



# Detector Support Group

*We choose to do these things "not because they are easy, but because they are hard".*

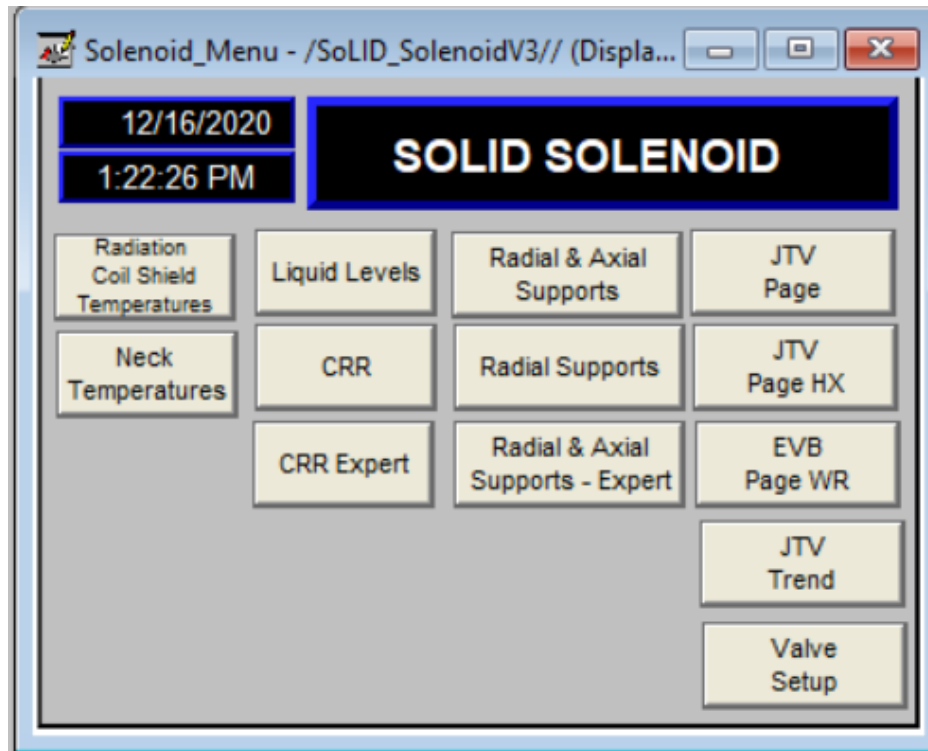
**Weekly Report, 2020-12-16**

## Summary

### Hall A – SoLID Magnet Controls

*Mary Ann Antonioli, Peter Bonneau, Aaron Brown, Pablo Campero, Brian Eng, Tyler Lemon, Marc McMullen*

- Developing *Solenoid Menu* HMI screen which provides access to all developed HMI screens



SoLID Solenoid\_Menu screen under development

- Completed PLC code to control heat exchanger JT valves

### Hall A – GEM Detector Gas Distribution System

*Peter Bonneau, Brian Eng, George Jacobs, Mindy Leffel, Tyler Lemon, Marc McMullen*

- Developing internal data logger for prototype GEM Gas Flow Readback software
- Updated, using NX12, fabrication drawings for the Gas System Flow Sensor Chassis to remove screen printed channel number labels
  - ★ Channels will be labeled with the names of the detector the channel goes to

### Hall B – SVT

*Peter Bonneau, Mindy Leffel*

- Installed, configured, and tested SVT hardware interlock LabVIEW software package and libraries

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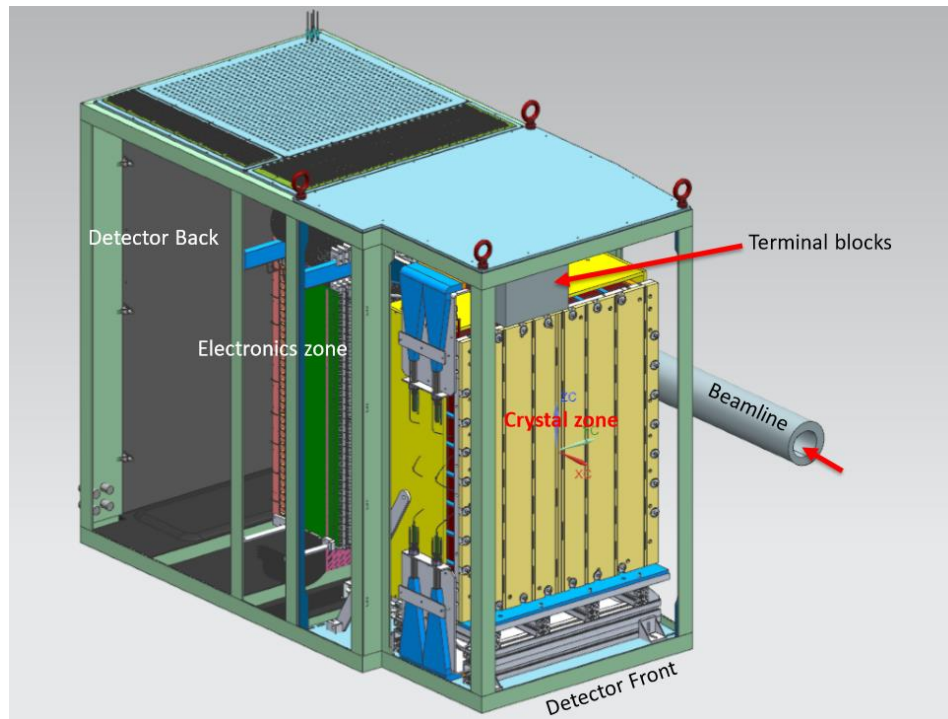
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### Hall C – NPS

*Mary Ann Antonioli, Peter Bonneau, Aaron Brown, Pablo Campero, George Jacobs, Mindy Leffel, Tyler Lemon*

- Developing system fault condition flowcharts for the NPS Hardware Interlock System
  - ★ Flowcharts show the reaction of the Hardware Interlock System to a fault condition detected from the environmental sensors within NPS
  - ★ To protect the NPS detector, the Hardware Interlock System will turn off the chillers and/or ramp down the HV depending on the source of the fault
- Developing, using NX12, a three-dimensional model of NPS detector to aid in the design of the Hardware Interlock System



Isometric view of NPS detector and Hall C beamline developed using NX12

- Generated 648 of 1080 PMT Settings screens
- **Completed fabrication of all 1100 high voltage divider cables**
  - ★ Labeled 100 of 1100 cables
- Generated color coding for Radiall 52-pin connector wiring and posted to DSG website's NPS technical documentation page

**SEASON'S GREETINGS  
AND  
BEST WISHES FOR A HAPPY NEW YEAR!**