Hall A - GEp

Mindy Leffel

- Completed two high voltage boxes; 20 of 22 completed

Hall A – Moller

Brian Eng

- Started developing Python script to exercise remote command functionality of magnet power supply
  - ✳ Currently based on draft of CAEN manual; still haven't received final version
  - ✳ Implemented read commands with no optional parameters

Hall C – NPS

Mary Ann Antonioli, Peter Bonneau, Aaron Brown, Pablo Campero, Brian Eng, Mindy Leffel, and Marc McMullen

- Updated PVs in all high voltage GUIs; tested and all behave as expected
  - ✳ After changing EPICs service names for the two NPS crates, no random parameter setpoint changes noticed and EPICS commands received after sending once
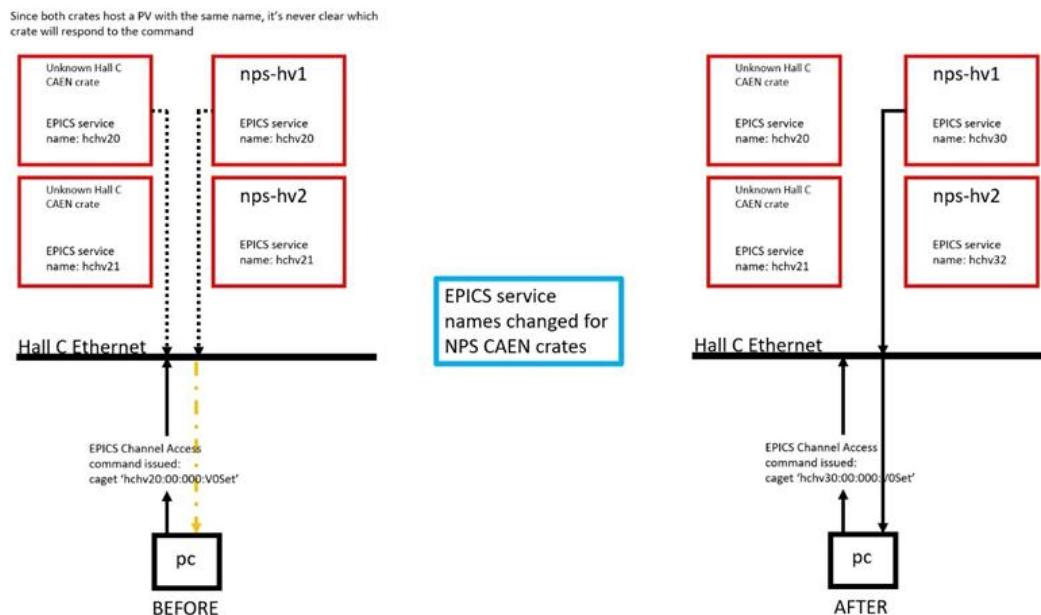
Before and after EPICS service names were changed for CAEN crates
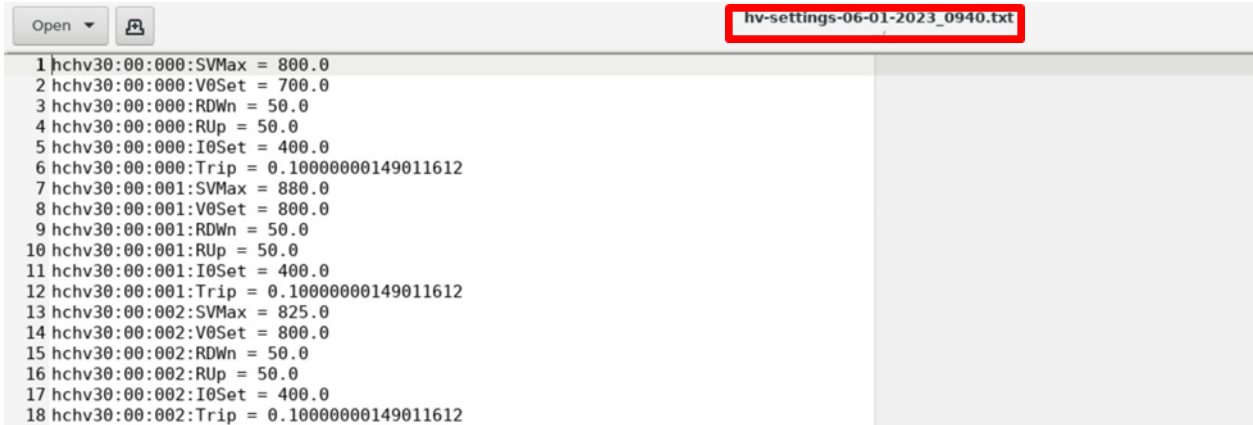
- Submitted request to archive all new high voltage PVs
- Revised and tested the high voltage save and restore Python program *save-restore.py*
  - ✳ Program asks user if they want to save, or restore, high voltage settings

```
                                          hv-settings-06-01-2023_0940.txt
 Open ▼   🔖

 1 hchv30:00:000:SVMax = 800.0
 2 hchv30:00:000:V0Set = 700.0
 3 hchv30:00:000:RDWn = 50.0
 4 hchv30:00:000:RUp = 50.0
 5 hchv30:00:000:I0Set = 400.0
 6 hchv30:00:000:Trip = 0.10000000149011612
 7 hchv30:00:001:SVMax = 880.0
 8 hchv30:00:001:V0Set = 800.0
 9 hchv30:00:001:RDWn = 50.0
10 hchv30:00:001:RUp = 50.0
11 hchv30:00:001:I0Set = 400.0
12 hchv30:00:001:Trip = 0.10000000149011612
13 hchv30:00:002:SVMax = 825.0
14 hchv30:00:002:V0Set = 800.0
15 hchv30:00:002:RDWn = 50.0
16 hchv30:00:002:RUp = 50.0
17 hchv30:00:002:I0Set = 400.0
18 hchv30:00:002:Trip = 0.10000000149011612
```
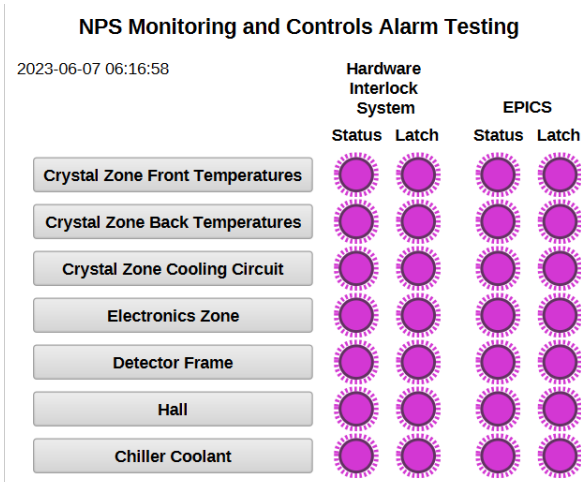
Screenshot of portion of saved high voltage settings (filename boxed in red)

- In LabVIEW program, broke out 70 LabVIEW array shared variables into individual variables, using loops
- Revised alarm system menu screen, adding EPICS status and latch LEDs and changing pop-up screen links to open alarm system screens

Revised Phoebus alarm testing menu screen

- Developing VisualDCT template for electronics zone temperature sensors for the alarm test system softIOC

Hall D – JEF
Mindy Leffel
- Wrapped ten crystals with 3M foil and Tedlar; 788 wrapped to date

EIC
Brian Eng
- In EIC project meeting, decided to move towards a single layout, along with a "plan b" if issues arise with ITS-3 based staves that are specific to EIC

![Detector Support Group logo]

Detector Support Group

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

Weekly Report, 2023-06-07

EIC - DIRC
Peter Bonneau, Tyler Lemon, and Marc McMullen
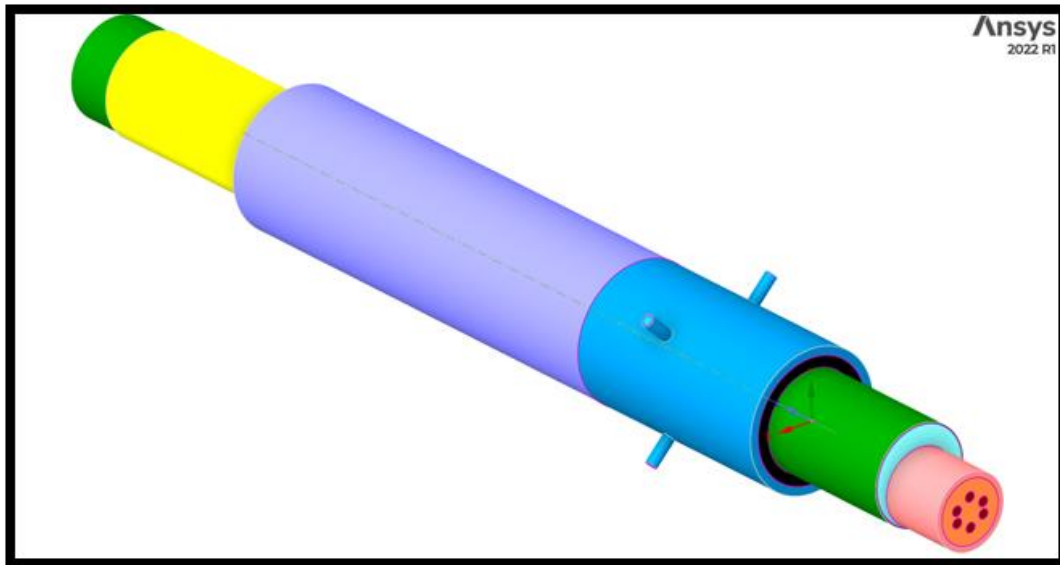
- Reviewing laser interlock PCB design

EIC - Thermal Test Stand
Pablo Campero, Brian Eng, George Jacobs, and Marc McMullen

- Cut heat shield material to 21"x24" and wrapped the beampipe

- Working on thermal simulation
  - ✦ Completed modifications to model so that each component more accurately replicates the test stand

Model of test stand

  - ✦ Set boundary and cell conditions for model
    - Airflow supply and ambient at 23°C
    - Heat source at 24, 157, and 772 W/m3
    - Applied convection to silicon pipe section; the remaining parts are covered with insulator