sdmay19-43: UAV Assisted Energy Delivery

Week 14 Report February 24 - March 2

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

Met with Dr. Zambreno for several hours, and determined based on that meeting as well as our own research that completely reimaging the drone is necessary, so began the process of wiping and reimaging from scratch. Determined that C++ to Python blackboxing is feasible, and began making progress on blackboxing the precision landing code. Finalized decision on using QR code on landing pad. Started searching for pre-made QR code reader that can provice X/Y/Z coordinates to use in precision landing. Started research for integration testing plans. Continued progress on fabricating landing pad.

Pending Issues

Still cannot run code on drone, and reimaging takes considerable time. Running into issues with reimaging despite using provided Intel information about reimaging our drone with Ubuntu.

Plans for Upcoming Reporting Period

Finish reimaging drone. Finish QR design. Start testing code on drone.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Kevin Angeliu	Finalized QR code design decision, started tests for precision landing, preliminary research for integration testing plans.	5	105
Garth Flaming	Meetings, reimage drone, reimage drone research, debugging issues	7	105
Alexandra Lowry	Researched how to reimage drone. Began process of completely reimaging, starting from wiping everything and reinstalling Yocto OS, then adding Ubutnu OS onto drone as well. Looked into debugging issues that arose from reimaging. Attended weekly meetings.	7	103

Kaitlyn Maass	Looked into updates from group. Was out of town on business.	2	90
Brendan Rohlik	Worked on looking into QR code if it can take dimensionality, and looked at cords on different websites.	6	101
Connor Wehr	Group/Adviser Meetings, Progress on Black box, Searching for QR code reader for getting X/Y/Z coordinates.	5	98

Gitlab Activity Summary

Nothing to report.