EE 491 WEEKLY REPORT 4 **Date: 2/20/17**

Group number: 1705

Project title: Drone Energy Delivery

Client &/Advisor: Geiger/Chen

Team Members &/Role: Dustin Reed: Communication Justin Howe: Key Concept, Jeffery Schons, Chidike Ubani: Webmaster, Eric Himmelblau: Team Lead

○ Weekly Summary

We met with our advisors to discuss how long it would take until we could fly the drone, as well as looked at data sheets and sensor data for the drone to determine what sort of external sensors we can use to mitigate GPS drift for target acquisition.

○ Past week accomplishments

· Dustin Reed: Researched Part 107 licensing process, Started looking into basics of battery charging.

· Avanish Kuntla: Researched GLONASS+GPS combined accuracy, studied 107 drone license study guide

· Justin Howe: Looked into requirements and study material for the process of licensing as a remote pilot.

Chidike Ubani: Attended Meetings. Followed DJI's app tutorial

· Eric Himmelblau: Worked through DJI's app tutorial

Jeffery Schons: read through DJI app Tutorial

· Download SDK and worked on the app tutorial

○ Pending issues

· It will be at least a month at the minimum until we can fly the drone outdoors.

○ Individual contributions

NAME	Individual Contributions	Hours this week	HOURS cumulative
Dustin Reed	Researched part 107 process, attended meetings, researched charging methods, looked at the	5	18.5

	project plan		
Avanish Kuntla	Attended meetings, Researched differences GLONASS/GPS combined accuracy, Worked on tutorial app, Read through 107 drone test study guide	5	20
Eric Himmelblau	Worked through DJI's app tutorial	2.5	15
Jeffery Schons	Looked at project plan, worked through DJi's app tutorial	2.5	15
Justin Howe	Researched requirements for licensing as a remote pilot	3	14
Chidike Ubani	Atteneded Meetings. Followed DJI's app tutorial	3.5	14

- **Comments and extended discussion**

One of us will have to take the pilots course so we can fly the drone outside. That will be a lot of work.Until then, we will have to rely on data sheets to determine the theoretical performance of the drone, and create our external sensor suite accordingly.

- **Plan for coming week**

· Dustin Reed: Start getting in depth information about the on board battery, and look at ways to get charge out of the battery and into the node.
· Avanish Kuntla: Find precise data on drone's gps precision, and how to interface with its camera.
· Justin Howe: Hopefully be able to do basic interfacing with the drone even if unable to fly.
· Eric Himmelblau: Do as much testing with the drone as I can while it's unable to fly
· Jeffery Schons: research more about power transfer, more into tutorial about the DJI app
. Solidify actual requirements needed for our website.

○ **Summary of weekly advisor meeting**

We talked about the drone licensing, as well as GPS information from the data sheet.

Grading criteria

Each weekly report is worth 10 points. Scores will be awarded as follows:

· **8 – 10**: Progress for your project seems to be suitable. Documentation and hours reported by team members are adequate.
· **6 – 8**: There is scope of improvement both in your report and your project progress. Can consult with instructor/TA after class for further inputs.
· **< 6**: Please talk to instructors/TA after class hours about any difficulties that you/your team is facing.