

## DSG Weekly Report – July 22, 2015

### Antonioli, Mary Ann:

#### Hall B

##### LTCC

- Calculated Winston cone reflectivity improvement percentages and made spreadsheet.
  - ★ E-mailed results to Glenn, Volker, and Maurizio; cc-ed Patrizia.

##### HDICE

- Programming manual rotation of target polarization in LabVIEW.

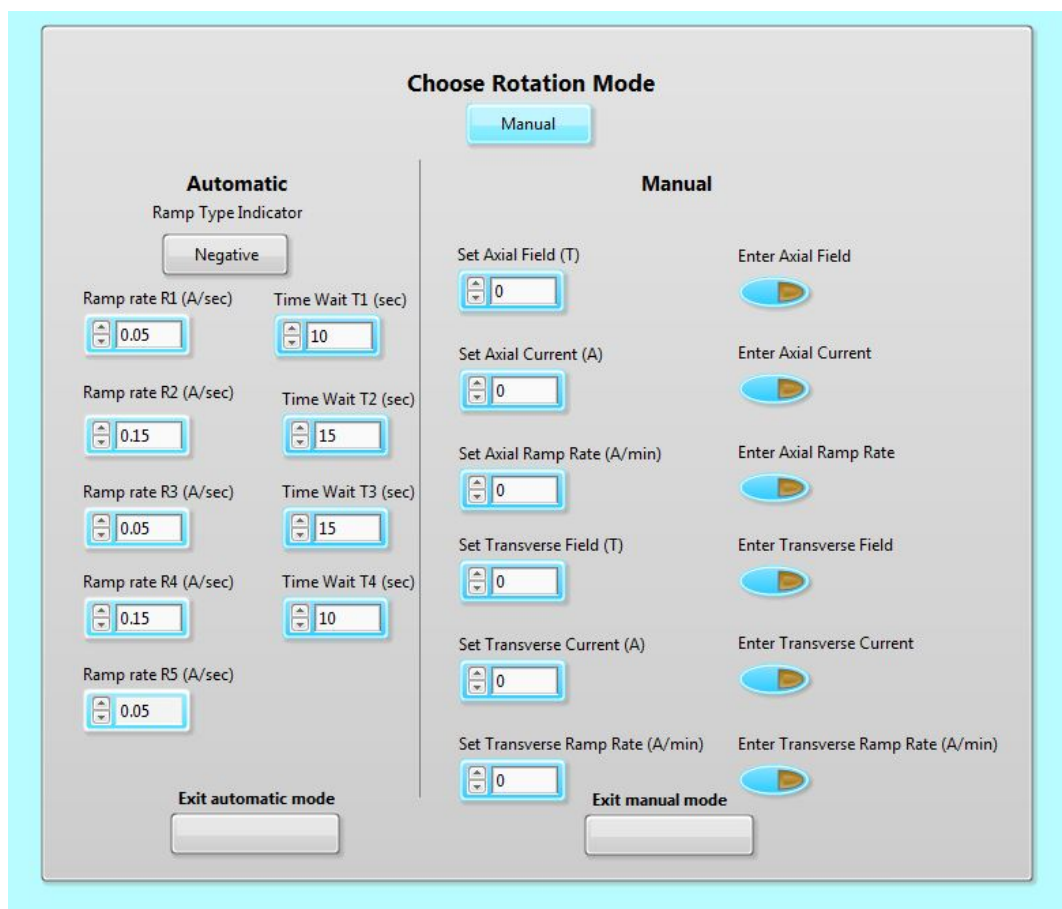


Figure shows a portion of the front panel developed for rotation of target polarization.

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

#### Hall D

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

#### DSG

- Updated website photo and archived old photo.

## **Arslan, Sahin:**

### **Hall B**

#### **HDICE**

- Attended the daily program development meeting.

### **Hall D**

- Walk through in Hall D with Dave Butler to train on gas system.
- Attended DSG group's daily meeting on magnet and detector performance.

### **DSG**

#### **Training**

- Attended two day LabView Core 2 training, offsite.
  - \* Subjects covered the use of local and global variables, property nodes, and proper programming structure as well as debugging strategy.

## **Bonneau, Peter:**

### **Hall B**

#### **HDICE**

- Conducted daily HDICE slow controls status meeting.
- Conducted bi-weekly status meeting,
- Installed and tested CAENels port drivers.
- Testing initial commands.

#### **SVT**

- Setup and testing SVT Hardware Interlock System's remote user computer and its integration into Hall B subnet.
- Integrated cRio chassis into Hall B subnet.
- Programmed water leak sensors into interlock logic.
- Developed sub-VI's for user interface error handling.

### **Hall D**

- Attended DSG group's daily meeting on magnet and detector performance.
  - \* Discussed progress of the Solenoid PXI system upgrades.
  - \* Reviewed problems with the BCAL humidity sensors.

## **Butler, Dave:**

### **Hall B**

#### **Gas system**

- Developing code for gas systems.
  - \* PID code ready for testing.
- Received ordered parts for the gas system with the exception of the 15 flow controllers that MKS still has to manufacture (they sent 7 already).

### **Hall D**

#### **Magnet**

- Added, as requested by Tom Carstens, MKS Instruments Convectron vacuum gauges to the PLC system to measure vacuum pressures at 0.1 mTorr or worse.

- Created tags for monitoring solenoid Coil 2, Coil 1, Coil 3, Coil 4, manifold, and distribution box vacuums.
- Wrote code to readout vacuum (pressure) in linear log scale.
  - \* HMI vacuum status display screen.
- Tom is going to setup a time to bleed down the vacuum to test these gauges.

### BCAL

- Worked with Elton Smith and Chris Stanislav to troubleshoot a dew point sensor on module 38 of the downstream BCAL.
  - \* Sensor has been replaced.
- Trained Marc and Sahin on PLC systems of BCAL and Gas Systems for FDC/CDC.
- Attended DSG group's daily meeting on magnet and detector performance.
- Discussed BCAL, FCAL, and FDC/CDC gas systems.
- Attended the FDC/CDC weekly status meeting.

### Eng. Brian:

#### Hall B

##### SVT

- Conducted 5 T superconducting magnet test with humidity temperature sensor board (HTSB) and temperature sensors on the hybrid flex circuit board (HFCB)
  - \* No issues detected in magnetic field.
- Generated ROOT files with SVT MYA data.
  - \* Might need to find a workaround for the fact MYA only stores changes when above dead-band, i.e. if channel never changes in a year will only return data if you search for year old data.

##### HDICE

- Teleconference with Craig (BNL)
  - \* Craig said he was sending USB drive with files (7/21/15).
- Ordered 10' Molex Temp-Flex cable.
  - \* Will disassemble cable to try and make smaller cable assemblies.

#### Hall D

- Installed LabVIEW 2014 software on PXI chassis, did a few low level changes to VIs, but most were simply recompiled.
- Investigating issues (gaps in data, arrays not full, etc.) with PXI to ROOT fast DAQ, as per above there were no changes to the VI, so not sure why is a PXI problem.

### Jacobs, George:

No report – Father gravely ill.

### Leffel, Mindy:

#### Hall B

##### DC

- Started making labels for signal cables.

#### Hall D

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

## DSG

### Training

- Completed Forklift Operator (SAF502) online training.
- Emailed Dave Kausch and Manny Nevarez, for requirements to complete aerial lift, forklift, and fall protection training.

## Mann, Tina:

### Hall B

#### Gas System

- Researched and located drift chamber cable for fabrication of 6ft-37pin cable for the analog in of the cRIO.
  - ★ Updated wire color code on excel spreadsheet.
- Fabricated cables.
  - ★ One 50ft-15pin cables for the valve control
  - ★ Two 50ft-15pin cables for the Pressure Readback
  - ★ One 6ft-37pin Cable for the cRIO Analog In

### Hall D

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

## McMullen, Marc:

### Hall B

#### Gas System

- Fabricating PID loop test chassis.
  - ★ Wiring back panel of analog inputs to cRIO, input AC power, cRIO power, and Mass Flow Controller power.
- Completed gas system chassis components and cables spreadsheet.
- Completed pinouts for the Gas shed and LTCC cables.

### Hall D

- Attended DSG group's daily meeting on magnet and detector performance.
  - ★ Covered BCAL voltage controls, temperature, and humidity screens.
  - ★ Viewed FDC gas flow and soft interlocks.
- Trained on controls systems.

## DSG

### Safety

- Attended Safety Warden Meeting held by the Division Safety Officer.
  - ★ A new Physics division document on Work Planning Guidance was distributed, which gives the latest guidelines on when it is critical to use work lists.
  - ★ A proposed Hazard Issue List was circulated, which provides a list of hazards and the subject matter expert to ask for guidance.
  - ★ A Hall Work Governance was distributed, which provides work rules for the Halls.

### Training

- Attended two day LabView Core 2 training offsite.
  - ★ Subjects covered: use of local and global variables, property nodes, and proper programming structure as well as debugging strategy.

**Sitnikov, Anatoly:**

**Hall B**

**DC**

- Tested dirty (under flood water) and used signal cables, using Pulse Function Arbitrary Waveform Generator 81150A, Digital Phosphor Oscilloscope 4054, and Flash Drive memory.
  - ★ 8 bundles=48 cables=816 channels

**Teachey, Robert Werth:**

- No report