DSG-NPS R&D Meeting Minutes

Date: August 17, 2021 **Time:** 11:00 AM – 12:15 PM

<u>Attendees</u>: Mary Ann Antonioli, Peter Bonneau, Aaron Brown, Pablo Campero, Brian Eng, George Jacobs, Mindy Leffel, Tyler Lemon, Marc McMullen, and Amrit Yegneswaran

- 1. <u>Reviewed minutes from 08/11/2021 DSG-NPS R&D meeting</u> DSG
 - 1. 08/11/2021 DSG-NPS R&D Meeting Minutes
- 2. <u>Reviewed latest iteration of task work schedule for FY2022</u> Peter Bonneau, Aaron Brown
 - 1. *Testing* and *Commissioning* sections will be added

3. Hardware Interlock System Development

Mary Ann Antonioli, Peter Bonneau, Aaron Brown

- 1. Discussed Temperature Map tab for LabVIEW Hardware Interlock Monitoring program
 - Need to add an *x* and *y*-axis with row and column labels
 - Colored blocks will display average temperature of each sensor
- 2. Reviewed modifications to LabVIEW Keysight scanning program
 - An additional multiplexer will be purchased
 - A spreadsheet will be developed showing exactly what sensors are connected to each multiplexer (based on a seven multiplexer configuration instead of six)

4. Thermal analysis and Ansys simulation

Aaron Brown

- 1. Reviewed slides that detailed how the PbWO₄ crystals and the PMTs are arranged in the detector
- 2. A semi-log plot will be generated showing watts vs temperature

5. <u>HV supply cable testing</u>

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

- 1. Testing of cable #40 with Radiall connector on one end and flying leads on the other
 - The DSG list has been approved
 - Banana plugs needed to complete test setup
 - A testing procedure will be written