DSG Meeting Minutes – 3/20/14

Mary Ann – Completed fabrication of low voltage spare cables; worked on high voltage distribution box; worked on the slow controls signal spreadsheet needed for the Experimental Physics and Industrial Control Systems (EPICS) software; completed AutoCAD and Visio drawings to analyze and document *via* clearances on the Hybrid Flex Circuit Board (HFCB).

Dave –Worked on the Hall D barrel calorimeter controls, four-wire RTDs from Omega are being used. RTDs are calibrated. Unfortunately, the four-wire RTDs can be used only as a three-wire system on the Alan Bradley programmable logic controllers (PLCs). Writing code to alarm when chiller temperature nears dew point ($\leq 5°$).

Brian – Developed database in SQL-lite for production modules. Mentioned that we need to barcode components. Set up terminal server gateway for Hall B net. Removed XP and installed Windows 7 on PC attached to the microscope.

George – Worked on troubleshooting high voltage issues with R1 and R3 Hall B drift chambers (DC). Problems caused by oil on wires from manufacturing. R1 easier than R3 to fix due to the shorter length of wires; field wires more difficult than sense and guard wires. DCs steady state current is 0.1 – 0.2 µA during ramp up at 25 V/S; current draw is 1.2 – 1.5 µA. Trip level is set at 2.5 µA. Stringing of sector 6 of R3 should be completed by 4/15/14; thereafter attaching windows, flushing gas, instrumentation and debugging.

Mindy – Worked on the 21" VME patch panel to be used in the lab; began fabricating D-sub 25-pin cables to go from the panel to the VME V450 cards; assisted in fabrication of cables for the high voltage distribution box; fabricating temperature and humidity sensors.

Tina – Fabricated cables for solenoid valves; hooked up cables. Fabricating cables for gas panel of Hall D's forward drift chamber (FDC) and central drift chamber.

Marc – Increased clearances on high voltage plane layers 10 and 11 of HFCB to be greater than the IPC recommendation; checking all changes made as per Compunetics request. Ordered VME patch panel chassis which is to be used in Hall B. Prepared HFCB slides and schedules for the upcoming review.

Anatoly – Fixed low voltage (LV) connector on FDC; rechecked all channels with scope (trigger level ~50 mV). Data acquisition system not ready; firmware expected next month. (Dave will enquire about LV connector type used and due date of firmware.) About 0.5% of 10,000 channels are inefficient.