May14-10 Weekly Report

MicroCART 2013-2014
Week 11: November 4-November 10, 2013
Advisors: Nicola Elia & Phillip Jones

Name	Weekly Hours	Running Hourly Total
Kevin Engel	7	59
Nathan Ferris	4	54
William Franey	3	54
Michael Johnson	8	65
Kelsey Moore	6	72
Lucas Mulkey		48
Aaron Peterson	4	56

Weekly objectives

Completed Objectives:

- Made C++ code for getting camera data
- Made C code for handling multiple PIDs
- Got the IMU data to send
- Started putting in timestamps

Next Week Goals:

- Looking to calibrate quad with C code and the turn-table
- Finish timestamps and print out the data

Issues/Concerns

- Artificial data generation code appears to be performing incorrectly despite verifying the code/method with Matt. I think the problem is with unit conversion with respect to the matlab Kalman filter code from 2 years ago.

Individual Accomplishments

Kevin Engel:

- Made getCameraData.cpp program to read camera data, with Mike
- Made PID.c program to handle 6 PIDs at once, with Mike
- Worked on Design Document
- Began looking into wiki markup language for editing wiki pages

Nathan Ferris:

- Attempted data collection, needed time stamps for data
- took a look at the C code for PID, seems just as basic as our matlab code

William Franey:

- Worked on debugging artificial data generation code with Matt
- Examined C PID code and compared to my own Matlab code.

Michael Johnson:

- Created a simple test program to read camera data
- Created a PID program in C to be generic for all PID controllers
- Worked on Design Document

Kelsey Moore:

- Started looking into Ardupilot code
- Tried to get IMU data and I must be doing something incorrectly because I can't get it to work

Lucas Mulkey:

Aaron Peterson:

- Research ardupilot open source code for stabilization
- Design Document