

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. Tune the autopilot and airspeed estimator (Brady, John, Andrew) The airspeed estimator is working great! We validated it by driving around with the plane out the window, and the readings matched our velocity without significant noise. We made a trip to tune the autopilot today, but had connectivity issues in Springville. Subsequently, a discussion with Thane and Alex led to our deciding to not try to fly in Springville anymore. Instead, we will conduct autopilot testing in the Lehi RC airfield. Tuning will commence tomorrow.
- 2. Parachute deployment testing and iteration (Jacob W., Derek, Brandon) The UGV team performed test drops of their new purchased parachute from ≈ 50 feet, and results appear promising. We want to focus on increasing the consistency of the drop location, which will in part come from streamlining a folding method. Discussion was also conducted with Dr. Beard about methods for dropping an object on a target.
- 3. **Finish the second airframe** (*Ryan, Tyler C., Kameron*) This is still in progress. Successful RC flights with Kameron and the first airframe have continued.
- 4. Complete last year's vision GUI interop communication system and perform network range test with camera (*Tyler M., Jake J., Connor*) A new wifi router has been purchased, and GUI code is in the process of being finished.

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. **Tune the autopilot** (*Brady, John, Andrew*) We are ready to do this in Lehi tomorrow! Thane and Alex will be accompanying us.
- 2. Conduct Parachute testing with systematic folding and a higher location (Jacob W., Derek, Brandon)
- 3. Finish the second airframe (Ryan, Tyler C., Kameron)
- 4. Locate a machine with an Nvidia graphics card for faster training of the target classification neural net



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