EE CprE SE 492 - MAY15-28
MicroCART Senior Design Team

Meeting Minutes - Week 3

January 26, 2015

Attendance:

Team Members:
Paul Gerver
Joe Benedict
Adam Campbell
Jacob Rigdon
Matt Vitale
Matt Post
Ravi Nagaraju
Tyler Kurtz

Advisors:
Dr. Phillip Jones
Paul Uhing

Agenda Items and Discussion

1) Bluetooth

   - Reliable connection (~1 Mb / 57 sec)
   - Surprisingly slow – looking into what would be causing this
   - Looking for dropped packets, performing latency tests
   - Dr. Jones brought up Low-Energy Bluetooth, low priority, but has potential for the future

2) Sensor Board

   - Receiving much more reliable data from gyro
   - Matlab graphs are performing well – in development
   - The implementation of a ping sensor was discussed - No plan of action at this time

3) Matt is continuing to review the demo GUI code and update the comments as needed

4) Matt is continuing to develop the shell script to use, ./QuadCommand

- Allows for easy PID testing by connecting to Bluetooth and setting up TTY screen
- Combines various pieces others have made such as Tyler's logging and graphing

5) Ravi is continuing to review Tyler's and Rohit's code to detect duplication and eventual/possible integration of both

- Need to determine what data is getting captured from each program
- Need to determine what file type and naming convention is used for each

6) Receiver is not getting minimal voltage per spec sheet

- 3.6 – 9.6 V range (Zybo delivering 3.42 V)
- Need to check the PWM signal sent to ECSs after increasing voltage

7) No reported issues with connections between the quadcopter components since the new connectors were installed

8) Dr. Jones requested better "plan of action" details for each upcoming week

- One will be sent out on each Tuesday after each team member reports to Jacob following the weekly client meeting