May14-10 Weekly Report

MicroCART 2013-2014
Week 15: January 13-17, 2013
Advisors: Nicola Elia & Phillip Jones

Name	Weekly Hours	Running Hourly Total
Kevin Engel	6	90
Nathan Ferris	2	74
William Franey	0	83
Michael Johnson	8	92
Kelsey Moore	5	98
Lucas Mulkey	2	100
Aaron Peterson	5	75

Weekly objectives
Completed Objectives:

Next Week Goals:
- Mount board on quad
- Define parameters of communication between basestation and quad
- Use CLI to send signals to the quad

Issues/Concerns
- Unknown origin of accumulating delay in IMU/Camera.

Tasks
PWM Integration (Luke, Kelsey, Nate)
- Initial Stages: Reading through material (Alexs email, modules), planning, predicting

setbacks
CLI(Kevin, Nate, Kelsey, Mike)
- Established skeleton of CLI
- Discussed necessary commands, modes, data transfer format

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

Kalman Filter(Bill, Nate, Mike)
-

CLI -> qtGUI (Mike, Kelsey)
-

Research(Aaron, Kelsey)
-

Individual Accomplishments

Kevin Engel:
- Worked on reformatting C++ version of CLI with Mike
- Researching how to implement and apply PID controller to quad
  - in order to better understand data needed from commands

Nathan Ferris:
- Met Saturday with available team members Kevin, Mike and Aaron. Agreed upon using SVN and for myself to proceed with remotely working on CLI for now with Kevin and Mike.

William Franey:
- Had no internet at the apartment until tonight (21st), will also be updating SVN and working on Kalman Filter

Michael Johnson:
- Meeting saturday to get up to speed after the winter break. Discussed design of the user interface CLI, and how to format the data being sent to the quad.
- Expanded the CLI greatly, and now resembles a "rough draft," can send formatted data over bluetooth.

Kelsey Moore:
- Near completion of new web design
- Focused more on the way the PID controller works
- Discussed interface CLI

Lucas Mulkey:
-

Aaron Peterson:
- Arducopter's PID code located and understood
- Going to begin our PID structure