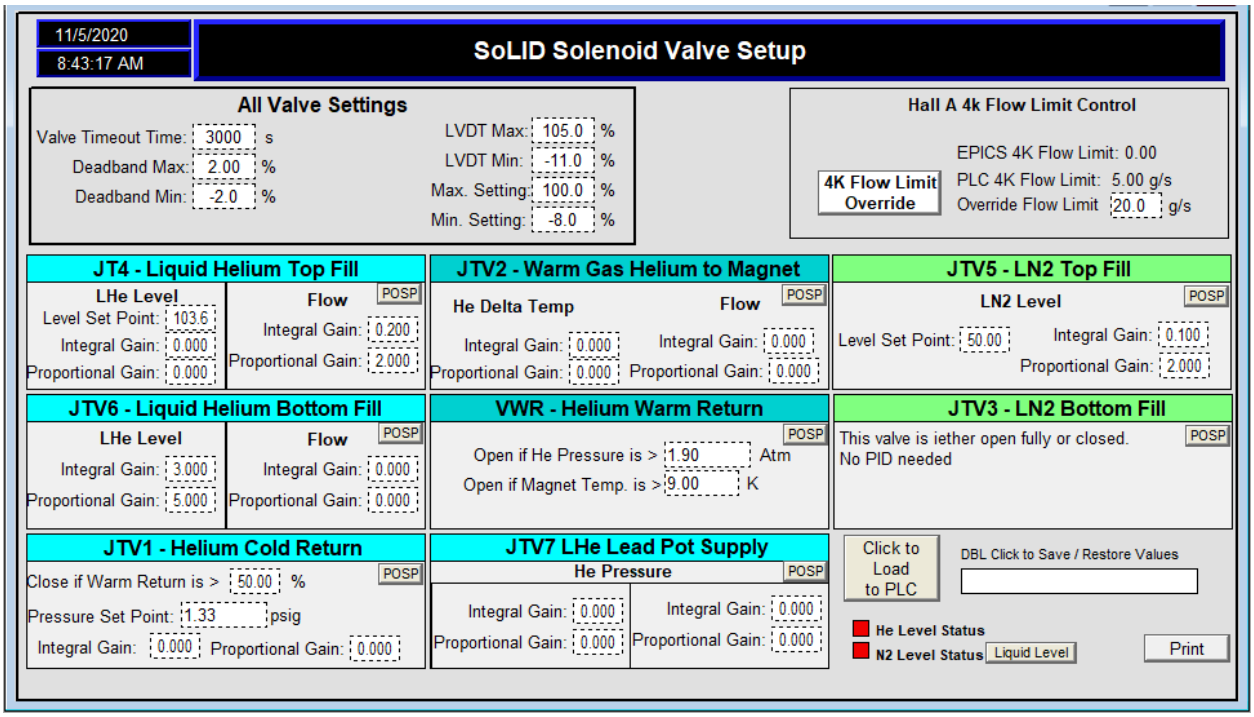
Summary

Hall A – SoLID Magnet Controls

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

- Completed *Liquid Level Expert* HMI screen
- Completed *Solenoid JTV-Setup* HMI screen
  - ✶ Screen allows setup of proportional and integral gain parameters to control the opening and closing of seven valves
  - ✶ Created Position Proportional buttons for each valve which allows user to navigate to Position Proportional screen
    - Position Proportional screen shows user defined cycle time with a pulse width proportional to the difference between the set and actual positions

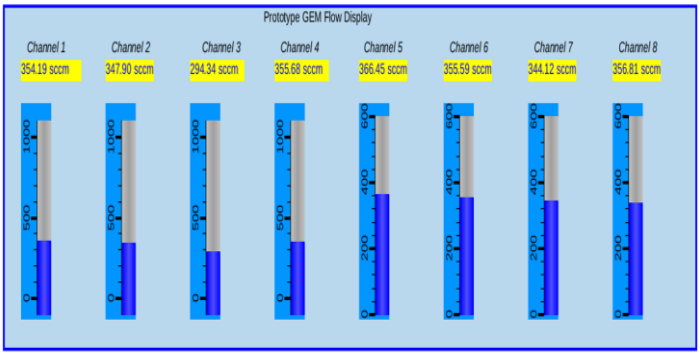


SoLID Solenoid Valve Setup HMI screen

Hall A – GEM Gas System

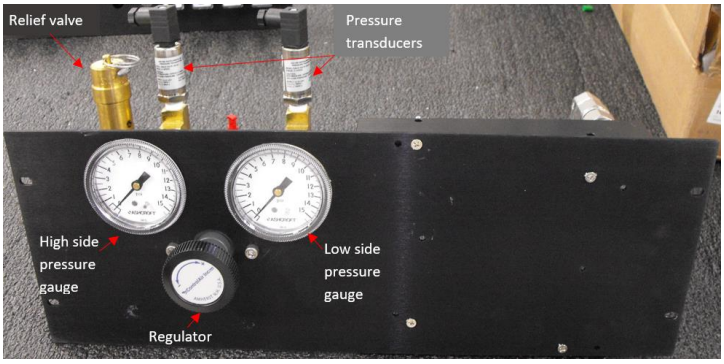
Peter Bonneau, Brian Eng, George Jacobs, Mindy Leffel, Tyler Lemon, Marc McMullen

- Installed Phoebus version of CSS on Raspberry Pi to display GEM gas flow
- Generated eight channel gas flow display

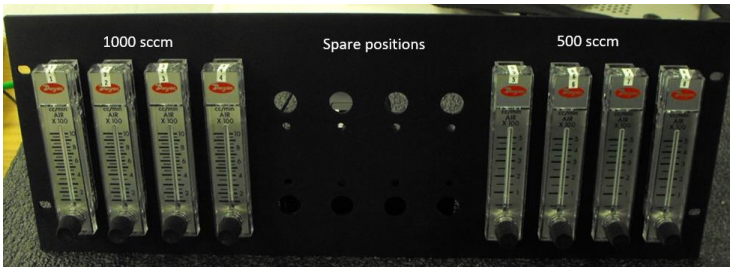


GEM Gas Flow display CSS screen

- Completed fabrication of prototype gas supply regulator and flow meter panel



Prototype of gas supply regulator for the GEM Detector Gas Distribution System



Prototype of flow meter panel with four 1000 sccm and four 500 sccm channels

Hall C – NPS

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

- Redesigning NPS Overview screen
  - ✶ Instead of 3x3 sub-grid each LED will be clickable and will display a PMT Status pop-up screen
- Developing PMT Status pop-up screen
  - ✶ One screen is created; the correct channel/PMT information is filled in via macros according to which LED is selected
  - ✶ PMT Status screen displays channel/PMT faults as well as voltage and current readback

- Conducted ramp testing of 16 of the 34 CAEN HV modules with EPICS CSS program
- Nine hundred and ninety of 1100 HV divider cables fabricated
- One hundred and eighty-six of 1080 PMT Settings screens developed
- Analyzed, with Excel, HV (with load) stability test current data
    - ✶ 32 of 32 module's current data analyzed

HDice

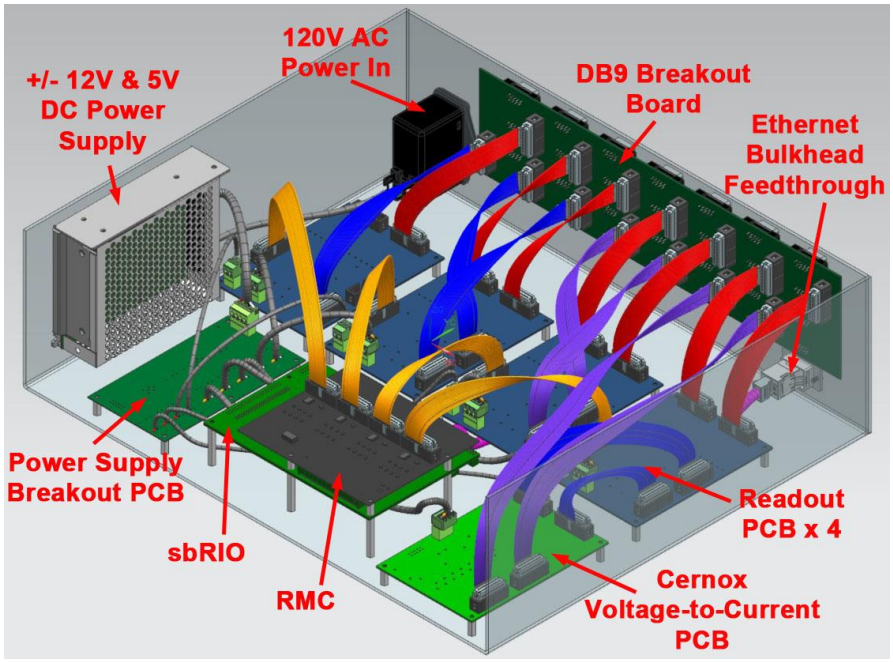
Peter Bonneau, Tyler Lemon

- Added error handling feature to fsNMR program for situations where there is no Gaussian peak in the data used for background scaling
- Added a case to the program to use absolute maximum of the background amplitude rather than the maximum of the Gaussian fit of the background amplitude

DSG R&D – MSELV Chassis

Peter Bonneau, Tyler Lemon, Marc McMullen

- Created, using NX12, three-dimensional model of MSEVL Chassis
    - ✶ Model includes all excitation and readout PCBs, sbRIO, sbRIO Rio Mezzanine Card, power supply, power supply breakout PCBs, and all cabling



Three-dimensional model of the DSG designed MSELV Chassis

EIC

Brian Eng

- Continued work on Tracking Detectors' (6.10.3 in WBS)
    - ✶ Added TPC costs; still compiling labor costs