First Semester Progress Report Programmable Flight Controller

Brendon Camm Lucas Doucette Dylan Humber

November 28, 2016



Contents

1	List of Acronyms	3
2	Objectives and Deliverables	3
	2.1 Overall Objective	3
	2.2 Short Term Objectives (October 2016 - December 2016)	3
3	Background and Significance	4
4	Proposed Approach and Validation	4
5	Preliminary Report	4
6	Work Plan and Milestones	4
7	Distribution of Tasks	4
8	Budget	4

1 List of Acronyms

2 Objectives and Deliverables

2.1 Overall Objective

The main objective of the project is to develop a programmable flight controller that responds appropriately to control inputs and disturbances. The flight controller will recieve control inputs over WI-FI from a base station. The base station can be any device that is capable of WIFI

2.2 Short Term Objectives (October 2016 - December 2016)

1) Simulation

The simulations will allow us to gain an understanding of how the controller will respond to specific inputs. The simulation can then be tuned until the output is within the constraints set by Dr. Rhinelander. We will be simulating both the flight dynamics and controller using MATLAB and Simulink exclusively.

- 3 Background and Significance
- 4 Proposed Approach and Validation
- 5 Preliminary Report
- 6 Work Plan and Milestones
- 7 Distribution of Tasks
- 8 Budget