# DSG Meeting Minutes – Wednesday, July 09, 2014

#### Antonioli, Mary Ann:

- Measured and recorded in Excel spreadsheet, resistance of 11 SVT temp and humidity sensor cable assemblies for <u>Hall B SVT</u>.
  - Took pictures for procedure to be written.
- Fabricated two 9-pin D-sub RS232 cables for <u>Hall D Target Control</u>.
- Read <u>Hall D</u> Conducts of Work.
- Analyzed HV current plots for <u>Hall B SVT</u> modules P23–P28, top and bottom sides.
- Ordered computer for Tina.

#### **Bonneau, Peter:**

- Reconfiguring measurement setup and writing LabVIEW code for measuring reflectivity of <u>Hall B LTCC</u> mirrors and Winston cones.
- Coordinated <u>Hall B SVT</u> faraday cage electrical interface activities.
- Reviewed environmental interlocks for the Hall B SVT.
- Set up and tested computer used for the EEL 121 microscope inspection station.
  - The microscope's camera is connected via an USB V3.0 interface in the computers motherboard. The Zeiss AxioVision software was installed and tested on the test station.

Hall D Target Control

- Setting up computer in EEL 121.
  - The computer that was used for target cool down in the EEL high bay (target area) has been reconnected in EEL 121 lab and the network connection to the target and HMI interface of the PLC were tested.
- Discussed with Dave and Werth the HMI screens for control and monitoring of the PLC.

# **Butler, Dave:**

<u>Hall D</u>

- Edited the solenoid vacuum narrative and vacuum checkout procedure.
- Implemented code, for solenoid's cryogenic-controls, to use either the highest or lowest  $\Delta T$  of the four coils minus the temperature in the cryogenic-distribution box. Both variables were added to the PID subroutines for valves *EV8* and *EV9* to control the nitrogen flow to the helium heat exchanger.
- On 7/5/14 the automatic gas switch-over control failed and caused the flow of CO<sub>2</sub> to the FDC and CDC to stop. Came in and manually change the bottles of CO<sub>2</sub>.

# Eng, Brian:

<u>Hall B SVT</u>

- Completed module: P29
- Worked on plotting sensor flatness.
  - Results haven't been satisfactory. Only a 3D scatter plot gives decent looking results of the methods tried, but visually it isn't very appealing. Contour and 3D surface plots have issues since the joints between sensors are so close (~110 microns compared to 300 mm overall) but there is usually a change in height in those areas.

#### Leffel, Mindy:

- Rewiring <u>Hall B CTOF</u> PMTs, completed 10, cumulative total 73.
- Altered Humidity Temperature Sensor (HTS) cables and straightened out the four cables for each board, before shrinking heat shrink.





Humidity Temperature Sensor (HTS)

HTS cables

Worked with Maurizio, Nick, and Tina, on the <u>Hall B HTCC</u> mirrors and Winston Cones.
 Setup, test equipment, dark box, mirrors, test program.

# McMullen, Marc:

Hall B SVT

- Ordered anti-stat mats, cable trays, and cable raceways for the Hall B SVT clean room.
  Arranged mats and cable trays.
- Completed testing of 3 Bus Cable panels, cumulative total.
- Testing latest shipment of 9 HFCBs.
  - Completed visual inspection, under microscope, and resistance measurements for 6 units; completed current measurements for 3 units.
  - One unit failed with a short from LV- to LV+ Top (Digital) even though the unit has a MicroCraft passed check stamp.
- Inventoried cables and components.
  - Cable count: 89 HV, 89 LV, 91 slow control, 13 HV to distribution box, 79 data, 80 pulser.
  - HFCB connector count: 84 3-pin and 96 5-pin Nanonics (data), 113 Triax (pulser).

#### Mann, Tina:

- Fabricated three 25-Pin D-subminiature Cables (8 of 10 completed) for the <u>Hall B Slow</u> <u>Controls System</u>.
- Working on <u>Hall B LTCC</u>.
  - Setup, test equipment, dark box, mirrors, test program.

# Sitnikov, Anatoly:

Hall B CTOF

- Completed design of fixture for cutting and polishing 1.41 mm boron-silicon fibers.
- Wrapping scintillators with light-guides.

# Teachey, Werth

Hall D Target

- Working on the Hall D target controls and readback HMI.
  - Lakeshore 336 and 218 temperature displays, heater status indicators, vacuum and pressure displays, and alarm indicators.
- Installed and configured networking for the Lakeshore heater controller in Hall D.
- Wrote and tested Lakeshore 336 heater controller PLC code to enable and disable the heaters depending on target state selected by the user (Fill, Empty, and Off).
- Rewired PLC power supply to supply 24 V to the target interlock system and gate valve.