

DSG Weekly Report – Feb. 18, 2015

Antonioli, Mary Ann:

Hall B

- Learned how to access **DC** gas system drawings on Linux computer. Made a spreadsheet of the gas system EPICS signals.
- Assisted Mindy with **SVT** slow controls cable repairs, prepping cables and drain wires to be attached to the cables.

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- Imported Tina's **note** on Winston cone testing into Adobe InDesign, formatted, discussed the testing procedure with Tina, and began editing.
- Learned how to make photo archive webpages for DSG website. Completed three.

Arslan, Sahin:

Hall B

- Continued testing **SVT** humidity/temp sensor boards and recording results in spreadsheet.
- Researching shunts for **HDice**.

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- Continued reorganizing control room.

Bonneau, Peter:

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- Made system image of the **HDice** NMRCONTROL computer prior to code development.
- Trained Mary Ann on the procedure for analyzing the **gas system** EPICS database.
- Analyzed the **DC** gas system EPICS database, which showed 56 analog channels on an XVME-560 ADC are being used. This is more channels than shown in the current gas system drawings.
- Trained Sahin on the procedures for testing and troubleshooting the **SVT** environmental monitoring PCBs, using the hardware test station.
 - Showed Sahin how to troubleshoot problems using the LabVIEW code.
- Monitored and analyzed the status of the **SVT** EPICS slow control system during the Long Term Stability Test of the SVT modules to be used in Region 1.

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- Started adding external voltage source control on the LabVIEW program that tests VME ADC modules.

Butler, Dave:

Hall D

- Assisted in removing and troubleshooting the **CDC** gas leak.
 - The leak was along the seams of the outer aluminum cover, which were sealed with duct tape.
 - The seams were repaired with kapton and aluminized mylar epoxied to the cover.

Eng, Brian:

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- Continued work on **HPS** PLC code.
 - Removed the MPOD fast shutdown as it was not wanted.
 - Added an external EPICS tag to control the MPOD.
- Nearly finished porting the RF Birdcage Coils notebook to Python for **HDice**.
 - Missing plots and one output table.
 - The numerical integration functions in Python are much slower than in Mathematica, which means once plots are added in, the runtime will be much worse.
 - Craig (Brookhaven) is continuing to look for old NMR code.
- Moved most of the **SVT** equipment from EEL/121B to EEL/124.

Jacobs, George:

FMLA

Leffel, Mindy:

Hall B

- Fabricated and tested cables for **HPS**.
 - Two 3-conductor RTD cables.
 - Three 3-conductor coolant valve cables.
 - One 3-conductor MPOD D-sub cable.
- Fabricated and tested two of four 150' network cables for **SVT** equipment setup in large clean room.

Mann, Tina:

Hall B

- Aligned pinholes for calibration and mirror test.
- Tested 10 **LTCC** Winston cones.

McMullen, Marc:

Hall B

- Traveled to FNAL to complete **SVT** module production.
 - Tested modules 80, 81, 75 (bottom sensors bonded).
 - Tested modules 85, 86, and 78 (HFCB top glued).

Sitnikov, Anatoly:

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- Wound 37 induction coils for compensation magnetic fields inside **CTOF** PMTs.
 - 51 coils completed.

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- Assembled 11 network cables with Rj-45 connectors.

Teachey, Robert Werth:

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- Reviewed networking strategy with Xiangdong Wei of the **HDice** group.
 - NMR systems are Windows XP, which is unsupported at the lab.
- Researched alternative RS-485 converters for the **HDice** NMR systems.
 - Current converters do not have drivers for Windows 7.
- Installing LabVIEW 2014 and converting **HDice** NMR code to this version.
- Continued reviewing the **HDice** NMR LabVIEW code.