

DSG Weekly Report – June 24, 2015

Antonioli, Mary Ann:

Hall B

DC

- Coordinating and overseeing activities on signal and high voltage cable fabrication, repairs, cleaning, sorting, and inventorying:
 - Assessed the cable-cleaning/testing situation in ESB, to come up with a process.
 - Generated table of available signal cable lengths and e-mailed Bob Miller the table.
 - Organized sorting of clean and unclean cables.

HDICE

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

SVT

- Fabricated cables for Hardware Interlock System.
 - Seven 10-ft cables, with ferrules on one end.
 - Four 20-ft cables, with ferrules on one end, D connector on other.

Hall D

Meeting

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

DSG

Documentation

- Edited and posted two technical notes on DSG website.
 - 2015-006 Hall B Drift Chamber Gas System
 - 2015-007 Differential Line Test for the FSSR2 ASICs of the Silicon Vertex Tracker

Arslan, Sahin:

Hall B

DC

- Unbundled, measured, sorted, and re-bundled signal cables.

Bonneau, Peter:

Hall B

HDICE:

- Conducted bi-weekly slow controls meeting.

Hardware Status

- Electron beam test setup to be constructed in test lab.
 - Setup expected to be operational August 2016.
- Setup of test station in DSG clean room completed.
 - Components and cables for Oxford power supply installed.
 - Protective shield enclosure covering output power leads fabricated and installed.
 - Redesigned RF Attenuation/Switching chassis installed.
 - B-List entry with THA and procedure approved by Andy.
- Regarding RF cables:
 - Measurement of equipment rack cables to be done, to see whether Molex's standard length (off-the-shelf) cables are adequate; 6, 12, and 120 inches cables with SMA connectors are available.

- DSG requested Molex lead times for custom length cables and information regarding sale of components and tooling necessary to fabricate NMR RF cable assemblies at Jlab. No response received from Molex.
- *Xiangdong mentioned he will send test results of the short cables to DSG.*
- *Cable lengths needed for test lab beam setup not known.*

Software Status

- Rotation of Target Polarization program's progress discussed.
 - Initial programming of automatic mode nearly complete.
 - Xiangdong provided default and maximum ramping parameters for program.
 - Xiangdong requested pause button for magnet power supply ramp.
 - DSG posted the revised procedure, which can be found on the HDICE controls website: <https://userweb.jlab.org/~bonneau/HDice/HDice%20Rotation%20of%20polarizations%20on%20Target%20Version%205.pdf>
- Status of the Mathematica analysis code discussed.
 - Each one of the 7 notebooks requires a certain number of data files in order to proceed.
 - Craig Thorn (BNL) will be sending a memory stick to Brian with needed files.
- Next meeting on Tuesday July 7th at 11:00 A.M. in DSG Control Room (EEL R121C).

SVT

- Programmed Real Time Operating Program (RTOP) user interface controls for enable/disable of all sensor types (temperature, humidity, and water sensors) used in the Hardware Interlock System.
- Added interface to RTOP to accept user commands.
- Added error handling to user/ Real Time operating program interface.

Hall D

Meeting

- Conducted daily status and instructional meeting on Hall D systems.
 - Review PLC programing for the FCAL dark room and FDC Gas System.
 - Examined the status of the Hall D slow control systems on a daily basis.
 - Reviewed the firmware updates for FCAL smart tube bases.

Butler, Dave:

- No report - on vacation

Eng. Brian:

Hall B

SVT

- Created a database of EPICS Process Variables (PV) for module signal names: https://userweb.jlab.org/~beng/SVT/svt_epics.sqlite
- Developing a command-line program to convert EPICS PVs into a ROOT file.
 - Data will be pulled from MYA via C++ API.
 - Program will be slower to run on CLON machines compared to ACC ones, but still only a few seconds to pull several days' worth of HV currents for all modules.
- Attended weekly status meeting.

HDICE

- Recoding Mathematica notebooks to version 9.
- Teleconferencing with Craig Thorn (BNL) and Xiangdong Wei (JLAB) to discuss availability of Mathematica data files.
 - Craig will be sending a USB drive with what he hopes is most of the needed input files.

Hall D

Meeting

- Attended DSG group's daily meeting on Slow Controls.
 - Went over PLC code for FCAL, Darkroom, and FDC/CDC

Jacobs, George:

Hall B

DC

- Wrote for HV troubleshooting procedures using Bertan power supply and HV test box.
- Discussions with Mac about DC testing, diffusion of O₂, and gas flow rates.

Gas System

- Labeled DCGAS, nitrogen, and LTCC gas system piping

Hall D

Meeting

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

DSG

Consultation

- Discussions with Zhiwen Zhao about C₄F₁₀ gas and the Hall A/C LTCC gas system.

Leffel, Mindy:

- No report – sick leave

Mann, Tina:

Hall B

DC

- Set up work station in ESB for cables to be tested.
- Sorted signal cables at the ESB.
- Cleaning and testing signal cables at the ESB.

SVT

- Fabricated four D-connector cables for the Hardware Interlock System.

McMullen, Marc:

Hall B

Gas System

- Forwarded chassis design files for manufacturing.
 - Fabricated chassis shipped to Jlab on 6/23; should arrive in a few days.

SVT

- Attended weekly status meeting.
- Fabricated six extensions from patch panel to Hardware Interlock System.
 - Both humidity and temperature wires from the Humidity/Temperature Signal Board to the cRIO chassis were extended.

DSG/Safety

- Reviewed B-list submitted for the HDICE magnet supply.
 - Forwarded B-list to Andy for approval; approved on 6/23/15.

Sitnikov, Anatoly:

Hall B

DC

- Unbundled, measured, sorted and re-bundled 69 bundles of signal cables.
- Cleaning and testing signal cables.
 - Cleaned 18 cables/36 connectors (1 connector is broken)

Teachey, Robert Werth

Hall B

HDICE

- No report - sick/vacation