

## AME 30358 – Score Sheet

### M7 – Remote Control Systems

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

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>Part I: Brushless Motor</b> The brushless motor spins at a speed proportional to the pulse width.		5
<b>Part II: Remote Control</b> The mapping of the controls-to-channels is correctly written in the lab notebook. The brushless motor and servo are controlled by the joystick(s) on the transmitter.		5
<b>Design Challenge 1 – Flight Control System</b> The brushless motor and servos are correctly laid out on the printed airplane drawing. The joysticks control the correct actuators: <ul style="list-style-type: none"><li>• Left joystick up-down - Motor speed</li><li>• Left joystick side-to-side - Rudder flap</li><li>• Right joystick up-down - Elevator flaps</li><li>• Right joystick side-to-side - Aileron flaps</li></ul>		4
<b>Design Challenge 2 – 2-Axis Pan and Tilt</b> The two servos are mounted correctly. The student is able to control the angular orientation of the system via the remote control.		6
<b>Clean-up</b> The students returned the lab bench to its initial state.		2
<b>TOTAL</b>		22