

## DSG-NPS R&D Meeting Minutes

**Date:** May 25, 2021

**Time:** 11:00AM – 12:00 PM

*Attendees: Mary Ann Antonioli, Aaron Brown, Brian Eng, Pablo Campero, George Jacobs, Mindy Leffel, Tyler Lemon, Marc McMullen, and Amrit Yegneswaran*

### 1. HV supply cable fabrication/testing

*Peter Bonneau, Aaron Brown, Brian Eng, George Jacobs, Mindy Leffel, and Marc McMullen*

1. Mindy Leffel fabricated 30 of 40 HV supply cables
2. Long-term cable testing with load in progress; plots uploaded to [DSG NPS Technical Documentation](#) webpage
  - Channels with the highest and lowest readback current are consistent across cables
  - Once long-term testing is complete, a few cables will be checked using module #184
3. Brian Eng and Marc McMullen will research fabricating a test stand for testing cables independent of the CAEN modules
  - A PCB with a Radiall 52-pin connector will be fabricated
  - A multiplexer chassis may be the best option for testing the SAMTEC connector end of the cables

### 2. Hardware interlock system development

*Mary Ann Antonioli, Peter Bonneau, and Aaron Brown*

1. Discussed procurement of sensors, instrumentation, and cabling
  - Remaining items to order include humidity sensors and various cabling/cable assemblies
  - A status column will be added to procurement spreadsheet
2. Discussed options for 22-awg, 50-conductor (25 twisted pairs) cable to fabricate extension cables for Keysight terminal blocks
  - Located 22-awg cable with 27 twisted pairs; the two extra pair could be used to fabricate cables for humidity sensors
3. Began an instrumentation and cabling fabrication spreadsheet that includes all items to be fabricated (including hardware)