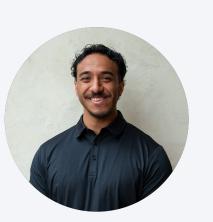
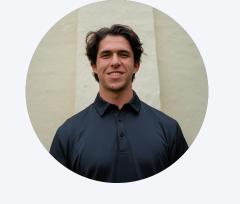


The STORKs









(M.E., Procurement

(E.E.)

Luiz Gonzalez Flavio Signoretti Bautista (CompE., ECE Lead)



Sophia Garcia (CompE.)

Acknowledgments

We would like to thank the following people for their support during our development: Professor Barry Dorr, Dr. Scott Shaffar, Oscar Correa, Mark Bruno and the SDSU Student Success Fee.



Dr. Scott



Oscar Correa





Professor



Mark Bruno

Shaffar **Barry Dorr** BLAST PAD 400 X 230 FIELD ELEV 2801 132.225 MOJAVE TOWER* 127.6 288.35 GND CON COURSE 2 / CENTER

STORK

(Specialized Transport and Observation Remote Kopter)



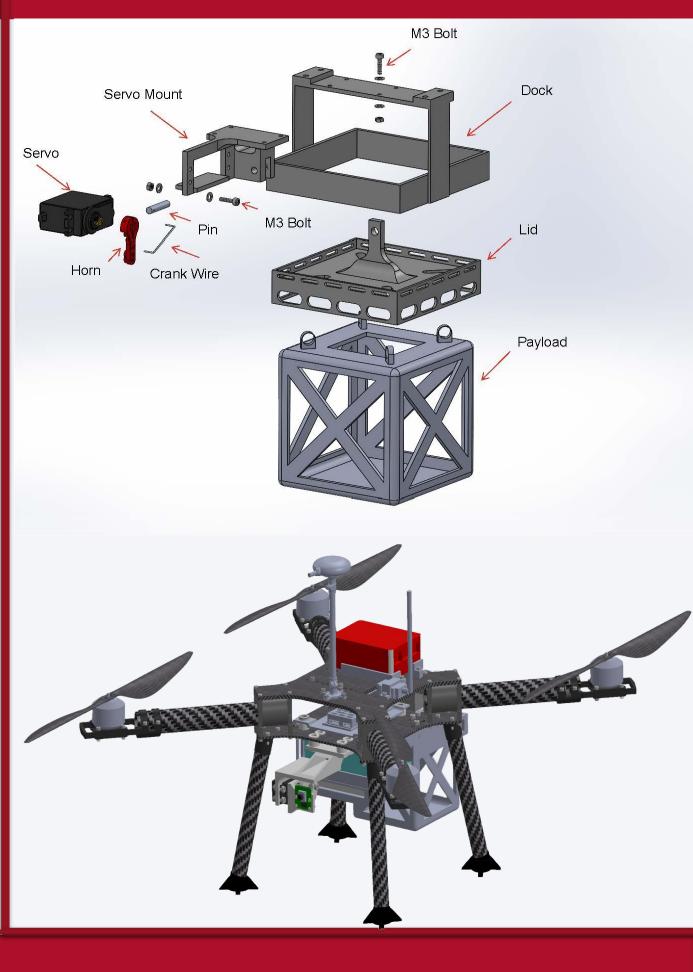
Overview

For the 2025 California Unmanned Aerial Systems Competition (C-UASC), our mission was to develop a small Unmanned Aerial System (sUAS) capable of precise waypoint navigation, target detection, payload drop, and payload delivery. We created a predominantly carbon fiber quadcopter. The system uses software solutions such as real-time flight control, mission planning, and a telemetry radio communication system. The modular payload delivery system can carry 2 types of payloads.

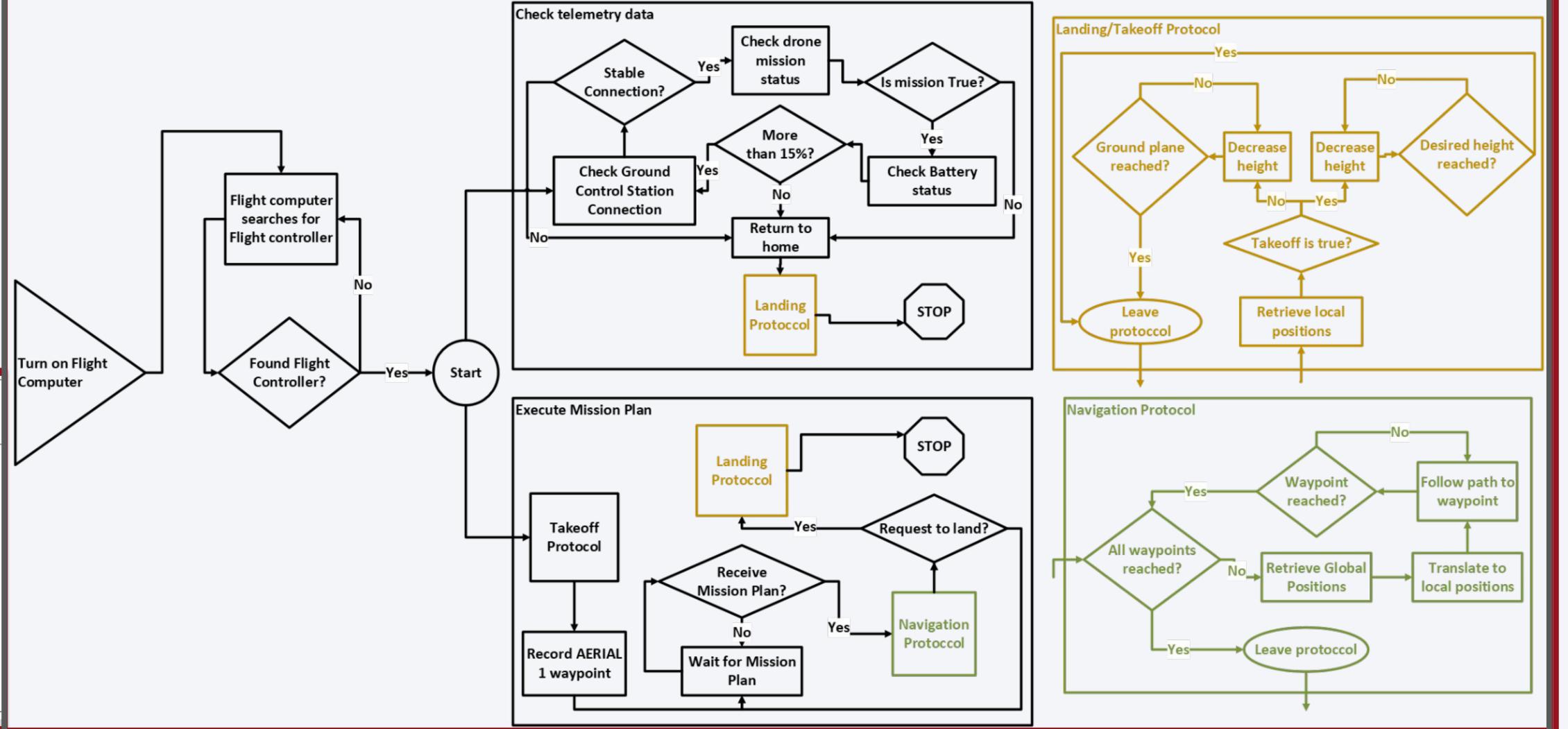
Final Drone Design



CAD Assembly

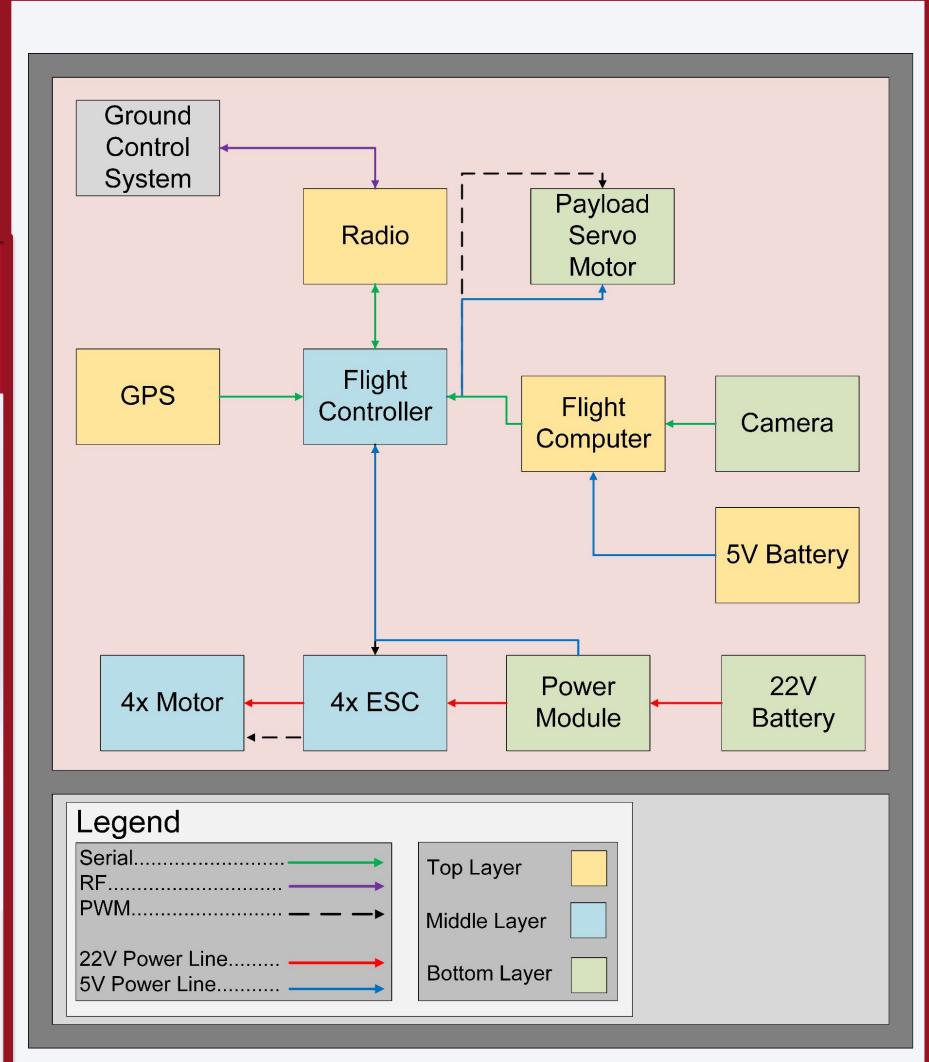


Code/Electrical Flow diagrams

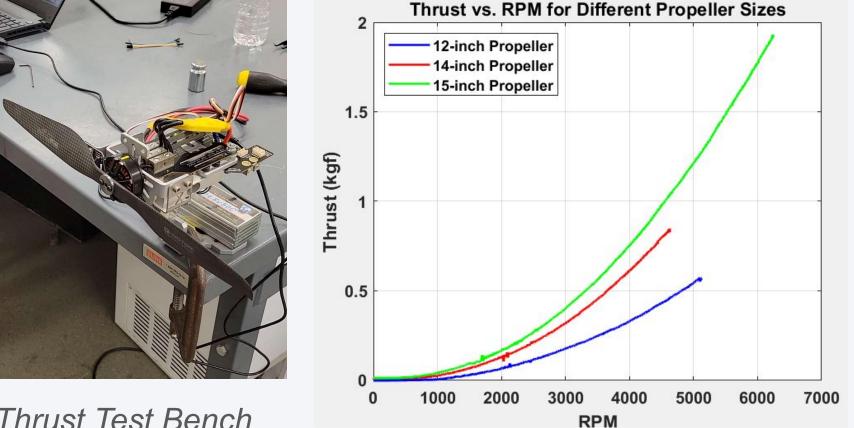




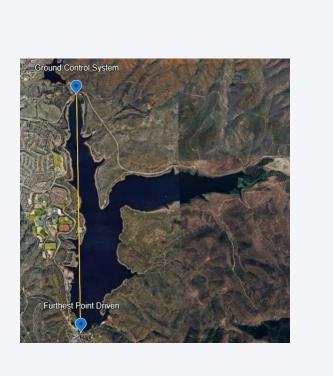
Block Diagram

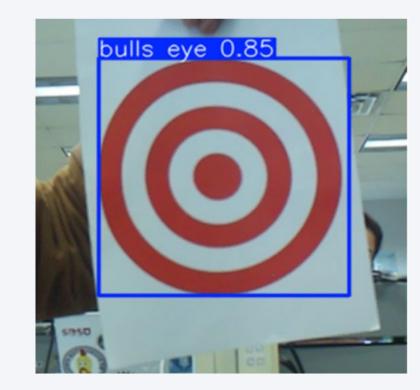


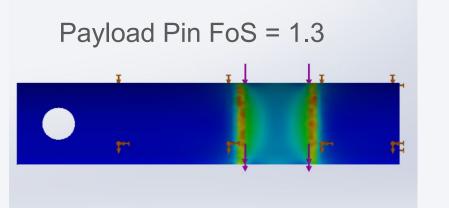
Testing

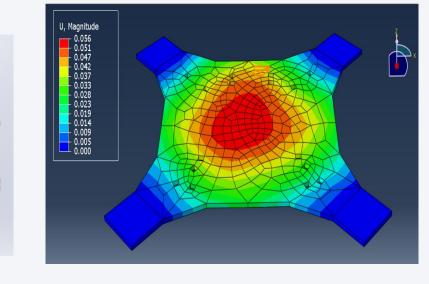


Thrust Test Bench









Spring 2025