## AME40453 - Score Sheet

C8 - BiCopter
Name(s): $\qquad$
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 <br> Both motors are spinning and producing thrust in the correct direction. |  | 5 |
| Subsystem C: Cable Management <br> 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 <br> A well-tuned controller has been implement. The BiCopter quickly returns to its quiescent state with very little oscillation. |  | 6 |
| Design Challenge 3 - Pilot Control <br> The BiCopter's quiescent pitch angle can be smoothly adjusted using the analog joystick. |  | 4 |
| Clean-up <br> The students returned the lab bench to its initial state. |  | 2 |
| TOTAL |  | 30 |

