Update Log 8 Week of Mar 21, 2022 - Mar 27, 2022

• Ryan Aultman (Storage-to-Output):

This week, I was unable to work on my subsystem, as lab was canceled. Along
with this, the biggest event of the year for an org that I was leading happened the
saturday of this week, and I was working on that event each day of the week
leading up to it.

• Thomas Bergeron (Digital Interface):

Lab was canceled due to weather this week but I was still productive. While unable to work with my teammates, I put together the exact plan for the housing using SolidWorks and researching prices at home depot. I emailed Dr. Lusher for approval and possible funding. If he gives his approval, the assembly will include cutting plywood as well as screwing plywood cuts, handles and wheels together.

• Janet Park (Controls/Monitoring):

Oue to lab being canceled due to inclement weather, as well as missing the last two weeks to both being ill and spring break, I was not able to complete integration tests as planned. Hunter and I attempted to test the NMOS switches, but we came across an issue with the component itself. However, once the new NMOS transistors arrive, we should be able to finish integration. Furthermore, Thomas and I plan on meeting later this week to test GPIO communication for emergency deactivation. I am also able to test the SPI communication with a Raspberry Pi at home by running Thomas' code that is uploaded to GitHub. Holistically, our group has started planning for the motor start-up tests by first checking the functionality of the motor in an isolated manner, then proceeding to integrate subsystem by subsystem. This will take place over the next two weeks.

• **Hunter Ruff** (Input-to-Storage):

Since lab was canceled due to weather, I haven't been able to do the tests that I wanted to but I am doing other things that I can at home and will go into the lab again this week. I am testing the NMOS switching drivers with Janet, wiring the ring terminal connectors for the battery, and am testing a more powerful pass transistor on my battery charger. I'll also be wiring up the new plug connector that we have to use in the EDC. Other than these items, my system is integrated and ready to go.