

DSG-GEM R&D Meeting Minutes

Date: November 23, 2020

Time: 11:00 – 12:00

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

1. Reviewed changes to the Gas Flow Sensor chassis design
 - 1.1. Tyler Lemon will modify the chassis design so that the silk screen numbers are all 0.25” in height and located below each bulk head gas line connection on the front and back panels, allowing room for a printed label, which will be specific to the connected flow meter valve for the back panel connections and GEM detector connection for the front panel
 - 1.2. After changes have been made, fabrication drawings will be to Par-Metal to fabricate the chassis
 - 1.3. Marc McMullen made a diagram of the labeling scheme for the gas lines and the Gas Flow Sensor Chassis (GFSC)
 - 1.3.1. All distribution panel gas lines (connecting to the back panel of the GFSC) will have a label which identifies which flow meter valve it comes from; on the front panel of the Gas Flow Sensor chassis, the detector supply gas lines will indicate which GEM tracker it is connected to downstream
2. Marc McMullen contacted Cardinal Machine for status of the exhaust Gas Flow Sensor and Multiplexer board enclosures, which were due on 11/13
 - 2.1. Cardinal Machine is having issues with new CNC software, which should be corrected this week; they will e-mail when they send the first two enclosures to Jlab
3. Marc McMullen modified the GEM Gas Flow readback software to indicate that connection to a gas flow sensor has been interrupted
 - 3.1. In addition to changing the channel status from “OK” to “BAD”, the flow value will read -499 sccm; once the connection is re-established, the indicator will change back to “OK” and the flow readback will change to a real flow value
4. Marc McMullen conducted the monthly GEM Gas Distribution meeting and provided an update on the project to Kondo Gnanvo and Evaristo Cisbani
 - 4.1. Details of that meeting have been posted to the DSG website at this [link](#)
 - 4.2. DSG is on track to deliver the prototype gas distribution system by mid-December
 - 4.3. System tests will be conducted in TEDF using a single UVA built “back” GEM tracker; Hall A has scheduled delivery of the GEM tracker to TEDF on December 9
 - 4.4. DSG delivered the regulator and flow meter valve panels to EEL 125
 - 4.5. DSG informed Kondo that all gas panel leak testing and gas supply connection requests be sent to Jack Segal