



# Design and Development of a Modular Reconfigurable Aerial Vehicle

Milestone 4

## Grupo 6

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110180 – Magner Gusse

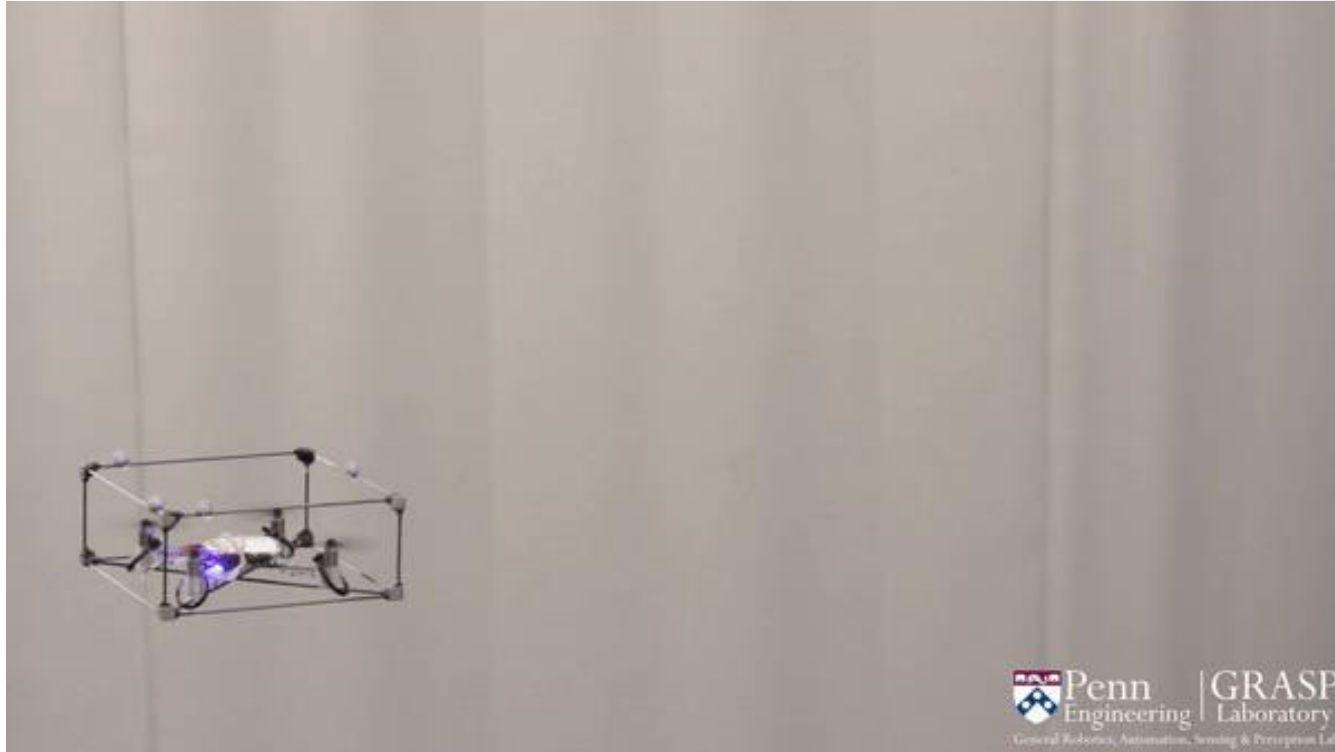
**Orientador:**

Pedro Casau



# INTRODUCTION

# MISSION STATEMENT & OBJECTIVES



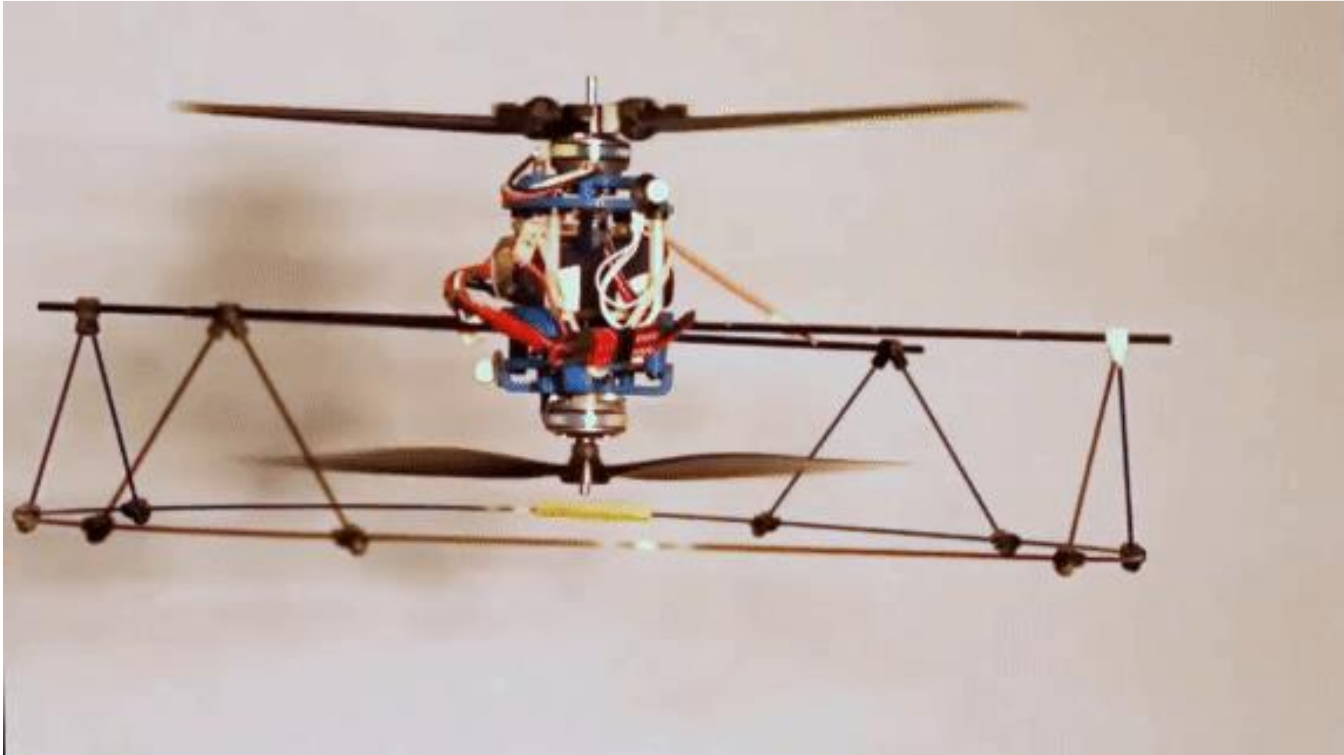
<https://www.youtube.com/watch?v=25zKLyOCA3A>

# MISSION STATEMENT & OBJECTIVES



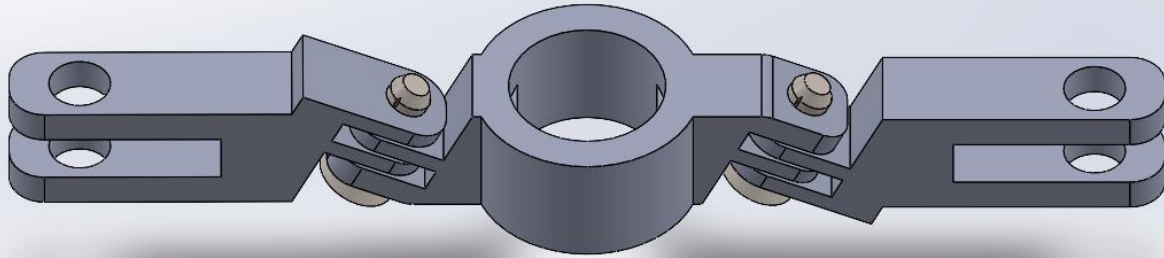
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# MISSION STATEMENT & OBJECTIVES



<https://www.youtube.com/watch?v=aEPf0QHVuMM&t=70s>

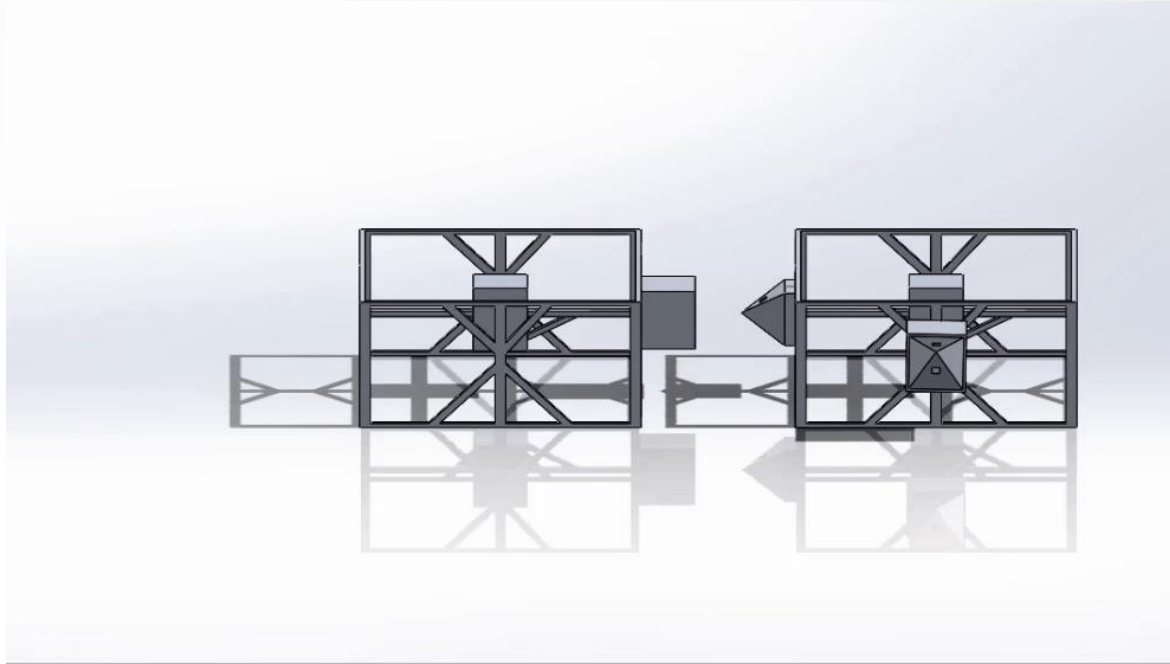
# MISSION STATEMENT & OBJECTIVES





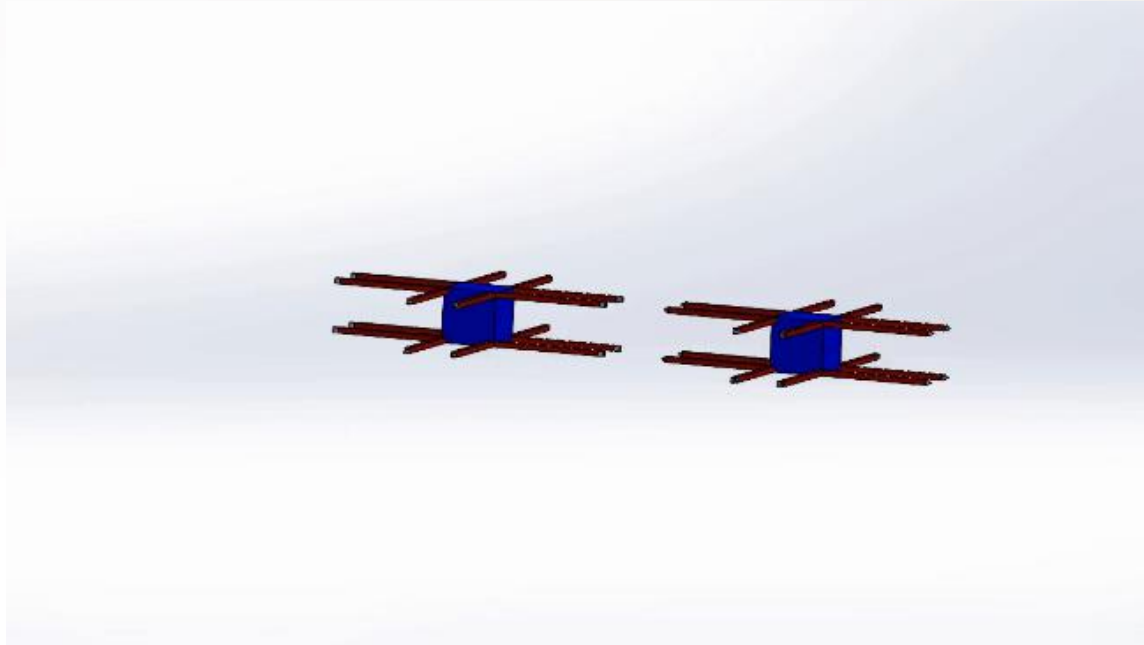
# Coupling Model

# COUPLING CONCEPT





# COUPLING CONCEPT



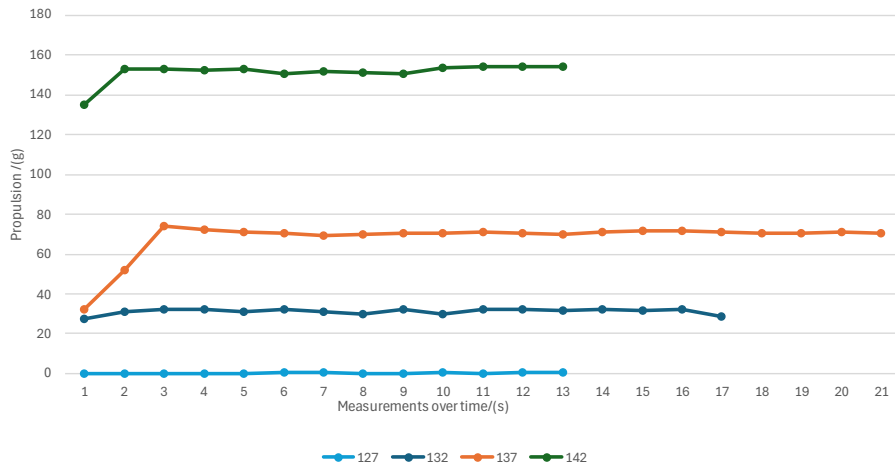
# THRUST STAND

[https://youtube.com/shorts/JcyohlVHpi4  
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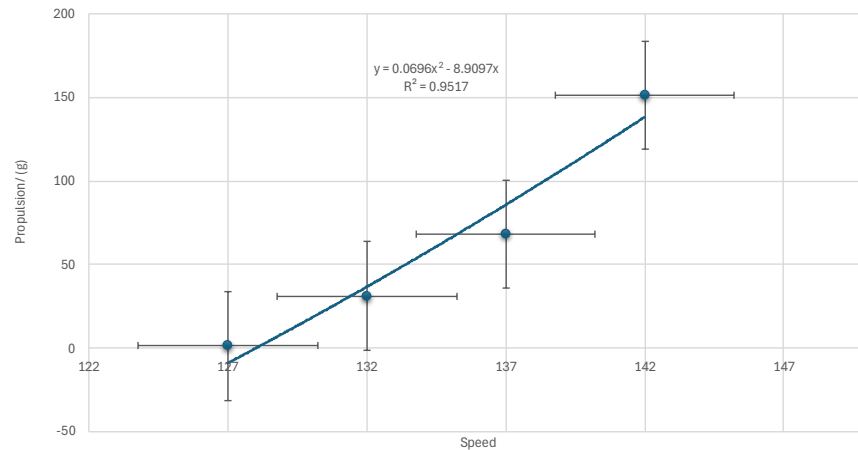
[https://youtube.com/shorts/KsTUEmDC  
xvE?si=UuR2yHyfTJ3hSR7I](https://youtube.com/shorts/KsTUEmDCxvE?si=UuR2yHyfTJ3hSR7I)

# PROPELLER-A

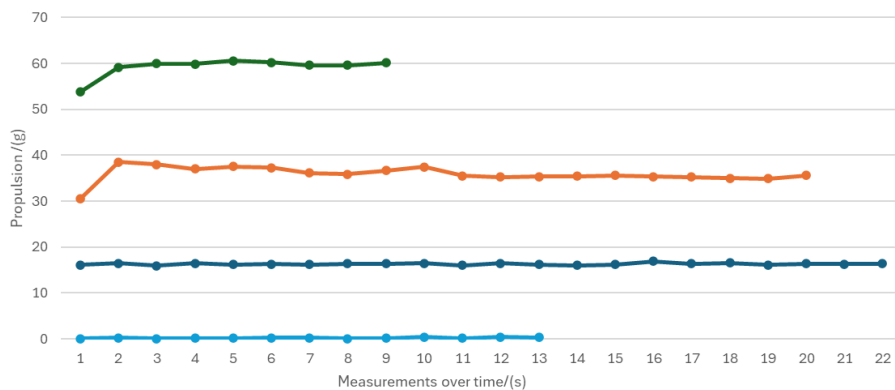
Propulsion(g) as a function of speed



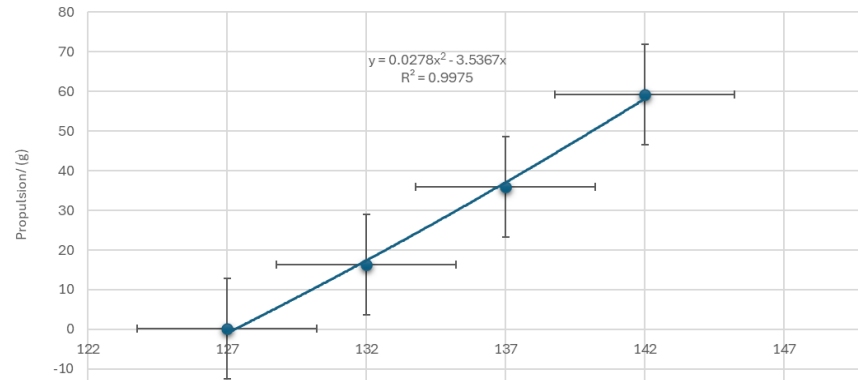
Average propulsion(g) as a function of speed



Propulsion(g) as a function of speed



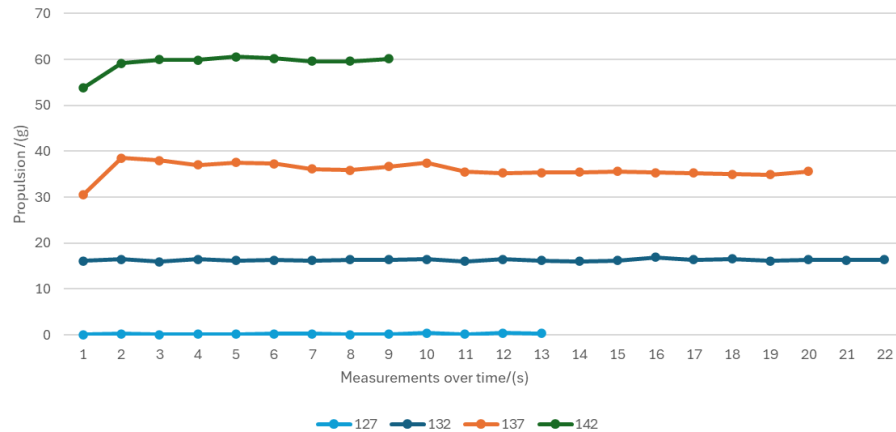
Average propulsion(g) as a function of speed



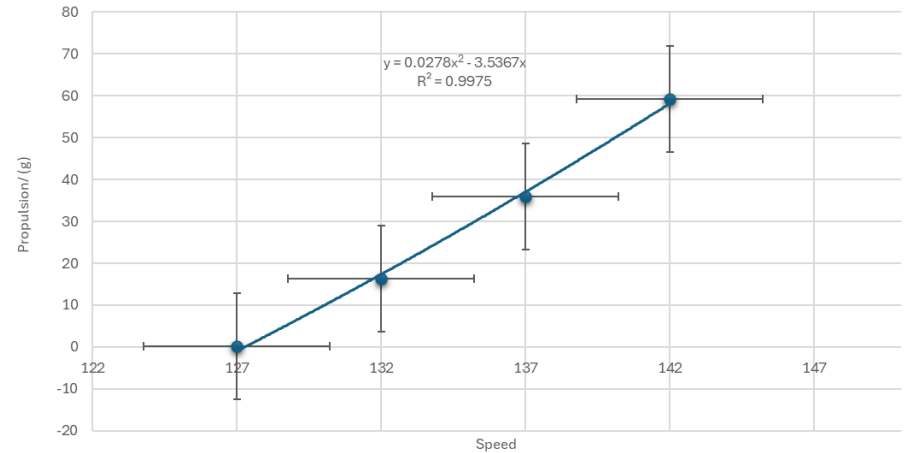
# PROPULSION TESTS

## PROPELLER-B

Propulsion(g) as a function of speed



Average propulsion(g) as a function of speed



# SWASHPLATELESS



<https://www.youtube.com/watch?v=aEPf0QHVuMM&t=70s>

# WBS

Thurst

**85%**

Structure

**15%**

Coupling Model

**90%**

Swasplateless

**30%**

# CONCLUSIONS



**THANK  
YOU!**