

Group: May 1738

Project: Flying flashlight

Advisor: Professor Gary Tuttle

Members: Peter Bonnie, Brady Koht, Sebastian Roe, Joseph Wickner, and Scott Melvin

○ **Weekly Summary**

Since all of the essential components of the copter had been selected our group decided to send off a parts list for approval by Professor Tuttle. It is expected that Lee will order the parts this week and the shipping time could be a couple days or possibly a week. Since our group still has no hardware yet, our goal has been to design a layout for the frame design. This includes mounting for the motors, ESCs, LEDs, and flight controller. However, the main issue we are trying to solve is cutting out the entire acrylic in one use of the laser cutter (located in the design building). Thus, we decided to wait to get all the parts in before we begin an official design for the frame.

Additionally, the methods for communication with the flight controller were investigated further. There have been many resources online that indicate Arduinos are the best way to communicate with the Multiwii for a DIY/customizable quadcopter. So, we plan to use a group members Arduino Uno to interpret incoming data for the flight controller.

○ **Past week accomplishments**

- Everyone: Discussed the issues of cutting out the frame design before receiving the copter parts. Additionally, it was found that using an Arduino will be our best option for communicating with the MultiWii flight controller. Sent off a parts list to Tuttle who approved thus Lee will be placing an order by the week of the 10th.

○ **Pending issues**

There are not any pressing issues with the project at the moment. Again, the frame design is delayed slightly but that will be OK assuming the laser cutting goes smoothly. Our biggest concern at the moment will be effective communication with the flight controller once we receive the part.

- **Individual contributions**

<u>NAME</u>	<u>Individual Contributions</u>	<u>Hours this week</u>	<u>HOURS cumulative</u>
Peter	Further researched and selected flight controller	1	11
Brady	Further research and selected flight controller	1	11
Scott	Further discussed frame design and possible LED choices	1	10
Sebastian	Helped select flight controller and LED choices	1	10
Joe	Also helped with frame design and LED choices	1	10

- **Comments and extended discussion**

In addition to the quadcopter parts being ordered, our group plans to order a set of LEDs that we believe are appropriate for our application. Although the parts will not be implemented for a while we think that testing them sooner will prove beneficial.

- **Plan for coming week**

Everyone: Create a project plan that accurately reflects the desired application of the “Flying Flashlight” project. Completing the project plan is our main goal for the week since our parts are being ordered and this we must wait.

- **Summary of weekly advisor meeting**

NA.