DSG Meeting Minutes – Wednesday, September 10, 2014

Antonioli, Mary Ann:

Hall B SVT

- Labeled terminal blocks #19 and #20 in AutoCAD Slow Control System's (SCS) patch panel drawing, following spreadsheet.
- Worked on **SCS**.
 - Labeled environmental testing cables attached to panel.
 - Routed cables on box.
 - Installed panel in clean room, with Mindy.
 - Hooked up available region 1 and 2 slow control cables and V450 cables to patch panel, with Mindy's assistance.
- Attached, for the **Power Supply System (PSS)**, 56 CPC connectors to front panel of **HV distribution box** #4 and wired their drains to the terminal blocks.
- Analyzed data of actual currents of modules P29-P43 using data-logged plots.
 - Exceptions: there were no plots for 41.
 - There was no data on the plots for 43.
 - There was no data for the module top for 30, 31, and 40.

<u>Hall D</u>

• Drew schematic of **FCAL** environmental circuit using Visio.

DSG

• Began adding folders and files to **DSG_technical** area on the M drive.

Arslan, Sahin:

<u>Hall B</u>

- Instrumentation of region three **drift chambers**.
 - Tested LV on DC R3S6.
 - Installed gas line fitting on DC R2S4.
 - Changed gas bottles Ar/CO₂ on the chambers DC R3S4 and DC R3S6.
 - Installed 14 STB boards on DC R3S6 and put conductive boots on crimp pins.
 - Installed 42 jumper signal cables to STB on DC R3S6.
- Gave tour to DSG team members of the **drift chambers**.
- Tested four SVT HFCBs #74, #75, #78, #80 with Marc and shipped them on 09/08/2014 for population.

Bonneau, Peter:

Hall B SVT

- Revised V450 ADC test station program of the SCS to read data from all sensor types, including HFCBs, and environmental sensors.
- Tested the **SCS** patch panel system after the cabling for environment sensors was added.
 - Using a VME crate, MVME5500 IOC, and a V450 ADC, verified the signal integrity and interconnect routing using the SVT EPICS test program. All environmental sensor inputs and outputs were checked and confirmed correct. After panel was installed in the cleanroom, the LV

distribution system and the output signals from the environmental sensor boards mounted outside of the detector space were checked.

- Updated **instrumentation** space allotments.
 - Assigned in racks spaces for UPS, local SVT slow controls monitoring, gas controller, SVT PAC system, chiller, chiller controls and monitoring, patch panel, and other supporting instrumentation.
- Tested **Power supply system's (PSS)** MPOD controls on the EPICS based **SCS**.
 - Confirmed the HV current resolution readback was corrected. Also tested LV supply and readbacks using two HFCBs. Started detailing GUI screen requirements as requested by Accelerator Controls Group during the SVT meeting this week.

Butler, Dave

Hall D

- Completed cabling and alarm code for **Pair Spectrometer** PLC in Hall D.
- Prepared the **FCAL** PLC hardware and software for the Caen interlock functionality. (Installed TTL module and will use Werth's code).
- Added an analog channel to the **FDC** PLC to monitor a flowmeter for the chiller.
- Implemented watchdog timer/EPICS interface for each PLC processor.
 - The watchdog timer is a 1 second bit change.

Eng, Brian:

Hall B

- Set up **SVT** cosmic stand in EEL/121B including making signal and HV cables.
- Installed counter module in HPS PLC setup.
 Added code for interlocking on 1 flow meter.
- Made slides for talk during **HPS** meeting.

Jacobs, George:

Hall B

• QC-ing **magnet** coils at AES.

Leffel, Mindy:

Hall D

• Continued working on MS/D-sub cables for Radiation Monitoring System.

HallB

- Continued testing LTCC Winston cones.
- Worked with Mary Ann to rewire the **SVT** slow controls patch panel.

McMullen, Marc:

Hall B SVT

- Completed post-manufacturing QC tests for seven bare HFCBs.
- Completed post-manufacturing QC tests for four populated HFCBs.
 Shipped to module production.
- Completed post-manufacturing QC tests for six backing structures.
 Two sent for module production.
- Completed Hall D walk-through.

Mann, Tina:

Hall B SVT

- At Fermi, QC testing and troubleshooting production modules (now @ P48).
- QC-ing HFCBs at Fermilab.

Sitnikov, Anatoly:

Hall B

- Making frame for storing 0.3 mm fibers, 6 meters long, after cutting and polishing.
- Assembling arrangement for cutting and polishing 1.4 mm fibers.



Cutting and polishing fixture designed by Anatoly, manufactured by JLab machine shop.

- Assembling three CTOF detectors (six PMT).
- Making six signal cables for testing three CTOF detectors.
- Cutting reflective foil (MV-2000) for wrapping CTOF detectors (20 pieces).

Teachey, Robert (Werth):

Hall D

- Added heartbeat code to the HV reset of Tagger, FDC, CDC, and Start Counter PLCs.
- Added Start Counter's thermocouple readback code to the FDC, CDC, and Start Counter PLCs.
- Tested **Tagger** HV reset PLC with the two tagger 1527 CAEN crates.
 - Note that front panel interlocks needs to be enabled.
- Wired thermocouples from the **Start Counter** to the **FDC**, **CDC**, and **Start Counter** PLC.