Summary

Hall A – HV
Brian Eng
- Debugging CSS-BOY file extension conversion to Phoebus file extension
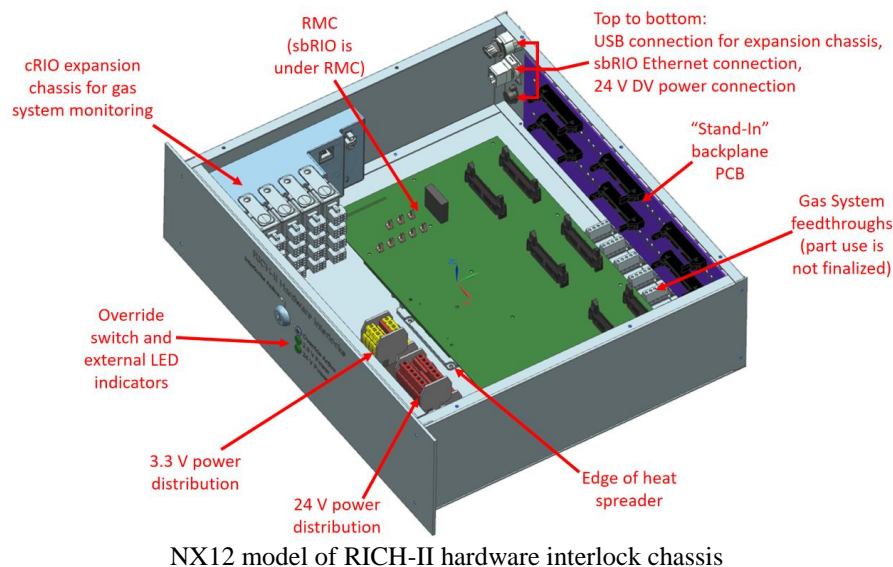
Hall A – SoLID
Mary Ann Antonioli, Pablo Campero, Brian Eng, Mindy Leffel, Marc McMullen
- Developing new electrical drawings
  - ✦ *Axial Load Cells Measurement Wiring Diagram*
  - ✦ *PLC IO, Remote A, Slot 7 Wiring Diagram*
  - ✦ *Axial Load Cell Cable Diagram*
- Calculated breaker ampacity to protect transmitter and actuator for electrical ball valve

Hall B – RICH-II
Mary Ann Antonioli, Peter Bonneau, Pablo Campero, Brian Eng, George Jacobs, Tyler Lemon, Marc McMullen
- Researching individually shielded, twisted pair CAT7 cables
  - ✦ Selected cable's diameter may be large for most crimp-on RJ45 connectors
  - ✦ Looking for thinner cables or larger connectors for selected cables
- Reorganized NX12 model of hardware interlock chassis to provide more room in chassis for RMC
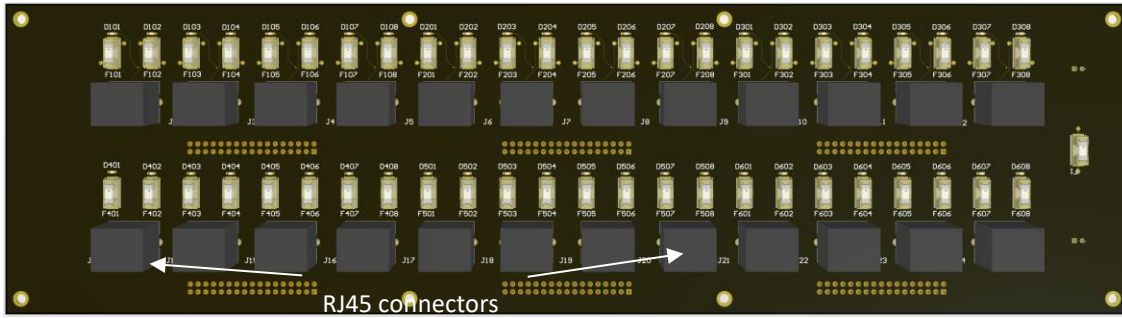

NX12 model of RICH-II hardware interlock chassis

- Redesigned Backplane PCB; modified RJ45 connector layout to two rows of 12 and realigned all parts accordingly

Backplane PCB render (rear view)

- Sent SHT-35 production files for 4 week manufacture and assembly; PR signed by Marco Battaglieri – 08/17/2021
- Finalized design modifications to the RMC PCB

Hall C – NPS

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

- Developing LabVIEW Keysight scanning program; revising program to break up sensor readings by multiplexer
- Developing *Temperature Map* tab for LabVIEW Hardware Interlock Monitoring program

Hall D – Slow Controls

Brian Eng, Tyler Lemon

- ADC module calibration – modules wouldn't accept value output (out of range); external calibrator needs to be recalibrated
  - ✶ Performed self-calibration on all modules as a temporary measure
- Converted new user-level and expert-level BCAL chillers CSS screens to WEDM

User-level BCAL chillers screen in WEDM. "Open Expert Screen" button links to expert-level WEDM screen below.

BCAL Chiller (Upstream) Using Watlow 3.0				BCAL Chiller (Downstream) Using Watlow 2.0			
64.00	Auto Setpoint	64.39	Process Value Filtered	64.01	Auto Setpoint	64.01	Process Value Filtered
26.00	Proportional Gain (Cool)	64.38	Process Value Raw	26.00	Proportional Gain (Cool)	64.03	Process Value Raw
13.00	Integral Gain	64.00	Process Value Setpoint	13.00	Integral Gain	64.00	Process Value Setpoint
2.80	Derivative Gain	0.00	Process Value Cal. Offset	2.80	Derivative Gain	-1.00	Process Value Cal. Offset
0.50	Process Value Filter Time	61.00	Process Value Error Status	0.50	Process Value Filter Time	61.00	Process Value Error Status
-1.00	Process Value Offset	106.91	Enclosure Temperature	-1.00	Process Value Offset	100.54	Enclosure Temperature
0.00	Deadband	0.00	Cool Power	0.00	Deadband	47.33	Cool Power
0.00	Autotune Setpoint (% of SP)	73.93	Heat Power	0.00	Autotune Setpoint (% of SP)	0.00	Heat Power
64.00	Manual Setpoint (0-100%)	26.00	Proportional Gain (Cool)	0.00	Manual Setpoint (0-100%)	26.00	Proportional Gain (Cool)
FALSE	Request Autotune	13.00	Integral Gain	FALSE	Request Autotune	13.00	Integral Gain
Auto	Control Mode	2.80	Derivative Gain	Auto	Control Mode	2.80	Derivative Gain
		0.50	Process Value Filter Time			0.50	Process Value Filter Time
NOTE: Items above are only indicators. WEDM does not allow controls.		0.00	Deadband	NOTE: Items above are only indicators. WEDM does not allow controls.		0.00	Deadband
		Auto	Control Mode			Auto	Control Mode

Expert-level BCAL chillers screen in WEDM

EIC
Brian Eng
- Attended ECCE and ATHENA tracking meetings

DSG – CAEN HV Test Stand
Mindy Leffel
- Pulled remaining 24 SHV cables through grommets; 48 of 48 complete
- Stripped outer jacket of all cables; attached terminal block and cable strain relief

Stripped jackets of SHV cables, terminal block, and cable strain relief for Radiall-to-SHV adapter