sdmay19-43: UAV Assisted Energy Delivery

Week 12 Report February 10 - February 16

Team Members

Kevin Angeliu — Chief Engineer - Communications Garth Flaming — Facilitator Alexandra Lowry — Report Manager Kaitlyn Maass — Meeting Scribe Brendan Rohlik — Head of Timeline Connor Wehr — Facilitator

Summary of Progress this Report

Discovered that drone SSH issues were not actually fixed (SSH only worked for one session, once drone was turned off and back on, the SSH would time out again), so tried to fix them again. Finished comparing code from previous group with ours, determined what differs and why their code runs on the drone and ours only runs on the DroneKit simulation. Started writing code tests. Finalized carriage cuts. Got Honors student Jeff up to speed with landing code and included him in Git repository. Started finalizing decisions for fabricating landing pad.

Pending Issues

Since drone SSH issue was apparently not fully fixed, that is top priority to fully fix. Landing code with centimeter precision was in C++, but we are working in Python so that code needs to be translated.

Plans for Upcoming Reporting Period

Completely fix SSH issue with drone. Write/edit code to get drone flying from one location to another. Start incorporating flying and landing tests. Start to translate code landing with centimeter precision from C++ to Python and test those translations.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Kevin Angeliu	Wrote fly to location tests, started writing docking tests, finalized carriage cuts.	8	89
Garth Flaming	Meetings, compare code, switch drone name, investigate drone SSH.	7	84
Alexandra Lowry	Group and advisor meetings. Worked on re- fixing drone SSH issue, and determining why the previous "fix" only worked for one session. Compared code to figure out why our code only runs on simulation. Continued looking into drone hover requirements, and	7	82

	translating those requirements into code.		
Kaitlyn Maass	Group meetings. Worked with Connor and Jeff on landing code and getting everyone on Git. Made a plan and started working on translating a C++ landing code to Python so we can have centimeter precision when landing.	7	82
Brendan Rohlik	Helped Finalize Carriage cuts, started looking at magnetic cords to order, started getting the landing pad ready to be finished with (color, final key hole, magnetic mount) drawings.	8	84
Connor Wehr	Group/Adviser meetings. Worked with Kaitlyn and Jeff to begin translating landing code into Python. Transferred all current code to Git repository.	7	82

Gitlab Activity Summary

Nothing to report.