

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. **Submit the Fall Semester Capstone Design Report** (*Entire Team*)
We completed this step, and the report was received very well.
2. **Run a mock competition with the new airframe** (*Entire Team*)
Amid the crash and chaos of the end of last semester, we only made it to flying RC. We will attempt to run the mock competition this week.

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. **Integrate new camera with airframe** (*Tyler M., Jake J., Connor*)
We will build a camera mount for the airframe, and fix a memory leak in the new camera driver.
2. **Increase airframe stability** (*Ryan, Tyler C., Kameron*)
This entails the following:
 - reduce weight
 - adjust the center of gravity
 - adjust control surfaces
 - input actual aircraft parameters into Gazebo
3. **Get the ball rolling with the UGV** (*Jacob W., Derek, Brandon*)
This entails selecting all components, buying the components, and brainstorming to decide on how to best employ the parachute concept in the airframe.
4. **Tune the autopilot and estimator** (*Brady, John, Andrew*)
The autopilot is now in a place where we can test it in hardware, verifying basic autopilot features and tuning gains through a flight test.
5. **Run a mock competition with the new airframe** (*Entire Team*)
We are planning on doing the mock competition this Friday morning. To decrease the chance of our crashing, we are going to be assisted by an experienced fixed-wing RC pilot. This will allow us to test the autopilot functionality with confidence. That

being said, we would prefer to get around 10 hours of flight time before flying with the camera.

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