

Group: May 1738

Project: Flying flashlight

Advisor: Professor Gary Tuttle

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

○ **Weekly Summary (Short summary about what you did this week)**

Since our choice of a flight controller was made, the remaining, essential components of the quadcopter needed to be selected. Thus, this week our group carefully chose an electronic speed controller, propellers, and a set of motors. The goal was to pick parts that were compatible, reliable, and robust enough to handle the set of conditions we plan to use them in. Additionally, we started to look further into the LED's that will be mounted onto the copter and the exact material for making the frame.

○ **Past week accomplishments (please describe as what was done, by whom, when)**

- Peter/Brady/Sebastian: Helped research and select ESC's, propellers, and motors
- Joe/Scott: Selected frame material and researched LEDs that we plan to use on the copter.

○ **Pending issues (if applicable)**

Nothing critical at the moment. However, the frame should be cut out soon so that we can customize mounting holes for the motors and flight controllers.

○ **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 | 2 | 10 |
| Brady | Further research and selected flight controller | 2 | 10 |
| Scott | Further discussed frame design and possible LED choices | 2 | 9 |
| Sebastian | Helped select flight controller and LED choices | 2 | 9 |
| Joe | Also helped with frame design and LED choices | 2 | 9 |

- **Comments and extended discussion**

The first set of parts has been sent to Professor Tuttle for approval. Once he approves then Lee can order them.

- **Plan for coming week (please describe as what, who, when)**

- Scott/Joe/Sebastian: Start to design a frame in AutoCAD and possibly have a cut out by next week
- Peter/Brady: Look into wired communication with the flight controller using microcontrollers such as an Arduino.

- **Summary of weekly advisor meeting (if applicable/optional)**

NA