# May14-10 Weekly Report

MicroCART 2013-2014

Week 6: October 7-13, 2013

Advisors: Nicola Elia & Phillip Jones

Name	Weekly Hours	Running Hourly Total
Kevin Engel	5	33
Nathan Ferris	5	35
William Franey	6	36
Michael Johnson	6	36
Kelsey Moore	6	37
Lucas Mulkey	6	31
Aaron Peterson	6	34

## Weekly objectives

#### Completed Objectives:

- -- Project Plan completed
- -- Tested James code on quad-copter
  - -Seemed to start up the quad at max throttle
  - -Tested manual commands for the controls and it didn't slow down or change direction
- --Started looking at controls for Kalman filter testing

#### **Next Week Goals:**

- -- need to talk to Luke to setup test for camera system and kalman filter (Nate)
- -- BT Communication (Luke)
- --Get James' Code to start piloting the quad

### <u>Issues/Concerns</u>

- -- question, are we able to gain administrative permission to download "eagle" software for iowa state computers? my laptop continues to break, just wanted to know, it would be convenient.
- -- Need some guidance on basic BT communication, will address tonight (Luke)

## **Individual Accomplishments**

#### Kevin Engel:

- Tested Ground 2 with menu interface
- Developed Project Plan

### Nathan Ferris:

- Looked at C code for PID controller, looked at Matlab code for Kalman. Helped write project plan. Looked into arducopter setup, need to assign RX and TX.
- Cleaned up desktop

### William Franey:

- Read PWM, PPM document
- Looked at C code for Kalman filter and PID controller
- Made good understanding of Matlab Kalman Filter code

#### Michael Johnson:

- Tested Ground 2, still need to meet with James again after he cancelled this week
- Helped with the project plan
- Created a new branch on SVN with refactored base station code in a QT project, started using that code in last year's GUI.

#### Kelsey Moore:

- Tested ground2 with Micheal and Kevin
- Worked on Project Plan v1
- Helped with Bluetooth communication understanding

#### Lucas Mulkey:

- Project Plan
- (Finally) Was able to create a new project in eclipse
- Read through phjones/DEBUG\_BT code

#### Aaron Peterson:

- Attached receiver onto arducopter with Nate and attempted to connect to controller; need to get manual that came with copter.
- Went over main concept of PID controllers