EGH446- Project 2020 – **PART A** - CRA Sheet
Must include: the requested documents listed on the blackboard submission item.

<table>
<tr><td></td><td>Notes</td></tr>
<tr><td>Mission Time and cross track error (Group):

<table>
<tr><th>Aerial: Mission time</th><th>Marks</th></tr>
<tr><td>550s (9.1 mins) or faster</td><td>5</td></tr>
<tr><td>650s (10.8 mins) or faster</td><td>4</td></tr>
<tr><td>750s (12.5 mins) or faster</td><td>3</td></tr>
<tr><td>> 750s (12.5 mins) or longer</td><td>2.5</td></tr>
</table>

<table>
<tr><th>Aerial: Avg Cross Track Error (absolute)</th><th>Marks</th></tr>
<tr><td>10m or less</td><td>5</td></tr>
<tr><td>15m or less</td><td>4</td></tr>
<tr><td>20m or less</td><td>3</td></tr>
<tr><td>> 20m</td><td>2.5</td></tr>
</table>

<table>
<tr><th>Ground: Mission time</th><th>Marks</th></tr>
<tr><td>1070s (9.1 mins) or faster</td><td>5</td></tr>
<tr><td>1170s (10.8 mins) or faster</td><td>4</td></tr>
<tr><td>1270s (12.5 mins) or faster</td><td>3</td></tr>
<tr><td>> 1270s (12.5 mins) or longer</td><td>2.5</td></tr>
</table>

<table>
<tr><th>Ground: Avg Cross track error (absolute)</th><th>Marks</th></tr>
<tr><td>1m or less</td><td>5</td></tr>
<tr><td>2m or less</td><td>4</td></tr>
<tr><td>3m or less</td><td>3</td></tr>
<tr><td>> 3 m</td><td>2.5</td></tr>
</table>
</td><td>10 Marks</td></tr>
<tr><td>System Complexity (Group)</td><td>5 mark</td></tr>
<tr><td>5 marks
Complete route planning is designed and achieved, a path is created between waypoints and a guidance approach used to achieve it.</td><td></td></tr>
<tr><td>4 marks:
Basic heading along the path is implemented and achieved. No intermediate waypoints or path between waypoints.</td><td></td></tr>
<tr><td>3 marks:
Your system intercepts all waypoints. Sub-systems work, no intermediate waypoints or path between waypoints.</td><td></td></tr>
<tr><td>0-2.5 marks
Partial marks. System fails to complete all circuit, gets trapped in local minima in some waypoints.</td><td></td></tr>
<tr><td>Individual report</td><td>15 Marks</td></tr>
<tr><td>Grade 7: Credible path designed and achieved, plus excellent description.
15 marks: Great effort demonstrated via non-standard and particularly insightful solution. Evidenced by good path, and in sub-system description. All other sections complete.
14 marks: Complete effort with great sub-system solution. Some minor weakness in some sections.
13 marks: Complete effort with good sub-system solution. Some weakness in some sections.

Your individual sub-systems implement path planning and route planning.</td><td></td></tr>
<tr><td>Grade 6: Credible path designed and achieved, plus good description.
12 marks: Good sub-system solution. Good description of code, but errors of misunderstanding exhibited in the sub-system description and recommendations sections. Perhaps slow mission time.

Your individual sub-systems implement path planning and route planning.</td><td></td></tr>
<tr><td>Grade 5: Finishes circuit, plus complete description.
11 marks: Sub-system solution suggesting thoughtful approach.
10 marks: Sub-system solution suggesting thoughtful approach. At least 1 minor error.

Must have complete sub-system description, and description of code

Your individual sub-system implements heading intercept, that is heading along the path is implemented and achieved</td><td></td></tr>
<tr><td>Grade 4: Completes at part of the circuit, plus some description.
9 marks: Sub-system solution suggesting credible approach.
8 marks: Sub-system solution suggesting credible approach. But major error hinders performance. Error identified, but unable to fix.
7 marks: Sub-system solution suggesting credible approach. But major error hinders performance. Error not identified.

At least one of your individual sub-system should work.</td><td></td></tr>
<tr><td>Not pass level</td><td>Partial credit</td></tr>
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