

# May14-10 Weekly Report

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MicroCART 2013-2014

Week 4: September 23 - 29, 2013

Advisors: Nicola Elia & Phillip Jones

Name	Weekly Hours	Running Hourly Total
Kevin Engel	5	27
Nathan Ferris	5	26
William Franey	4	23
Michael Johnson	4	24
Kelsey Moore	6	27
Lucas Mulkey	4	22
Aaron Peterson	7	24

## Weekly objectives

Completed Objectives:

- Set up new base station computer
  - Helped install QT
  - Checked out SVN
  - Reworked IP configuration for the camera system
- Research QT tools and Quartis tutorials
- Reviewed documents to fine tune Project Charter
- Further understanding of Kalman filter and PIDs
- Made old GUI work with the new base station computer

Next Week Goals:

- Meet with James: teach us details of base station code
- Meet with Alex: status update regarding variable PWM code, help us get last year's system operational
- Continue Practice using software tools: Quartis, IR camera

## Individual Accomplishments

Kevin Engel:

- Continued wiki and code reading.
- Worked on understanding hardware, interfaces/standards

Nathan Ferris:

- Fixed mini quad with Aaron, screw nearest to the battery input was screwed in too tight, “pinching” the traces in the board and shorting them, its fixed now so watch out for that team in case you end up taking screws out.
- Downloaded previous matlab code, ran it to get the gyroscopic data output, I will take a deeper look at it once my two exams this week are over.
- Read Kalman filter book up to chapter 12.
- Worked with kevin to complete list of detailed standards

William Franey:

- Read Kalman filter book through most of Ch. 14. I still need to implement a few of the Matlab examples.
- Helped in the mini-quad debugging with Nate and Aaron.

Michael Johnson:

- Continued going through the code for the gui
- Helped old gui system to compile on the new system

Kelsey Moore:

- Started looking through C code for the gui and flight controls
- Setup IP configuration for Camera system
- Reworked the GUI to compile and work on new base station computer
- Started Quartus Tutorial
- Read through QT and VRPN install given

Lucas Mulkey:

- Worked through Quartus tutorial

Aaron Peterson:

- Installed Eagle and began tutorials
- Fixed mini quad
- Looked at ArduCopter to try to get ready for flight

## Issues/Concerns

We haven't heard from Alex at all lately, and it could continue to be an issue if we need to receive the information about flying last years quad from him.

Having trouble with Eclipse on the quartus machine, doesn't want to point to the correct directories. Will try a fresh checkout this week.

The battery for the mini quad went bad. A new set of batteries was ordered by Dr. Jones.

Aaron and I noticed that when Mani sent out scores from last weeks report, we received a 7/10 with a "LATE" deduction, I was certain we turned it in on time. The comments are a little hard to follow, and our point total adds up to 8/10.