DSG Weekly Report – August 12, 2015

Antonioli, Mary Ann:

Hall B

DC

- Coordinating and overseeing activities on signal cable sorting, repairs, cleaning, testing, and inventorying.
 - * Analyzing signal cable test results.

<u>SVT</u>

• Fabricated 22 ferrule-to-ferrule cables for Hardware Interlock System.

<u>Arslan, Sahin:</u>

Hall B

DC

- Cleaning with alcohol and testing with scope and signal generator signal cables.
- Trained Tina, Mindy, and Anatoly on how to operate test equipment. **<u>SVT</u>**
- Assisted Brian with routing cables on R1—R3 tube.
 - * Wrapped and tied lacing cord around the screws to hold cable.
 - Wrapped 1/2" Kapton tape around screws (to protect lacing cord from screw threads and also to serve as a guide: to indicate how far to thread them into the tube.).
 - * Procedure provides clearance for R4 assembly.

Gas System

• Removed wheels from DC gas panel

DSG

- Helping George with move to DSG lab.
- Helped Peter with DSG Control set up

Bonneau, Peter:

Hall B

HDICE

- Checked CT box for accuracy via a high performance digital meter (Keithley 2001).
 - * At low current (1 A), CT-box accurately measured current at the 100μ A level.
 - ★ Higher current testing has been postponed until the test station computer issue is resolved.
- Submitted PR for replacement of HDICE test station computer.
 - Since the other HDICE computer is the same model and old as the one that failed, a PR has been submitted to replace the other computer as well.
- Ordered a refurbished power supply for the old computer as a stopgap solution. **SVT**
- Wrote code to support override switches on front panel of Hardware Interlock System.
 - * Switches allow cRio program to be upgraded and rebooted without interrupting operation of SVT.
- Retested interlock fault chains prior to chassis installation in the cleanroom.
- Commissioning Hardware Interlock System.

- * Internal environmental sensors and the ambient sensors were connected to system and tested.
- Ran extended operation tests to ensure system stability.

Hall D

- Examined status of slow control systems on a daily basis.
- Contacted Manuel Lara regarding log entry on integration limits for FCAL signals.
- Reviewed reconfiguration of CDC transition boards as result of the broken wire in straw tube K39.

DSG

- Researched and ordered equipment for DSG test station.
- Ordered computer and monitors for George Jacobs.

Butler, Dave:

Hall B

<u>Gas system</u>

- Working on PID loop for gas system.
 - * Working with Marc and George to troubleshoot possible noise issues in DAq system.

Hall D

- Participated in the weekly FDC/CDC meeting.
- Attended meeting on updating the Solenoid PXI system.

Eng, Brian:

Hall B

SVT

• Completed cable routing/management for R1-R3 support tube.



SVT cables before routing.



SVT cables after routing.

- Conducted dry run with R4 support tube to verify clearances.
- Performed calibration runs and ran CODA for ~2M triggers.
- Installed cRIO with Marc in EEL/124 and connected Hybrid Temperature Sensor Board. HDICE
- Continued looking through a few more Mathematica notebooks to verify files included on USB are complete.
 - * Aside from scan files (which were expected to be missing) found ~5 missing files over 4 notebooks.
- Compiling a list of missing files to send to Craig (who is off until 8/17).

Jacobs, George:

Hall B

<u>Gas system</u>

- Completed preparations for DCGAS PID development and testing.
- Working on DCGAS PID controls development.
 - Trouble shooting cables, connections, and power chassis
- Monitored progress of LTCC window leak check in TEDF
- Updated the GasSystemsTasks spreadsheet for Glenn Young.
- Purging LTCC gas system with N₂ using MKS 647b flow control and MKS 250 pressure control

DC

- Reviewed and commented on the preliminary design for the R2 DC downstream attached cable carrier tray.
- Submitted work request to facilities management to re-lamp bldg 96B

Meeting:

- Participated in Hall B TDG meeting.
 - * Present: Bob M, Dan C, Youri S, Marizio U, Steve C, Saptarshi M, Glenn Y, Eugene P
- Participated in the LTCC window test preparation meeting.
 - * Present: Bob M, Maurizio U, David A, Doug T

Leffel, Mindy:

<u>DC</u>

- Repaired signal cables:
 - * Re-laminated and replaced both connectors on cable R3S1 ST 23.1, bad channel.
 - * Re-laminated and replaced one connector on R3S3 ST 20.2, transposed wires.
- Attached all four FSSR2 chips to SVT HFCB S/N 2-P4, using conductive epoxy.
- Researched label maker and labels to be used for labeling cables.
- Researched crimp tool for RG174 coax cable and ordered it.
- Trained on how to set up and run signal cable test.

Mann, Tina:

Hall B

DC

- Trained on testing signal cables **SVT**
- Replaced three cable connectors for humidity temperature sensor boards.
- Fabricated and replaced 6 cable labels for humidity temperature sensor boards. Gas system
- Cut 3 cables to length
 - * A 25' cable with 15 pin connectors for Valve Control Panel
 - * A 25' cable with 9 pin connectors for pressure readback
 - * A 3' cable with 15 pin connectors for Valve Driver Valve
- Fabricated the 25' cables.
- Installed cables for LTCC testing.

McMullen, Marc:

Hall B

Gas System

- Trouble shooting issues with DC PID test stand.
 - An offset of 3.5 VAC was measured between the input signal from the MKS 223 (capacitance manometer which measures pressure)) and the +/- 15 V common, both in the hall and back in the lab.
 - Offset dropped to less than 1VAC after disconnecting the +/- 15V common to the distribution block.
 - Offset did not return after reconnection of the +/- 15V common to distribution block until after the chassis was reinstalled and reconnected to the cRIO and powered.
 - * Offset returned to less than 1 VAC after all commons were connected to chassis ground.
 - PID program still showed an off set, which returned to ~0, only when offset was measured by a meter or a MKS 223 was connected.
- Replaced +/-15V supply with an external supply to power the MKS 223s. **SVT**
- Installed Hardware Interlock chassis and connected the Temperature/Humidity boards.

Sitnikov, Anatoly:

Hall B

- DC
- Cleaned and dried signal cable connectors.
- Tested signal cables.