

## DSG RICH R&D Meeting Minutes

**Date: January 22, 2021**

**Time: 11:00AM – 12:00PM**

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

### 1. Super Dry dry cabinet procurement request submitted; all signatures acquired

1.1. Jami Anthony assigned as buyer; has contacted Super Dry

### 2. New dry cabinet's nitrogen rotameter connection

2.1. Super Dry sales rep mistakenly offered automatic nitrogen flow rotameter (\$2,030), which is unavailable for dry cabinet

2.2. Super Dry offered a rotameter that will flow upon power loss to the dry cabinet (\$900)

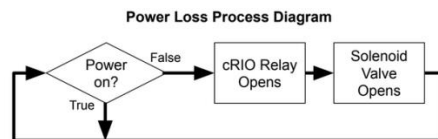
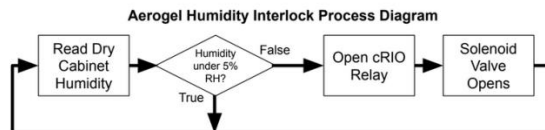
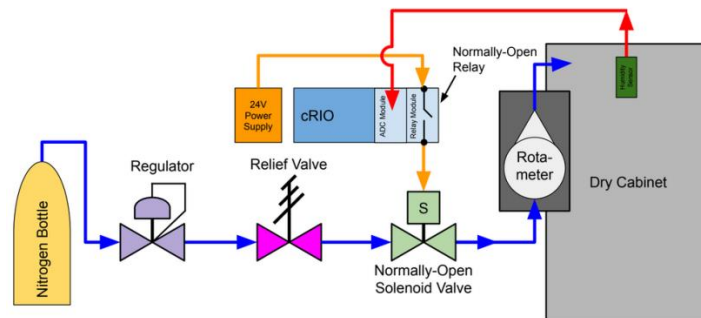
2.3. DSG will design and build fail-safe aerogel nitrogen supply

2.3.1. A normally-open solenoid valve will be used, allowing flow to dry cabinet on power loss

2.3.2. Included will be ability to initiate flow by a cRIO relay if the dry cabinet's humidity increases beyond a set value

2.3.3. George Jacobs and Tyler Lemon will compile parts list and write a proposal for system

2.3.4. System and process diagrams are below



### 3. RICH1 interlock system development

3.1. Reviewed list of items needed to work on SHT-35 sensor development from home

3.2. Tyler Lemon will order all sensors for RICH1's interlocks

3.3. Flat, shielded, twisted-pair, and stranded CAT7 cables will be used for signal cabling, terminated with RJ-45 (or Ethernet) connectors