

Hall A SoLID Magnet Control Systems – Meeting Minutes

Date: February 10, 2021

Time: 10:30 – 11:30

Attendees: Peter Bonneau, Aaron Brown, Pablo Campero, Brian Eng, Steven Lassiter, Tyler Lemon, and Marc McMullen

1. PLC programming status

- 1.1. Agreed to review progress of work mentioned in [Solid Solenoid PLC Programming Meeting](#) held December 16 during our next PLC Programming meeting on February 17
- 1.2. Fixed I/O module communication faults
 - 1.2.1. Steven Lassiter contacted Allen Bradley to solve communication issues of 1794-ACN15 Flex I/O adapter module; connection faults were cleared
 - 1.2.2. Pablo Campero solved I/O error due to MVI-94 ASCII communication module
 - 1.2.2.1. Changed connection node for module
 - 1.2.2.2. Re-scheduled ControlNet network
 - 1.2.2.3. Downloaded program to PLC controller that includes changes done for the module configurations
- 1.3. New version of PLC code (ACD file: Cleo_V2_Feb_8_2021) is located in common area: M:\dsg-halla_controls folder

2. HMI and CSS-BOY screens development status (Pablo Campero, Mary Ann Antonoli)

- 2.1. Reviewed version two of *Cryo Controlled Reservoir Expert* HMI screen
 - 2.1.1. Will make heat exchanger tubes two colors, based on aperture or closing of associated JT valves
 - 2.1.2. Confirmed that the current lead helium tank needs to be shown
 - 2.1.3. Reviewed colors for cryogenic fluids
 - 2.1.4. Steven Lassiter will review screen further and will provide feedback
- 2.2. *POSP* CSS-BOY screen is completed
- 2.3. Python code to back up and restore values on the *Solenoid Valve Setup* CSS-BOY screen is in progress

3. Hardware and instrumentation status (Marc McMullen, Mindy Leffel)

- 3.1. Two constant current source boards assembled; one tested
 - 3.1.1.1. Board worked as expected; output current kept constant during the test
 - 3.1.1.2. Wrote a note detailing testing procedure
- 3.2. No changes on status of motor controller relay boards

4. Documentation

- 4.1. Steve Lassiter requested mechanical drawings of valve control panels; will be drawn by Pablo Campero
 - 4.1.1. Panels will be used for instrumentation required to control JT valves located in cryo control reservoir and heat exchanger
- 4.2. Drawings of electrical connections in the PLC and instrumentation racks will be completed first

5. Miscellaneous

- 5.1. PHYCAD58 PC has no access to FactoryTalk Activation Manager software, therefore licenses for PLC and HMI software are not available
 - 5.1.1. Pablo Campero debugged issue, but could not resolve it
 - 5.1.1.1. Re-installed FactoryTalk Activation Manager
 - 5.1.1.2. Unable to restart FactoryTalk Activation Helper service on PC because not an administrator
 - 5.1.1.3. Steven Lassiter will make Pablo Campero administrator so that he can continue debugging
 - 5.1.2. Steven Lassiter provided ticket number to contact Allen Bradley to solve issue
- 5.2. Hall A SoLID Magnet Controls and PLC programming meetings will be every two weeks instead of monthly; Pablo Campero will re-schedule already set meetings