



EDT Industrial Cadets Gold Project

Leonardo and Your Mentors

Commercial-in-Confidence



Electronics



Helicopters



Aircraft



Cyber &
Security



Space



Unmanned
Systems



Aerostructures

Introduction

- Leader in Aerospace, Defence & Security
- Over 400 staff in Southampton, 7500 across the UK
- Focus on communications, optronics and air traffic management.



ABOUT US

Team 1

Calum

- Graduate Systems Engineer
- Studied aerospace at Swansea University

Dylan

- Degree apprentice systems engineer
- Studying embedded electronics at Solent University

Wiktor

- Industrial Placement Project Manager
- Studying business management at Bournemouth

Team 2

Enya

- Graduate Systems Engineer
- Studied mechatronic engineering at University of Manchester

James

- Degree apprentice systems engineer
- Studying embedded electronics at Solent University

Charlie

- Industrial Placement Software engineer
- Studying computer science and AI at Birmingham University

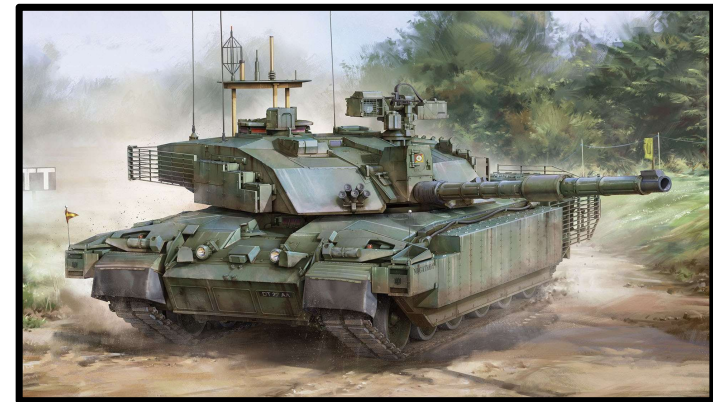


Potential Project Idea: The Orca

- Primary goal:
 - Robot car which can detect and avoid obstacles
- Stretch:
 - get from A to B autonomously

Design Specifications:

- Detect proximity to objects e.g. cliffs or rocks etc.
- Must be able to traverse uneven terrain without toppling
- Must be able to climb and incline of 15 degrees
- Must travel at least 5 m meters in less than 20 s
- Must be able to carry 100 g
- Must be as lightweight as possible
- £100 maximum budget (cheaper preferred)



Potential Project Idea: The Chameleon

- Primary goal:
 - Traverse the terrain in the shadows
- Stretch:
 - Detect the shadow moving and follow it
 - Transmit audio/visual data regarding the environment to a remote operator

Design Specifications:

- Must respond to change in light level in less than 5 s
- Must have self destruct button which kills its heat signature (turns everything off)
- Must travel at least 5 m meters in less than 20 s
- Must be able to carry 100 g
- Must be as lightweight as possible
- £100 maximum budget (cheaper preferred)





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THANK YOU
FOR YOUR ATTENTION

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