

Date: October 19, 2020

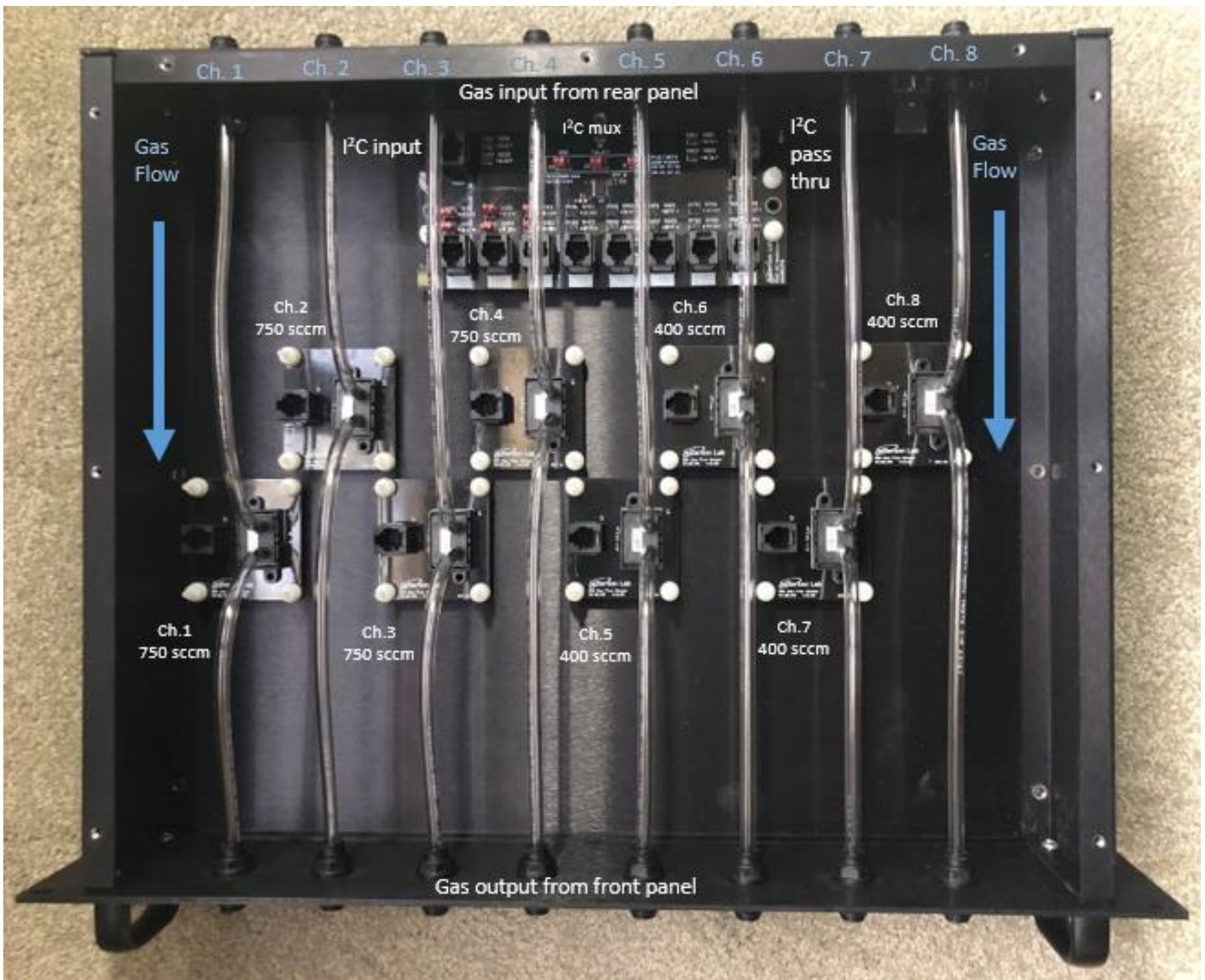
Time: 11:00 – 12:00

Attendees: Mary Ann Antonioli, Peter Bonneau, Aaron Brown, Pablo Campero, Brian Eng, George Jacobs, Marc McMullen, Amrit Yegneswaran

1. All components for the gas flow distribution system are in-house

GEM Prototype Gas Distribution System		
Parts	Needed for prototype	In-hand
Gas Flow Sensor/Multiplexer Chassis		
chassis	1	Y
400-sccm sensor board	4	Y
750-sccm sensor board	4	Y
multiplexer	1	Y
1/4" gas line	10'	Y
push-lock connections	16	Y
panel mount RJ-11 Connectors	2	Y
4-conductor cable	10'	Y
6p4c connectors	20	Y
standoffs	36	Y
Regulator Panel		
2U panel	1	Y
0–15 psi regulator	1	Y
I ² C pressure transducer	2	Y
4-channel manifold	2	Y
orifice	1	Y
relief valve	1	Y
Flow Meter Panel		
2U panel	1	Y
100–1000 sccm rotameters	4	Y
50–500 sccm rotameters	4	Y
Data Acquisition		
Raspberry Pi 4 kit	1	Y
level shifter	1	Y

2. Marc started assembly of the prototype gas flow sensor chassis, shown below



3. Tyler provided fabrication drawings for the exhaust flow sensor board and multiplexer boxes
 - 3.1. Marc has sent the multiplexer fabrication drawings to a local shop for quote
4. Software development is underway
 - 4.1. Marc has written Python code to cycle through mux channel and read back flow from the Honeywell Zephyr
 - 4.2. Brian has written Python code that sequences multiplexer channel switching between multiple multiplexer boards