Team: Aerospace Actuation

Date: 1/24/2022

Attendance:
☒ Whole Team Present
☐ Members Missing

Missing Senior Design Students, if any:
Click or tap here to enter text.

Meeting:
☐PDR
☐CDR

EiR Mentor: Matt Heath
EiR Signature: *Matt Heath*

EiR mentor's recommendation for future steps:
(to be filled-in by mentor) – continue writing/typing on the back, if needed

- The Teams schedule is well-developed and the team should make sure they align with it. Keep working through the Requirement development with the additional help resources. Contact me if the team feels the data on completion is not going to be met so I can help.
- Work on advancing the CHIL software to allow variable to be modified by the GUI interface instead of the current hard coding method.
- Keep learning Labview to develop the GUI interface with the CHIL system.
- Labview also has an interface that works with Matlab/Simulink.
- Additionally, if have time for extra feature; look into creating constraints for user input with the GUI to allow for safe operation of the CHIL system/testbed. (Example: Limit the large steps in input if it would cause damage to the equipment)

Tell us what you think about the meeting:

- Team is on track to complete a GUI in Labview to control the CHIL system
- CHIL system has been off for the entire duration of winter break and now there are errors in obtaining the same results that we were getting at the end of fall break that need to be solved before future work can continue
- Need to replace the hard coded values for duty cycle and load torque with variable parameters that can be modified in Labview
- The PXI system will not be coming in time to be used for initial GUI design so the GUI needs to be created to be compatible with the existing cRIO system that is available in the Powerhouse
- We can run MATLAB simulations via Labview so the team will investigate the most efficient way to integrate the provided OPAL Simulink model with the GUI to show the effects of various inputs on the real time model
- The team feels positive that they can accomplish outlined goals by E-Days and have communicated current concerns to the EiR and team lead to ensure that there is an open line of communication in the case of mishaps, confusions, or other potential issues