Summary

Hall B – BoNuS Target Gas Controls
- Development started of software controls; waiting on controls process clarification from Hall B Engineering before continuing.

Hall B – Magnets
- Completed Pre-Power-up Interlock checkouts for Solenoid and Torus.
  - ✶ Interlocks modified for voltage tap cable, system cable, and PLC hardware watchdog failures to cause a Control Ramp Down rather than a Fast Dump.
  - ✶ Adjusted Torus LCW return flow switch to trip Torus MPS when LCW valve is closed.
- Completed Pre-Power-up Instrument checks for Solenoid and Torus.
- Updated all Cryo-con units' hostnames to reflect system they are used for.

Hall B – RICH
- Relocated Forward Carriage (FC) ambient temperature and humidity sensors.
  - ✶ Sensors were supposedly monitoring ambient temperature on L1, L2, and L3 of FC but in reality were all located in the same rack on L2 (rack C2-3).
  - ✶ One sensor relocated to FC L1 rack C1-1, another relocated to FC L3 rack C3-2.
- Developed Python program to calculate time to discharge buffer tank for various flow rates and rotameter valve opening areas.

Hall C – EPICS
- Converted two Hall C magnet HMIs to CSS-BOY screens

Hall C – CAEN HV Test Station
- Modified 48-channel multiplexer software to independently operate 36 relays.
- Re-wired prototype HV test chassis to independently operate 36 relays versus multiplexing 48 channels.

Hall C – CAEN EPICS Test Station
- Shipped A7030TN board (S/N: 297) to CAEN for EPICS and firmware debugging.
- Ran 24-hour stability test for SY4527 mainframe with 16 CAEN-A7030TN HV boards connected with all channels turned off.
  - ✶ GECO 2020 data-logging used to record channels' set and readback values.
  - ✶ Monitored boards during test using GECO 2020 and DSG's Voltage Ramp Test CSS-BOY screen.

Engineering Division
- Soldered 144 resistors, 20 capacitors, and 4 semiconductors on beam position monitor PCBs.

Accelerator Division R&D – Wire Bonding

- Tested bonding to a new superconducting Nb_3Sn sample.

DSG R&D - SHT85 Sensor LabVIEW Readout

- Split code into two loops, one for humidity and one for temperature.
- Developing data-logging for program.

DSG R&D – RICH

- For Sensirion SHT85 sensors, developed integrated temperature/humidity system interconnects, cable types, and chassis design for the sbRIO.
- Developed manual mode in sbRIO scan engine for sensor troubleshooting, testing, and status readback.