

## Weekly Report

May15-27

S2 Week 12 (4/6/15 – 4/12/15)

Advisors: Dr. Jones, Dr. Elia

Team Members:

Alberto Di Martino \* Team Co-Web \*  
Dylan Gransee \* Webmaster \*  
Robert Larsen \* Team Leader \*  
Ian McInerney \* Team Key Concept Holder \*  
Aaron Pederson \* Team Communications \*  
Rohit Zambre \* Team Secretary \*  
Fengxing Zhu \* Team Comm. Co-leader \*

## Weekly Summary

This week we've worked on adding some anti-windup to the I component of the system, after fixing an ESC. We've also begun assembling a new body for the robot, but a minor modification needs to be made to the cables. Work on adding markers to the logging system has progressed as well.

## Pending Issues:

## Individual Contributions:

Aaron:

- Began assembling new robot body

Alberto:

- Began assembling new robot body

Dylan:

- Merged the changes I have been making with the updated codebase
- Updated the website to have up to date documentation
- Helped Ian and Robert with testing

Fengxing:

- Worked on adding "Marker" to the data logger with Rohit
- Modified the plots by adding "Marker" into the data analysis plotting functions with Rohit.

Ian:

- Found spare ESCs for purchase
- Fixed ESC error
- Implemented Integrator Anti-windup in the code

- Doesn't really help at low angular offsets (causes massive overshoot on recovery)
- Works better at large angular offsets
- Requested samples for the extender cables for Eris motors
- Received ESC for gimbal motor

Robert:

- Examined VHDL
  - Didn't have much time, need to look further
  - Plan on doing some testing Thursday if I get a chance
- Helped test anti-windup

Rohit:

- Worked on adding the "Marker" feature to the data logger (with Feng)
- Added the "Marker" plotting stuff onto the data analysis plotting functions (with Feng)
- First attempt at understanding the VHDL files
- Add a little more to the documentation

## Next week goals:

Aaron:

- 

Alberto:

- 

Dylan:

- Code documentation and updating
- Create a demo "AI" to move the pendulum in a square formation
- Add bounds checking for things like the setpoint (so it cannot be set lower than we can handle)

Fengxing:

- Doing documentations.

Ian:

- Modify ESC for Gimbal motor
- Document anti-windup system and its limitations

Robert:

- Continue study into VHDL
- Document

Rohit

- Add more to the documentation

- More attempts to understand the VHDL file

### Work Hour Totals:

Team Member	Weekly Hours	Running Total
Aaron	3.00	187.80
Alberto	3.50	166.50
Dylan	17.00	227.00
Fengxing	6.00	159.50
Ian	8.50	193.50
Robert	12.00	189.00
Rohit	7.50	161.50