sdmay19-43: UAV Assisted Energy Delivery

Week 7 Report

October 21 - October 27

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

Still waiting on necessary cords to connect to drone physically. Since we do not want to try flashing our own code to the drone without ensuring that we have access to all of the previous group's code, we continued researching other sources of code and compiling tests from DroneKit to use when we can actually connect. Started looking into already complete landing procedures with precision control. Started looking at edge detection and color masking for image processing. Researched 3D printing of battery carriage and looked into placement of battery on drone.

Pending Issues

Still at a standstill with code since we cannot physically connect to drone and get all old code off of drone. Still having some issues with pushing to and pulling from Git.

Plans for Upcoming Reporting Period

If cords come in, will start connecting to drone and begin testing our code, tests from DroneKit, and previous group's code. Finish resolving Git issues. Finish carriage design and hopefully finalize decision on cord selection for energy transfer (not connecting to drone to interface and work with code).

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Kevin Angeliu	Investigated battery placement spots on the drone, research into precision controlled landing, little bit of edge detection and color masking for image processing.	6	46
Garth Flaming	Wrote/acquired code to set altitude as well as to reboot the drone. Also, code for flying in a triangle that starts and ends at the same spot.	6	41
Alexandra Lowry	Reviewed more sources of code, particularly the previous group's launch and image	5	41

	processing code to see what can be used in our project. Also looked into more of DroneKit's examples and tutorials using simulations to better understand what is supposed to happen so that when we connect to drone, we can hopefully debug easier based on knowledge of what should happen.		
Kaitlyn Maass	Looked at more code, waiting for cords to come in. Attended meetings. watched videos about flashing the drone, coding, and calibrating.	5	42
Brendan Rohlik	Almost finished inventor (asking Kevin about screw holes for the design), started researching 3D printing the product, preliminary precision docking research.	5	43
Connor Wehr	Preliminary search for landing procedures code, Ordered and collected needed parts for connecting to drone, and attempting to resolve various issues faced with Git.	5	38

Gitlab Activity Summary

Nothing to report.