

DSG Weekly Report – March 11, 2015

Antonioli, Mary Ann:

Hall B

- Analyzed data of 15 **LTCC** Winston cones.
- Completed spreadsheet of RS232 signals for **gas system**, deriving information from a drawing.
- Prepared 35 drain wires to be used for **SVT** R4 slow controls and low voltage cable repairs. Removed the heat shrink from those 48 cables.

DSG

- Made edits to Werth's PLC **note**.

Arslan, Sahin:

Hall B

- Completed test setup for **DC** R1S4 (cosmic ray and efficiency test), with Anatoly.
- Bundled 210 **DC** signal cables into 35 groups, 6 cables per group, with Anatoly.
- Ran vacuum signal cable for **HPS** in the Hall, with Brian.

DSG

- Helped Marc to move equipment shipped from FNAL into EEL 124.
- Helped Anatoly to clean his work area in TEDF.
- Patched the floor in EEL 124 with epoxy.

Bonneau, Peter:

Hall B

- Programmed LabVIEW-based test for the independent coolant measurement system for the **SVT**. Also determined calibrations for output voltage vs. measured value for flow, temperature, and pressure.
- Met with Sue Weatherspoon, Scott Higgins, and Anthony Cuffe regarding **SVT** slow controls development and troubleshooting.
- Conducted **HDice** meeting.
- Met with National Instruments representatives regarding Jlab Linux LabVIEW issues and hardware upgrades needed for the **HDice** GPIB and serial RS485 instrumentation.
- Wrote a description of the flow of the initialization sequence in the **HDice** LabVIEW NMR program.
- Started adding an instrumentation disable mode to the **HDice** NMR program for troubleshooting sequences without the need for attached instrumentation.
- Talked with CAEN regarding their DC current transducers, for the **HDice** magnet power supplies.
- Started setting up a computer for testing of **HDice** LabVIEW for Linux.

Hall D

- Met with Lubomir Pentchev to discuss cleanroom requirements for the repair of the **FDC**.
- Monitored the status of the PLC-based **slow control** systems.

Butler, Dave:

Hall B

- Attended the **HDice** meeting.

Hall D

- Received the vapor-cooled lead solenoid valves for the **magnet** leads.
 - Removed the upper limit interlock on the PLC (this was entered into the ABIL interlock database) to allow continued checkout of the solenoid power supply.
 - Assisted in installation of the new valves and conducted range testing with the PLC. One of the spare valves appeared to have stiction in the closing direction so it will be returned to Teledyne Hastings for repair.
 - Remaining valves appear to be working correctly so the interlock was returned to normal and the magnet/power supply is back to normal working conditions.
- Attended the **FDC/CDC** meeting and presented information on the FDC chiller BiRa shutoff and the CDC airflow interlock.

Eng, Brian:

Hall B

- Set up **SVT** 4-module cosmic stand in EEL 124.
 - One of the discriminator cables was damaged in the move from EEL 121B.
- Tested **SVT** P50 for BCO problems reported by Yuri; BCO distribution wasn't flat.
 - Using the vscmPulserBCOSync() functionality of VSCM (pulse is injected on a fixed/known BCO bin) no missing BCOs were found on test stand in EEL 231. Also tried same VSCM that was used in EEL 124 when Yuri was acquiring data, but still no missing BCOs.
- Set up **VXS** crate from FNAL in EEL 124 to be used with **SVT** cosmic stand.
- Installed and connected PLC for **HPS** in Hall B.
- Set up VirtualBox with Windows 7 for **HPS** on an OS X terminal that's on the Hall B subnet.
 - PLC is on 160 subnet, terminal is on 86. Needed so that the Allen-Bradley software could be installed in order to communicate/program/etc the PLC.
- Ran **HPS** vacuum signal cable in Hall with Sahin.
- Made changes to **HPS** PLC firmware per requests.
 - Made new tag for MPOD enable signal.
 - Changed RTD limits to floats (were integers).
 - Changed interlock logic so that faults only affect respective chiller (previously any fault interlocked both chillers, now SVT faults affect only SVT and FE faults only affect FE chiller).
- Attended **SVT** and **HDice** meetings.

Jacobs, George:

FMLA

Leffel, Mindy:

Hall B

- Fabricated cables for **HPS**.
 - Cut and terminated 80' vacuum sensor cable.
 - Terminated a jumper/pigtail cable (previously installed in the hall) for the flow switch of the front end chiller.
 - Terminated a cable for the flow switch of the SVT chiller.
- Started termination of 110' cable for the **SVT** outlet coolant flow meter.
- Finished termination of the last three (of four) **SVT** flow, temperature, and pressure controller cables.
- Continued repairing drain wires on **SVT** R4 LV and SC cables.

Mann, Tina:

Hall B LTCC

- Calibrated and aligned pinholes for testing Winston cones.
- Tested Winston cones so that all ECI returns as of 3/6/2015 have been tested.
 - Compared tested cones to Mary Ann's spreadsheet to verify all tests have been recorded.
- Packed 10 cones to ship out to ECI.

McMullen, Marc:

Hall B

- Wrote short document on the **SVT** N₂ purge system.
- Moved into EEL 124 the **SVT** equipment that had been shipped from FNAL, with assistance from Sahin.

DSG

- Continue working with CRio evaluation kit.

Sitnikov, Anatoly:

Hall B

- Completed test setup for **DC** R1S4 (cosmic ray and efficiency test), with Sahin.
- Bundled 210 **DC** signal cables into 35 groups, 6 cables per group, with Sahin.
- Fabricated 5 network cables (L=100 ft).

DSG

- Cleaned work area in TEDF.
- Patched the floor in EEL 124 with epoxy.

Teachey, Robert Werth:

Hall B

- Reprogrammed the SVT Reception test stand for the new MPOD LV and HV module configuration.