DSG-RICH R&D Meeting Minutes

Date: April 2, 2021
Time: 11:00AM – 12:00PM

Attendees: Peter Bonneau, Aaron Brown, Pablo Campero, Brian Eng, George Jacobs, Tyler Lemon, Marc McMullen, and Amrit Yegneswaran

1. **N_2 volume cRIO replaced**
   Brian Eng
   - Reconfigured spare cRIO to match network settings of failed N_2 volume cRIO
   - Replaced failed cRIO with spare and loaded N_2 volume hardware interlock program onto it
   - Verified interlock limits and EPICS monitoring after replacement
   - Awaiting RadCon survey of failed cRIO so it can be taken out of Hall B for further debugging

2. **Completed SHT35 sensor PCB design**
   Peter Bonneau, Brian Eng, Tyler Lemon, and Marc McMullen
   - Design under review
   - Compiling PCB's bill of materials
   - Received parts for prototyping sensor board to determine pull-up resistor values

3. **Started sbRIO Reconfigurable Input/Output (RIO) Mezzanine Card (RMC) design**
   Peter Bonneau, Brian Eng, Tyler Lemon, and Marc McMullen
   - Discussed needed features for RMC to produce a basic schematic
   - Researching an external power supply for the sbRIO's chassis,
     - Power in chassis will be DC and under 24 VDC
       - Lowers class and mode of chassis, allowing work to be done on chassis more safely

4. **Dry cabinet estimated delivery day moved to April 3, 2021**
   Tyler Lemon
   - JLab Shipping & Receiving notified of shipment and will let us know when it arrives and will put crate in EEL 125

5. **Proposed locations for extra hardware interlock sensors allowed by SHT35s**
   Tyler Lemon and Peter Bonneau
   - Add additional coverage in monitoring areas of detector
     - N2 volume, Fig. 1
     - Electronic panel (EP), Fig. 2

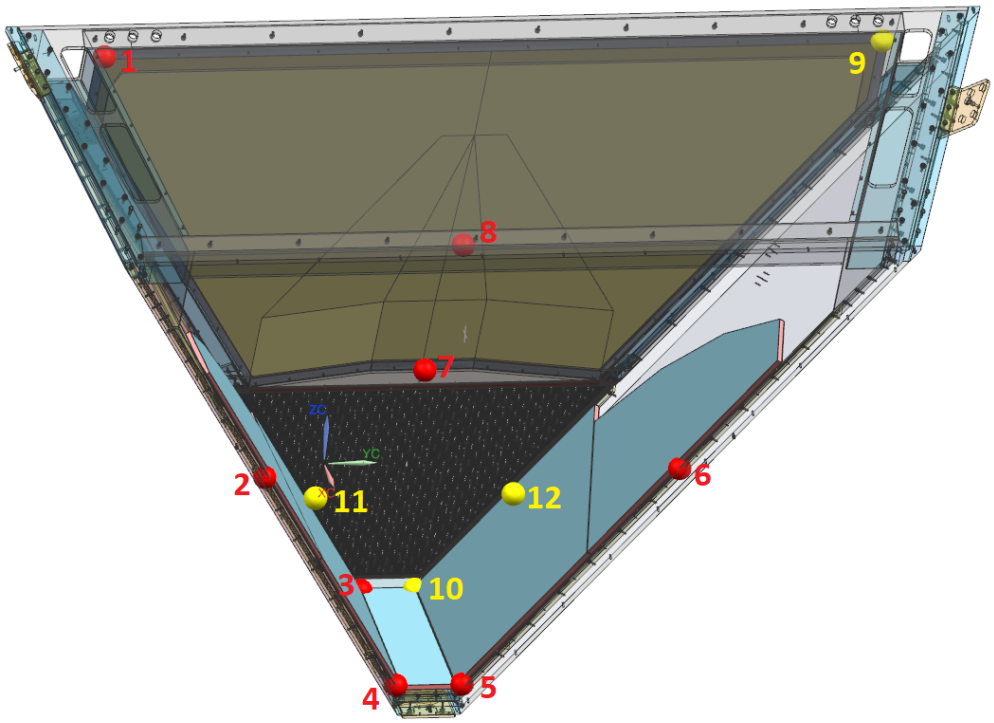

Fig. 1: Existing and proposed new sensor locations for N_2 volume. Existing locations are noted by red spheres numbered 1–8. Proposed locations noted by yellow spheres numbered 9–12.

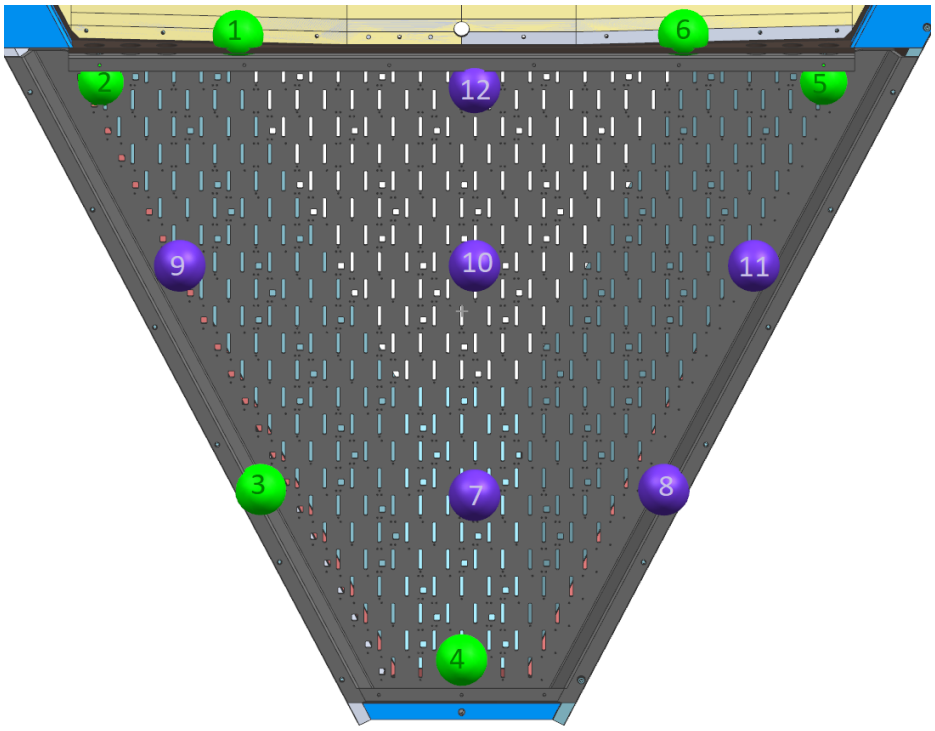

Fig. 2: Existing and proposed new sensor locations for electronic panel. Existing locations are noted by green spheres numbered 1–6. Proposed locations noted by purple spheres numbered 7–12.