston cones and updated spreadsheets.

DSG

- Inventoried tagged items in clean room, with Mindy.

Arslan, Sahin:

Hall B

- Tested **SVT** humidity/temp sensor boards.

DSG

- Cleaned out and organized shelves in control room.

Bonneau, Peter:

Hall B

- Conducted meeting on **HDice** work in progress.
- Reverse-engineered EPICS database of input analog channels for **Drift Chamber gas system**.
 - Initial analysis of the database revealed more analog channels are being used in the gas system than shown in the current diagrams.
 - Conducting a count of installed instrumentation, communication interfaces, and voltage levels and signal conditioning.
- Monitored and analyzed the status of the **SVT** EPICS slow control system for the long-term stability test of eight SVT modules.

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- Trained Mary Ann on the procedures for creating spotlight archive pages on the DSG website.
- Completed hardware and software setup of the PC-based test station.
 - Completed and checked the initial configuration for the testing of SVT temperature/humidity boards.
 - Trained Sahin on the setup, operation, LabVIEW code, and troubleshooting of the test station.

Butler, Dave:

Hall B

- Met with Pete to discuss the Hall B **Drift Chamber gas system**. Ran the MKS mass flow controller driver code on the development cRio system.
- Attended the **HDice** meeting.
- Attended the **SVT** weekly meeting.

Hall D

- Specified and ordered an air flow sensor to detect a no-flow condition for the **CDC** cooling system, so that the MPOD low voltage will turn off.
- Attended the **FDC/CDC** meeting. Still having issues with the gas mixture for the detectors. Continuing to do testing and permanently installing a CO₂ monitor.

Eng, Brian:

Hall B

- Created MyaViewer configuration files for the eight **SVT** modules in the long-term stability.
 - There are separate files for each module, as well as by type, (i.e. all HV currents, etc).
- Continued work on porting RF Birdcage Coils notebook to Python for **HDice**.
 - Currently it is significantly faster, but the numerical integration functions are much slower than expected and still a few more need to be implemented.
- Unpacked ten **SVT** modules from latest FNAL shipment and updated database. Also, set up the reception test stand slot to use EPICS instead of LabVIEW for control/monitoring of its slow controls.
- Testing one of the **HPS** SVT chiller valves that is controlled via stepper motor and opens when given 0 V and closes on 24 V.
 - Need to order a 24 V output module for PLC to control the valve (waiting on account code from Stepan).
- Attended **HPS** meeting to discuss current status.
 - They added another two RTDs to PLC system.

Jacobs, George:

FMLA

Leffel, Mindy:

Hall B

- Completed repairs of drain wires on seven **SVT** R1 slow controls cables and seven R1 low voltage cables.
- Instructed Anatoly on: the repair of slow controls and low voltage cables, the termination of network cables, and the attachment of back shells on D-sub cables.
- Reworked repairs of drain wires on six **SVT** R1 cables and reworked attachment of approximately six D-sub cables.
- Researched, located, and gathered materials for seven various types of cables for **HPS**; cut the various lengths of cable and terminated two of the cables.

Mann, Tina:

Hall B

- Met with Maurizio to discuss issues with the recoated **LTCC** large Winston cones; the test results do not show improvement in the reflectivity.
- Calibrated and aligned pinholes for **LTCC** testing.
- Tested recoated **LTCC** small Winston cones — six small, three large, one plastic.

Hall D

- Attended Hall D tech meeting.

McMullen, Marc:

Hall B

- Completed AutoCAD layout of EEL 124 (clean room), SLAC and Hall B SVT assembly areas.
- Attended SVT status meeting.
- Generated a spreadsheet with the updated status of HFCB manufacturing and population.

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- Provided safety guidance during installation of SLAC SVT.
 - Submitted a service request for a connector change for the AC cable of their chiller.
 - Assured all lab safety guidelines were followed.
- Wrote BList for DSG work in large cleanroom.

Sitnikov, Anatoly:

Hall B

- Prepped 12 drain wires for **SVT** R1 slow controls and low voltage cables.
- Wound 14 **CTOF** induction coils.

DSG

- Cut 19 50-ft. network cables for Control Room. Assembled 9 with RJ-45 connectors.

Teachey, Robert Werth:

Hall B

- Reviewing my **HDice** code and documentation.
- Copied latest LabVIEW code from the **HDice** NMR system being used with the production dewar.
 - Vivian Lane made changes to the code in the 2 years since I have worked on the NMR systems.
- Moved the spare **HDice** NMR rack PC to the DSG control room so that Peter can create a mirrored backup of the Hard drive.
 - Charles Hanretty removed the PC from the spare NMR rack with Xiangdong Wei present.
- Located spare cable and connectors to prototype **HDice** request for new, tuned NMR cables.