DSG Meeting Minutes - Wednesday, November 19, 2014

Antonioli, Mary Ann:

Hall B

- Attended Central Detector talks for CTOF, SVT, MVT, and CND.
- Data-analyzed 20 large Winston cones for CTOF.
 - Added averages and standard deviations to status sheet.
- Estimated from data plots, the average temperatures during burn-in of **SVT** production modules P1— P71, and documented them in Excel.
- Wired power supplies of cRIO Detector Safety System.

DSG

• Edited Note 001-2014 on **SVT Cables** and prepared it for website posting.

Arslan, Sahin:

Hall B

• Re-soldered and retested R1 chambers.



Before



After



Sahin Arslan (DSG) testing RI drift chamber.

Bonneau, Peter:

Hall B

- Troubleshooting Production Module P55 using the **SVT** module logic analyzer test station.
 - By changing the differential line test varying the FSSR2 output data line on U1— determined that the fADC and not the differential data line of OUT1 was defective. When pulser output was set to zero, the fADC intermittently returned a value greater than the expected 0.
- Debugged an intermittent communication problem between the laser mono-chromator and the LTCC test stand computer.
 - Changing the connecting USB port on the test computer fixed the communication problem.
- Tested NI cRio 9030 controller/chassis after it was assembled and cabled.
 - Embedded Linux controller is working correctly; loaded RT LabVIEW on to Linux controller, installed drivers, and configured network interface.
- Contacted MKS instruments regarding the recommended interconnecting cable specifications between the mass flow controller and the MKS 647C multi gas controller to be used for the drift chamber **Gas System**.
 - Drawings and specifications have been received from MKS.

DSG

- Added DSG note page to the group's website.
- Submitted, for the DSG website, CCPR requesting the addition of links on the Hall B, Hall D websites as well as on any other JLab webpage that lists Physics Division groups.

Butler, Dave:

Hall B

- Attended the **SVT** DOE Review presentations.
- Met with Peter and George to determine process variables for the Tracking Detector Safety System.
- Researched Tracking Detector Safety System hardware.
- Ordered LabVIEW NI-Industrial Communications for Ethernet/IP software.

Hall D

- Attended the **Beam Readiness** meetings.
- Updated the **FDC/CDC** HMI in preparation of the PLC upgrades after beam commissioning.
 - Added differential pressure sensors to flowmeters located inside the hall. Set flowmeter to warn at
 5 Pa and shutdown at 10 Pa; system runs at 65 Pa.

Eng, Brian:

Hall B

- Attended **Micromegas** gas meeting:
 - Micromegas uses Siemens PLC system. Signals will be provided to be read into EPICS via SVT VME boards.
 - For the Micromegas detector, the Saclay group will provide instrumentation and piping from their gas panel to detector; JLab is responsible for the gas to the gas panel and will need to design/implement the mixing system.
- Attended Central Detector talks: SVT, CND, Micromegas, and ASIC-Dream Chip.
- Developing code for an expanded differential line test of **SVT** Production Modules, namely exercising more output modes to better isolate Out1 issues.
- Attended **SVT** DOE Review talks.

Jacobs, George:

Hall B

- Attended CLAS Collaboration's **Central Detector** talks.
- Met with Paul Hanson regarding the new DC Cable Routing Scheme on the TORUS.
- Developed alternate cable tray for the **DC Cable Routing Scheme** on the TORUS.
- Discussed N₂ purge system with Patrizia Rossi and RICH INFN development team, Marco Contalbrigoon, Dario Orecchini, Sandro Tomassini, Marco Mirazita,.
 - Updated RICH N₂ purge system diagram.

Leffel, Mindy:

Hall B

- Worked on SVT Slow Controls patch panel cables.
 - HTSB cables: soldered humidity sensor cables and glued temperature sensors, to five boards.
 - D-Sub cables: crimped contacts on two more cables.
- Wrapped, labeled, and packaged ten tested large LTCC Winston Cones and unwrapped eight for testing.

Mann, Tina:

Hall B

- For the LTCC reflectivity tests:
 - Aligned laser through pin holes.
 - Performed calibration and mirror tests.
 - Tested 16 large Winston cones (total tested 39 out of 72).

McMullen, Marc:

Hall B

- Continued drawing **SVT** racks on space frame level 1.
 - Rotated view to isometric and labeled SVT/detector components.
- Connected HV cables to DC R1S5 distribution box for retesting.

Hall D

- Attended and provided reports from the Beam Readiness meeting.
 - Hall D is in commissioning phase. Accelerator has provided some beam with stoppages due to various technical issues (2 K cold box tripped, IOC failures).
 - Studies on beam tracking and position were conducted by either moving the collimator or having accelerator move the beam.
 - Tracking from the tracking detectors was displayed in the 11/12/14 meeting; it can be viewed on the Hall D log: https://logbooks.jlab.org/search/site/3305977

Sitnikov, Anatoly:

Hall B

- Cut and polished 46 fibers (D=0.32 mm, L=4.8 m) boron silicon.
 - Now polished 92+46=138 fibers.

Teachey, Robert Werth:

Hall B

- Reviewed SVT EPICS control program with Peter to start testing of the LV and HV high/low current interlocks.
- Developing requirements for the VME/MPOD Test Stand.

Hall D

Started reviewing PLC code for FCAL.

DSG

- Investigated problems with Hall D Monitoring System PC in the DSG control room.
 - Lost internet connection and found the issue to be with the Network Card.
 - After rebuilding the PC and reloading software, the computer center (CC) automatically locked my user account when I tried to register the PC on the CUE.
 - PC has been given to the CC for rebuilding.
- Starting DSG Note on Hall D cryotarget.