Nathan Luis Joey Stickle STEM 2° April 1, 2019

Third Pegasus Status Report

Most of the work done from the last progress report was done working to finish the instrument housing panel and installing the oil reserve mount. A lot of work was done on this section, as you can see below. We had to redo many rivets, as there were plenty of difficult places we had to rivet and they did not always go in as we wanted. There was also some work done to match drill two holes that were not drilled before the pieces were attached. This was not an issue that resulted from the work in this class, but rather the work of previous classes. You can see the two holes that needed to be match drilled below. They are on two attachment flanges on the tailcone, and will be instrumental in attaching the tailcone to the fuselage.

We recently received one of the final kits, the finishing kit, a couple weeks ago. We had to organize the delivery and make sure the auto shop was opened up so the delivery truck could pull in and deliver the package. It was a massive crate, about 5 feet by 6 feet by 3 feet and around 300 pounds. It is currently sitting in the auto shop as we wait for the car lifts to be taken out over spring break. Once this is done, the plan is to move the fuselage and tailcone into the auto shop and attach them there. There is a lot more prep work that needs to be done in the auto shop before this can happen. There is a lot of clean up that needs to be done as well as organization of the different cabinets and cataloguing the finishing kit to make sure all the necessary parts were delivered. If there are missing parts, we will have to contact the plane company and let them know about the parts we are missing.

The next steps for us, after spring break, will be mostly centered on attaching the fuselage and tailcone, as well as getting everything moved into the auto shop. We already have a plan of how to move things into the auto shop. Thankfully, the center post comes out of the door, so there won't be any need for taking things apart or flipping anything on its side. The same is true in the auto shop. We will need to proceed with extreme caution because the parts are very delicate and cannot be damaged in any way. Once this is done, however, we will have far more space to work and continue to progress on the project.

The pictures below are as follows.

- 1. Instrument Housing (completed 3/18)
- 2. Oil Reserve Holder (completed 3/29)
- 3. Left Tailcone Flange (completed 4/1)
- 4. Right Tailcone Flange (completed 4/1)
- 5. Instrument Housing (completed 3/18)









