

# Aircraft Design Project Urban Air Mobility (UAM)

Week 7

13/12 – 17/12

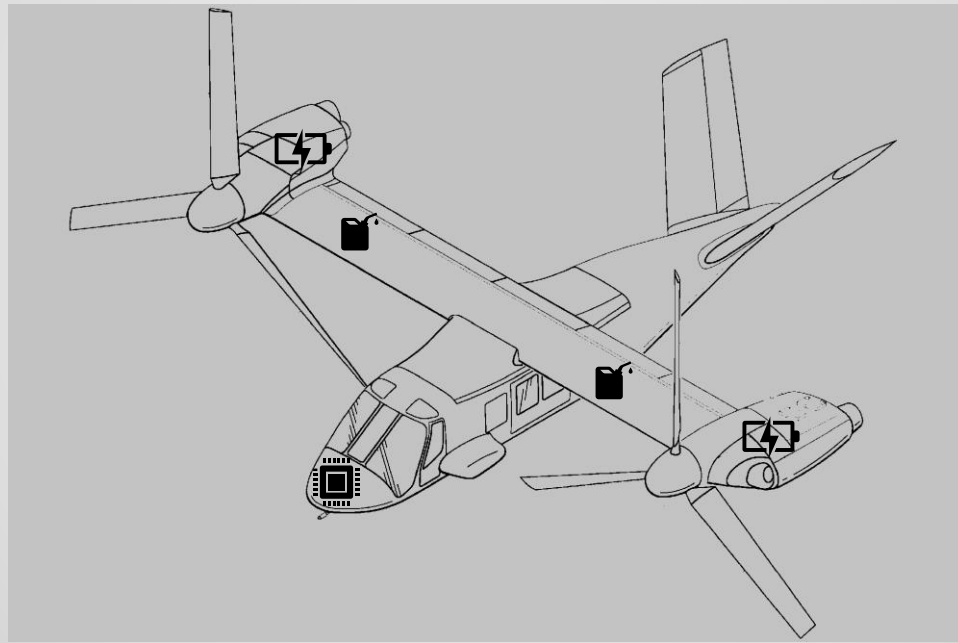


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# Longitudinal Stability

## Introduction

- Your group started allocating room in your initial configuration for the different components and passengers/crew.
- You have also defined dimensions, mass values, and approximate positions for the different aircraft components.
- The question is: **does it guarantee a stable configuration?**



# Longitudinal Stability

## Objectives



**Estimate position of centre of gravity**



**Determine coefficients of longitudinal, lateral and directional stability**



**Make modifications to your initial design if needed!**

**For next week's meeting:**



**Prepare Powerpoint presentation**  
**Max: 5-10 min**