

## AME40453 – Score Sheet

C7 – BiCopter

Name(s): \_\_\_\_\_

For more details on any of the items below, please refer to the lab handout.

**The following items will be demonstrated to the lab instructor during the allotted lab time. Credit will not be given for portions completed outside of lab.**

Item and Description	Points Awarded	Possible Points
<b>Subsystem A: Inertial Measurement Unit</b> The time, angle, and angular speed are correctly printed in the serial monitor.		5
<b>Subsystem B: ESC BLDC Motor Control</b> Both motors are spinning and producing thrust in the correct direction.		5
<b>Subsystem C: Cable Management</b> All wiring and electronic components are securely mounted to the airframe.		3
<b>Design Challenge 1 – Proportional Feedback</b> The BiCopter oscillates under the impetus of proportional feedback.		5
<b>Design Challenge 2 – Proportional-Derivative Feedback</b> A well-tuned controller has been implemented. The BiCopter quickly returns to its quiescent state with very little oscillation.		6
<b>Design Challenge 3 – Pilot Control</b> The BiCopter's quiescent pitch angle can be smoothly adjusted using the analog joystick.		4
<b>Clean-up</b> The students returned the lab bench to its initial state.		2
<b>TOTAL</b>		30