AME30358 – Score Sheet

M12 – 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
Subsystem A: Inertial Measurement Unit The time, angle, and angular speed are correctly printed in the serial monitor.		5
Subsystem B: ESC BLDC Motor Control Both motors are spinning and producing thrust in the correct direction.		5
Subsystem C: Cable Management All wiring and electronic components are securely mounted to the airframe.		3
Design Challenge 1 – Proportional Feedback The BiCopter oscillates under the impetus of proportional feedback.		5
Design Challenge 2 – Proportional-Derivative Feedback A well-tuned controller has been implemented. The BiCopter quickly returns to its quiescent state with very little oscillation.		6
Design Challenge 3 – Pilot Control The BiCopter's quiescent pitch angle can be smoothly adjusted using the analog joystick.		4
Clean-up The students returned the lab bench to its initial state.		2
TOTAL		30