DSG Weekly Report – July 15, 2015

Antonioli, Mary Ann:

Hall B

DC

- Coordinating and overseeing activities on signal cable fabrication, repairs, cleaning, sorting, and inventorying.
  - Met with Dr. Chandler, Sahin, and Bert concerning safe lifting of cables.
  - Fork lift will be used to lift the baskets to the correct height.
  - Researched connectors, in case more are needed.

HDICE

- Attended the daily program development meeting.
- Programming manual rotation of target polarization in LabVIEW.

Hall D

- Attended DSG group's daily meeting on magnet and detector performance.
- Went to Hall D with Dave to review gas system.

Arslan, Sahin:

Hall B

DC

- Testing signal cables with oscilloscope and signal generator,
  - As cables were under flood water, testingto check signals quality.
- Met with Dr. Chandler at ESB (Electronic Staging Building) to discuss ergonomic aspects of cable testing.
- Transferred N_2, Ar/CO_2, and dry air with forklift from EEL and ESB to gas shed.

HDICE

- Attended the daily program development meeting.

Hall D

- Walk through in Hall D with Dave Butler to see gas system.
- Re-install PXI chassis with Brian in Hall D for solenoid after upgrade of HD to SSD.
- Attended DSG group's daily meeting on magnet and detector performance.

Bonneau, Peter:

Hall B

HDICE

- Conducted daily HDICE slow controls status meeting.
  - Bert Manzlak approved test station in DSG clean room.
  - Bert mentioned those who work on the test station should complete SAF 603A.
  - Computer port driver for the CT-Box (current shunt) hardware received, installed, and tested.
  - Programming device driver for software interface started.
  - Automatic mode for rotation of target polarization is being integrated with manual mode.
    - Coding of the manual mode started.

Hall D

- Attended DSG group's daily meeting on magnet and detector performance.
- Examined status of slow control systems on a daily basis.

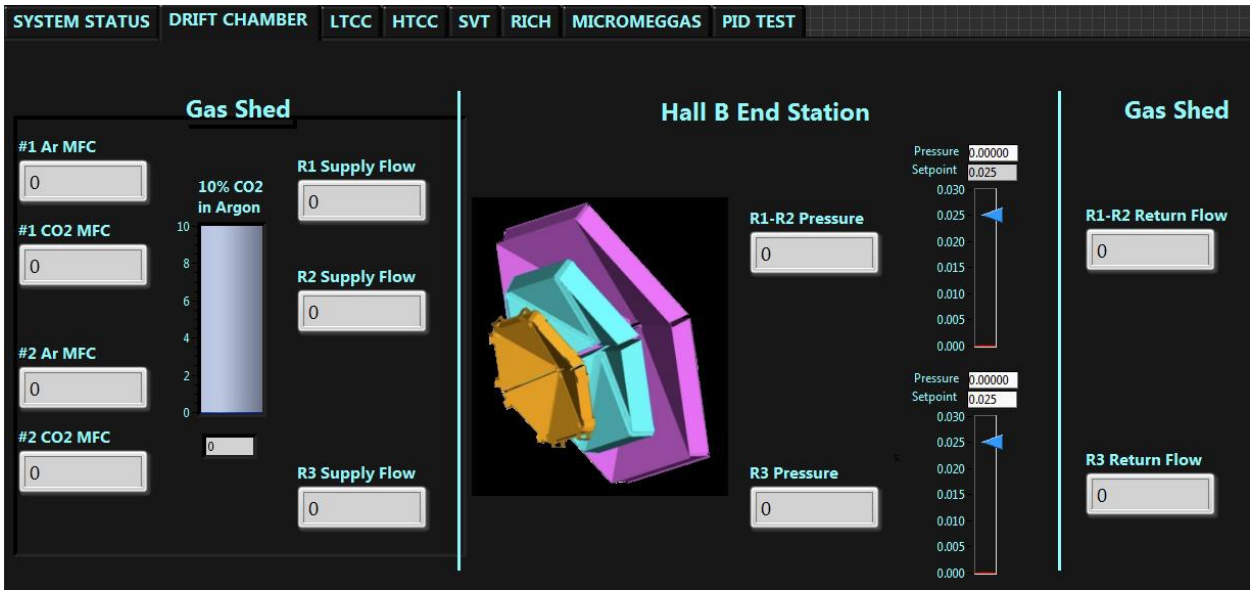
- Reviewed CDC/ FDC Gas System's piping and instrumentation diagram.
- Reviewed EPICS motor control screens and logbook entries.

Butler, Dave:

Hall B

Gas system

- Continuing work on code and screens for the gas system.



First version of the drift chamber screen.

Hall D

- Working with Sahin to add six Convectron vacuum gauges to the Solenoid PLC System.
  - Upgrade includes an online PLC program change, updated PLC expert screen.
  - Working with Hovanes to update EPICS screens and updating PLC channel documentation.
- Trained Tina, Mindy, Mary Ann, Marc, and Sahin on Hall D gas system components and piping and instrumentation diagram.
- Attended DSG group's daily meeting on magnet and detector performance.
  - Discussed gas systems and CDC construction.

Eng, Brian:

Hall B

SVT

- Generated file with process variables and new dead-band values for LV currents (0.1 A to 0.01 A) and HV currents (0.01 to 0.02 A).
  - **For LV**: to try and catch spikes (which seem to be due to network connectivity issues)
  - **For HV**: to reduce the appearance of the current oscillating between two values.
- Added temperature, humidity, and dew-point sensors to MYA to ROOT conversion program.

HDICE

- Sent Craig email asking for shipping information on drives,
  - **No answer, came the stern reply.**

Hall D

- Updated Windows on ***labdisp2*** (computer will be used for PXI upgrades).
  - Installed/updated LabVIEW 2014.
  - Left solenoid computer (***halld2***) as is, in case need to roll back to an older version.
- Removed PXI chassis from end station to install SSD.
- Backed up HD image and used that to restore to SSD.
- Attended DSG group's daily meeting on magnet and detector performance.

Jacobs, George:

Hall B

Gas system

- Requested quote on Neon and COMPASS gas mixture from Spectra Gas and Matheson TriGAS.
  - Response: unavailable due to the **global shortage** of Neon.
- Researched materials for DCGAS system exhaust manifolds.
  - Decided to use corrugated SS tubing and KF fittings – cost estimate ~10K$.
- Meeting with Bob Miller on DCGAS manifolds for TORUS.
  - Discussed flow and differential pressure requirements, numbers of connections, connection sizes, connection types, and component locations.
- Attended weekly TDG Meeting.
  - Attendees: Bob, Glenn, Stepan, Dan, Maurizio, Youri, Saptarshi, and Eugene.
  - Topics discussed: CTOF crazing, LTCC leak testing, and C_4F_{10} test with gas system starting on the 27th, HTCC mirror installation, and separation of designer Brandon.

Hall D

- Attended DSG group's daily meeting on magnet and detector performance.

DSG

- Fixed Widows PC, AutoCAD works.
- Walk through of ESB with Walt Akers and Glenn Young to evaluate storage space utilization and items to be excessed.
- Maurizio Ungaro requested advice on using 90% R134a - 5% SF4 - 5% butane gas mix for leak checking LTCC. .
  - SF4 is highly toxic gas and 5% butane is within the flammable range when mixed with air. Advised him to use 100% pure R134A gas for leak checking.

Leffel, Mindy:

Hall B

Gas system

- Cut six 50' cables with Tina.
- Created labels for SVT hardware interlock signal cables.
- Preparing for wire bonding FSSR2 chip to HFCB:
  - Searched EEL building for a protective case, found one, and modified it to accommodate HFCB

Hall D

- Overviewed gas system for CDC and FDC; outside, in gas room, and in the hall.
- Attended DSG group's daily meeting on magnet and detector performance.

DSG

- Arial Lift (SAF302) and Fall Protection (SAF202) online training completed.
- Forklift Operator (SAF502) online training, in process.

Mann, Tina:

Hall B

Gas System

- Cut six 50ft cables with Mindy for the Valve Control (4) and Pressure Readback (2).
- Fabricated cables.
  - Three 50ft-15pin cables for the valve control
  - Two 6ft-Conxall-8 cables for analog out
  - One 6ft-Conxall-2 cables for cRIO Power

Hall D

- Attended DSG group's daily meeting on magnet and detector performance.
- Conducted systems check.
- Trained on gas systems (with Dave).

McMullen, Marc:

Hall B

Gas System

- Completed spread sheet with pinouts for the cables to be used for the DC PID loop test.
- Assembling DC PID/ HTCC chassis.

SVT

- Attended meeting on integration of the two-barrel systems.
  - Discussed timeline for de-cabling and re-cabling detector.

HDICE

- Was briefed on the different detector components and the current work being done by DSG during a walk-through of the HDICE lab with Peter.

Hall D

- Went over operation of FCAL dark room safety controls.
- Attended DSG group's daily meeting on magnet and detector performance.
  - Focused on CDC/FDC gas, Solenoid,, and beam position monitoring systems.

DSG

- Installed HTSB test program on the cRIO.
  - Program reads and displays temperature and humidity and writes to text file.

Sitnikov, Anatoly:

Hall B

DC

- Separating dirty signal cables from clean signal cables.

Teachey, Robert Werth:

- No report