LArFCS Cryogenic System Progress

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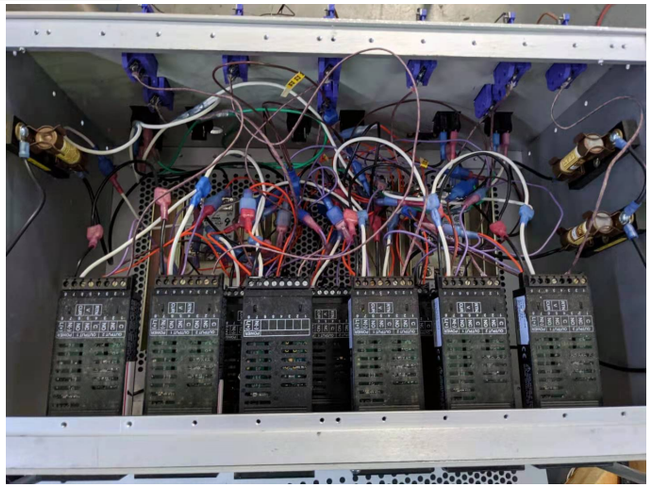
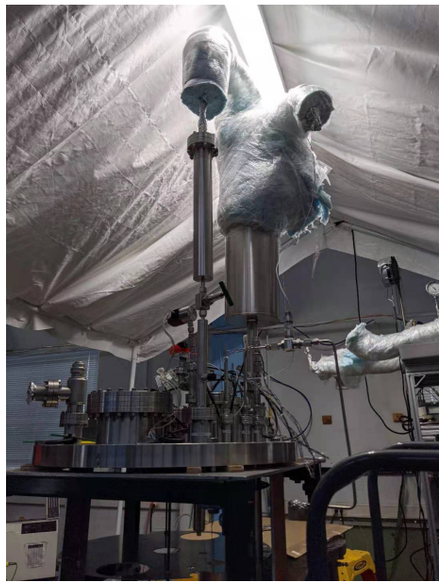
LArFCS Construction

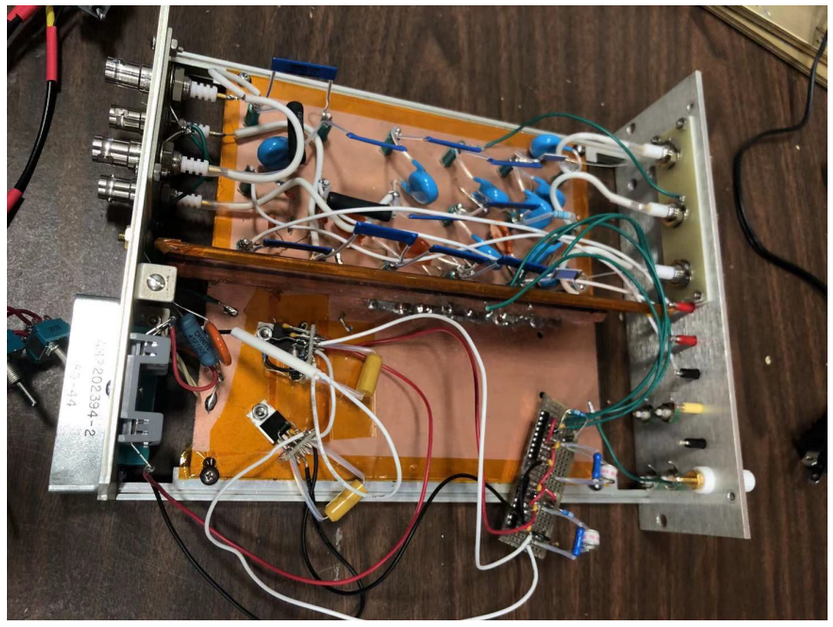
- **Preparation for the purity run**
  - Inline filter status check
    - All valves sealed, positive inner pressure still maintained(charged to about 8 psig at the end of last run)
    - Moved the inline filter cart neat the LArFCS for a mock up connection
    - The heating controller box problems fixed
      - Replaced one micro-controller
      - Clean up the wire lead connected to the replay, water from roof leak get into the box..
      - Working on fixing the LabVIEW control program via RS485



LArFCS Construction

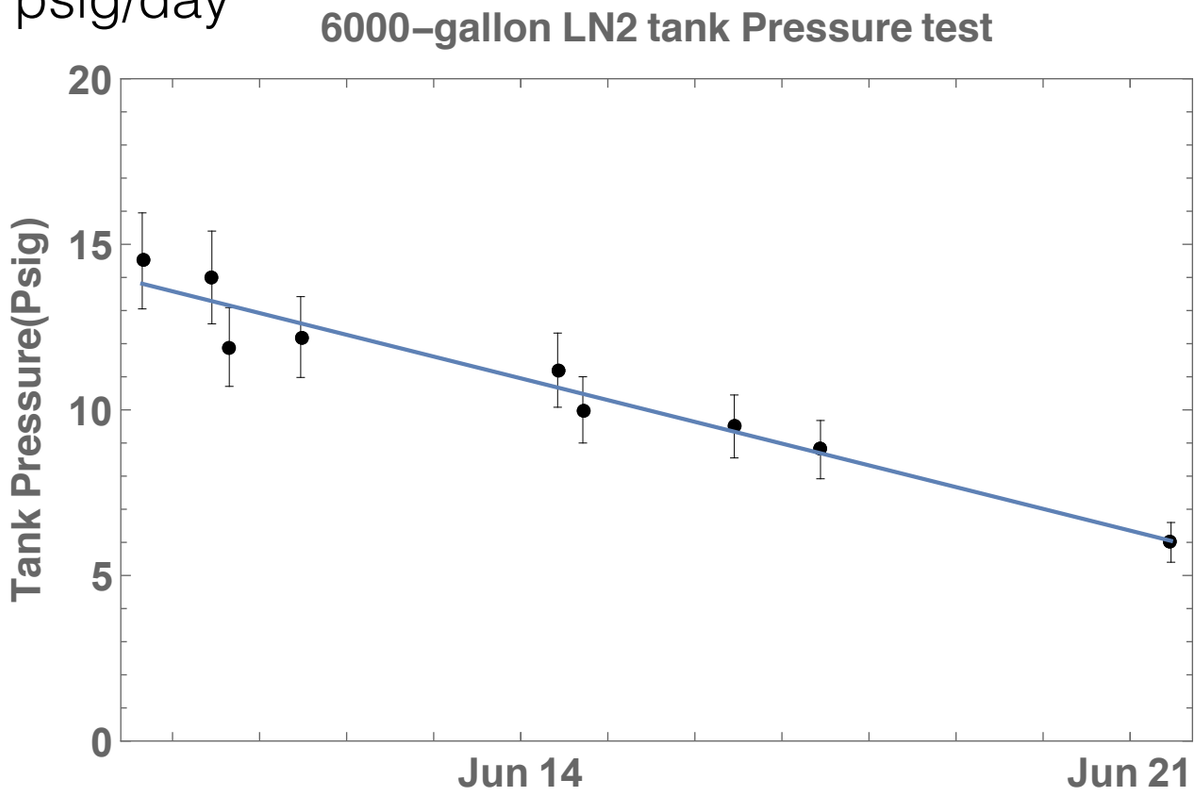
- **LArFCS construction**
  - Insulation on LArFCS purifier cylinder removed for adding the gas bypass/sampling and activation apparatus
  - KHV will start the construction after they back from annual vacation after July 18
  - Valves for the gas switch panel back order with Swagelok, KHV suggested other vendors with equivalent products
  - UCI is still working on the electronics box
    - Assembly still in progress, est. ~1 month to finish the assembly and test
    - 15 kV HV rated capacitors located at a local vendor on Long Island
  - Xeon lamp still requires a WebReq
    - Lab laser safety confirmed the Xeon lamp doesn't require SOP, just need cautions in operation
    - CC canceled in time after finding out with the property representative that although value below a bar-code equipment, still need an A-tag
    - Putting in WebReq as soon as Edmund updates the quote





6000 Gallon LN2 tank

- **Preparations for the commissioning following lab safety guidance**
  - Press test to the LN2 tank
    - Pressurized to about 15 Psig first
    - Charging time ~ 1 day
    - Monitoring the press reduction for about 2 weeks
    - The pressure reduction is about 0.66 psig/day



6000 Gallon LN2 tank

- **Preparations for the commissioning following lab safety guidance**
  - Troubleshoot the pressure reduction problem
    - A gross leak located on one of the cryogenic valve
    - Most likely caused by the aged gasket
    - Tried to tighten up the bolts, problems remains
    - Consulted Bill from Magnet Div:
      — Replacement of the PTFE gasket is not difficult, better replace gasket for both valves
      — Still fine to proceed a tentative cool down with minimum LN2 filled
      — Need a site survey from Airgas with the manager and cryo tech, est. cost ~$700
    - Waiting for approval from Mike Gaffney to proceed to the test filling
  - Painting the tank to white
    - WO #EP1134602 initiated for the cost estimation, due by 06/25
    - Tom determined to use the lab painter to save on the cost of lifting crane cost