DSG-NPS R&D Meeting

Date: October 13, 2020
Time: 11:00 – 12:20

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

1. CSS screen development status
    1.1. Discussed two possible numbering schemes of PMT channel assignments, shown below

Scheme 1	00:00	01:00	02:00	.	.	.	29:00
	00:01	01:01	02:01				29:01
	00:02	01:02	02:02				29:02
	.	.	.				.
	.	.	.				.
	.	.	.				.
	00:35	01:35	02:35	.	.	.	29:35

Scheme 2	00:35	01:35	02:35	.	.	.	29:35
	00:02	01:02	02:02				29:02
	00:01	01:01	02:01				29:01
	.	.	.				.
	.	.	.				.
	.	.	.				.
	00:00	01:00	02:00	.	.	.	29:00

mm:nn ⇔ slot#:ch # ⇔ pmt col # : pmt pos # (in column)

    1.1.1. Carlos Munoz-Camacho is currently using scheme 2; DSG scheme 1
    1.1.2. A meeting is scheduled with Brad Sawatzky and Steve Wood to discuss which numbering scheme to use
    1.2. PMT voltage and current limit settings CSS screen will be redesigned
        1.2.1. LEDs will have the same color change behavior as those for the *NPS Overview* screen
        1.2.2. An "OK" button will be added to confirm changes to voltage and current limit settings
    1.3. Aaron will research using CSS macros and scripts to programmatically place widgets

2. CAEN PV discussion
    2.1. Discussed CAEN PV format: *serviceName:slot#:ch#:parameter*

        2.1.1. Service name for both crates will need to be changed (currently *hvcaentest2* and *hvcaentest3*)

        2.1.2. Aaron will provide group with list of all provided PVs for a module's channel

3. CAEN testing and data analysis
   3.1. George will complete all testing data analysis using Excel; ten modules remain to be analyzed for current stability
   3.2. George has completed three current trip tests
       3.2.1. Noticed that ch# 24 for each module had no voltage readback; determined problem was caused by a pushed-in pin on the Radiall connector for the SHV distribution box designed/fabricated by DSG
       3.2.2. George and Marc will coordinate repairing the connector
       3.2.3. No further testing until connector is repaired; first three modules will be retested
   3.3. Continuing to look for solutions for XY Plot time being set to UTC
   3.4. Developing Python analysis package for trip test data analysis
       3.4.1. Adjusting matrix size as 36 plots on one page requires plots to be too small to be useful

4. HV divider cables fabricated—900 of 1100