

# Week 2 Progress Report

Team Gamma

January 28, 2025

## 1 Progress Made

### 1.1 Trade Studies

- We created a spreadsheet to allow us to perform trade studies to derive our requirements
- The main inputs of the spreadsheet are:
  - Weight
  - Thrust available
  - Aspect ratio
  - Wing span
  - Oswald efficiency factor
  - Parasitic drag coefficient
  - TSFC
- The main outputs of the spreadsheet are:
  - Max ceiling
  - Cruise range
  - Take off distance

### 1.2 Mission Diagram

- We updated the 2D mission diagram with an animation of the aircraft following the flight path and increased readability of the diagram

### 1.3 Requirements

- We began deriving requirements based on the results of the trades studies we performed

### 1.4 Product Breakdown Structure

- Updated PDS to reflect new derived requirements from trade studies

### 1.5 Additional Work

Cabin and seat configurations have had preliminary research done

## 2 Next Week's Objectives

### 2.1 Continued Requirement Derivation

Next week, we aim to continue deriving more requirements in preparation for the SSR