Welcome to FlyUC!

Thank you for your interest in joining our team! We really appreciate and welcome anyone with the interest in aviation technology.

About Us

Our <u>goal</u> is to push the boundaries of transportation and aviation technology with hopes of creating a fully electric powered VTOL aircraft. Through this process, as a team, we hope to expand our knowledge in systems engineering and flight technology.

While we do have these goals, we are a student organization. Our expectations of our members is to try new things and have fun learning! Don't worry if you have little to no knowledge in a certain area, this is your chance to experiment and learn anything you desire!

Prototype Process

To go with guidelines matching the university and our partner mentors, the UC Drone lab, the ideal way to ensure our system gets thorough review and checks is to follow a production process. Each prototype version will go through the <u>production cycle</u>. As an organization we thought it would be best to mimic the guidelines <u>NASA</u> and the military follow when creating a full-end product.

Currently, we have 2 prototypes in parallel that we are working on:

P0: Drone lab sent a recommended kit and we will be building this to gather basic knowledge on each of the components and verify all of the theory/assumptions we made during calculations are correct.

P1: This prototype is what we are designing and making from "scratch". This design process is a lot more free and we can design to our own system requirements.

For the P1 currently we have completed/in progress of:

- SRR (Internal)
- SDR (Internal)
- PDR1 currently preparing for

 Every PDR, all the team leads will be presenting to the drone lab to get approval on our idea so that's why during this stage documentation of our system is imperative

Current PDR documentation

Currently, we have established our hardware system to match the thrust to weight ratio with Propulsion.

Electronics Overview | P1

This is a work in progress document (8/1) but essentially all this information will be on the PDR documentation and presentation so it will be good to familiarize this knowledge.

Team Resources

Contact Team Lead (Keerthi Sekar) if you don't have access to:

- 1. GitHub Organization
- 2. Trello
- 3. Slack

Team Lead Contact:

Keerthi Sekar

- DM via Slack
- Email: sekarku@mail.uc.edu