

# AME 3623: Project 8 Group Grading Rubric

April 16, 2020

Group number:

Team member names:

Team member(s) claiming software component:

## **Implementation: 35 points**

### **camera\_step() (from project 7): 10 points**

- (10) Fully meets the given specification.
- (5) Fails to meet one aspect of the specification.
- (0) Does not meet the given specification.

### **control\_step(): 15 points**

- (15) Fully meets the given specification, including: controlling heading and lateral position, and displaying rotation rate and heading error.
- (10) Fails to meet one aspect of the specification.
- (5) Fails to meet two aspects of the specification.
- (0) Does not meet the given specification.

### **fsm\_step(): 10 points**

- (10) Fully meets the given specification.
- (5) Only produces a portion of the required sequence.
- (0) Does not meet the given specification.

## **Demonstration: 30 points**

### **Orientation error and rotation rate display: 15 points**

- (15) The orientation error and rotation rate are properly reflected by the LEDs.
- (10) There is one problem with the display.
- (5) There are two problems with the display.
- (0) There are more than two problems with the display.

### **Lateral PD controller: 15 points**

- (15) The lateral controller pushes the craft toward the lateral goal and is well-tuned.
- (10) There is a small problem with the lateral controller (e.g., it works but it is not well tuned).
- (5) The lateral controller is recognizable, but there are serious problems (e.g., selected parameters are poorly tuned).
- (0) The lateral controller does not work.

**Documentation: 35 points**

**Project documentation: 5 points**

- (5) All required project-level information is given at the top of the C and H file(s), including: project number, date, group number, group members, and the group member responsible for the code.
- (3) One required piece of information is missing.
- (0) Two or more required pieces of information are missing.

**Function header documentation: 15 points**

- (15) All functions are documented with a high-level description, a description of each of the parameters, and a description of the return value (where appropriate).
- (10) One function is not documented properly.
- (5) Multiple functions are not documented properly.
- (0) Function header documentation is not given.

**In-line documentation: 15 points**

- (15) All functions include appropriate in-line documentation. (“appropriate” means that you capture the logic of a line of code or group of lines)
- (10) One function is missing in-line documentation.
- (5) Multiple functions are missing in-line documentation.
- (0) No in-line documentation is given.