

1 Goals for the Past Week

The following is a list of our goals for the past week, as well as descriptions of their completion and/or progress:

- 1. Use sensor and Inertial Sense data to tune the ROSPlane estimator and improve the quality of the airspeed sensor signal (Andrew Torgesen)
 We have obtained data for this, and work is being done to increase the quality of the airspeed data by Friday.
- 3. Tuning the gains in ROSPlane for controlled, autonomous flight (Brady Moon, John Akagi, Jacob Willis, Kameron Eves)

 James Jackson recently informed us that the F4 chip that we're using has a bug in the USB serial port code, and we've noticed this bug ourselves. Until this bug is fixed, we will fly RC and use ROSFlight to collect and monitor sensor and estimator data.
- 4. Getting the imaging software ready for the mock competition (Tyler Miller, Connor Olsen, Derek Knowles, Brandon McBride, Jake Johnson)
 We appear to be on track, in this regard.

2 Goals for the Coming Week

The following is a list of our goals for the coming week, as well as details about how we plan to accomplish them:

- 1. Submit the Fall Semester Capstone Design Report (*Entire Team*)

 Documentation is essentially complete at this stage. The main work that remains is organizing our eighteen-minute presentation and turning in our spiral-bound book.
- 2. Run a mock competition with the new airframe (*Entire Team*)

 Because of the time it took to assemble the plane, current issues with ROSFlight on the F4, and because we didn't get a chance to tune the autopilot, we are going to fly the mock competition without autonomous flight. We will test the performance of the aircraft under RC control (and give our safety pilot more flight hours to log) and test the target classification software.



Please send us any feedback with regards to the progress we've made, as well as our plans for the coming week.