Multi-User Drone

Deliverable 3

Goal: Full flight test utilizing the newly developed multi-user drone system.

We did not accomplish the goal of a full flight test.

We have worked out most of the code for multiple drones, and the system seems to run normally with this code in place. We have run tests with a second Pi connected but have not run a test with that Pi connected to a drone and Pixhawk flight controller.

Kyle and Logan:

Worked on fixing the existing system to eliminate issues with the drone maintaining position in flight. This took longer than expected, however the issue no longer persists. We have gained improvements in system performance by implementing the fix which will be most notable when operating multiple drones. Some work was done towards the multi-user aspect of the project although we have not fully accomplished our deliverable 3 goal in this regard.

Austin:

Worked towards improvements in the Unreal Engine UI. Spent some time working on developing keyboard controls, however this project has been dropped in favor of focusing on building assets and functionality in Unreal Engine for multiple drones.

Plans moving forward:

Kyle:

Finish the multi-user aspect of the system. I anticipate that this will take a few weeks but is achievable before deliverable 4.

Logan:

Work with Austin on updating the Matlab portion of the system to facilitate multiple drones.

Austin:

Unreal Engine work to include and improve functionality for multiple drones.