Senior Design Team may23-45: MicroCART Team

Week 10 Status Report (10/21-10/27)

Members:
- Cole Hunt
- Connor Ryan
- Emily Anderson
- Gautham Ajith
- Grant Giansanti
- Tyler Johnson
- Austin Beinder

Weekly Progress Summary

- Started on PCB design ([high-level diagram](#))
- Basic operation testing on Pi Zero W
- Working through MP-4
- Design document: project plan

Pending Issues

- Can't get Unbuntu on the raspberry pi
  - Tyler and Cole will trouble shoot this.
  - We are going to try on the other pi just to make sure its not the pi issue
  - We will also try and use a 8gb sd card to see if the size is the problem.
- Raspberry Pi Zero only has two hardware PWM channels
- IMU situation: breakout boards have different pinouts.
  - Jumper connections?
  - Make our own breakout boards?
  - Only design for one IMU?

Individual Contributions

Team Member	Contributions	Hours	Total Hours
Austin Beinder	● Flight training: 5 battery cycles ● Beginning simulation rework, converting simulink to matlab ● Got partway through part 1 Mp4	7	31
Cole Hunt	● Flight training: 4 battery cycles ● Troubleshooting corrupted Pi image ● C code running on Pi	5	20
Connor Ryan	● Flight training: Completed ● PCB Design, need input of requirements ● MP-4, comm issues	7	26
Emily Anderson	● Flight training: 1 battery cycles ● Started MP-4, had to reinstall virtual box		9
Gautham Ajith	● Flight training: 4 battery cycles ● Setting up documentation process for GUI issues		18
Grant Giansanti	● Flight training: 2 battery cycles ● Working on pi ● Investigating HW vs SW PWM		17
Tyler Johnson	● Flight training: Completed ● Sick in the beginning of the week so wasn't able to commint as much time ● I worked and got the OS booted on the pi ○ Still can't get the ubuntu working ● Helped with PCB design	4	23

Comments:

● Additional work sessions on Sunday afternoons and Wednesday nights

Next Week Plans

● Finish PCB Design
● Test performance of software PWN pins