

May14-10 Weekly Report

MicroCART 2013-2014

Week 17: Feb 10 - Feb 16, 2013

Advisors: Nicola Elia & Phillip Jones

Name	Weekly Hours	Running Hourly Total
Kevin Engel	4	123
Nathan Ferris	4	82
William Franey	4	106
Michael Johnson	5	120
Kelsey Moore	5	116
Lucas Mulkey	6	124
Aaron Peterson	7	98

Weekly objectives

Completed Objectives:

-Finally able to settle on a reliable BT system (baud rate, bytes per packet etc.) Things are looking good.

Next Week Goals:

-Compare PWMs (servo vs old system) I have done some analysis on PWMs coming out of the FPGA servos, need to run the old system and compare values, assuming this is nominal we can attach the board to the quad and begin flight testing/transitioning out of the camera system.

Exciting times. Luke

-Figure out how to configure and hook up using GPS module - Kevin

Issues/Concerns

- Biggest issue at this point is time. We need to be efficient in our work sessions and get things DONE
- Should I continue and finish the Kalman filter transition for the filter we currently have or wait for a new one? -Kelsey

Tasks

PWM Integration (Luke, Kelsey, Nate)

-

CLI(Kevin, Nate, Kelsey, Mike)

Sensor Data -> CLI (Kelsey, Mike, Luke)

-

Kalman Filter(Bill, Nate, Mike)

-

CLI -> qtGUI (Mike, Kelsey)

-

Research(Aaron, Kelsey)

-

Individual Accomplishments

Kevin Engel:

- Final BT debugging

Nathan Ferris:

-

William Franey:

- continued working on CAD design
- solved issue I was having with saving and modifying Matlab files.

Michael Johnson:

- BT debugging

Kelsey Moore:

- Tried to work on PID controller from home because of illness and being out of the state for most of the week
- Worked on testing code for PID controller
- Tried to look into motor translation

Lucas Mulkey:

- Resolved the BT issues with mike and kevin. System seems stable
- Analyzed PWMs from the servos on FPGA

Aaron Peterson:

- Debugged with Kevin and Mike
- Began PID module in Matlab