

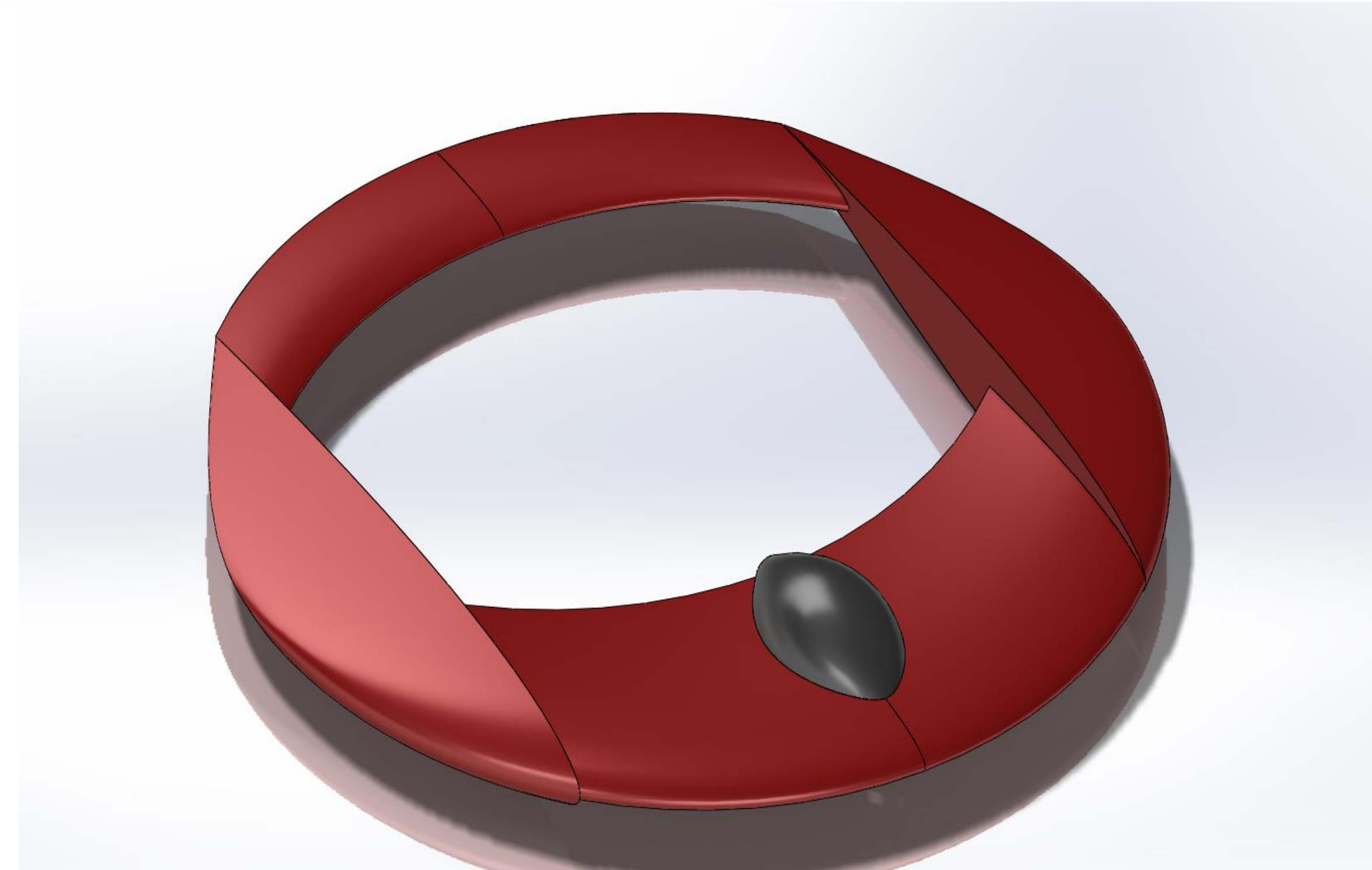
CIRCULAR UAV

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Background

The concept of circular wing configuration has recently emerged with potential applications to unmanned air vehicles (UAVs). The Circular UAV project aims to design, build, and fly a demonstration of a circular UAV with the Geobat, built by Aerobat Aviation, being the first draft.

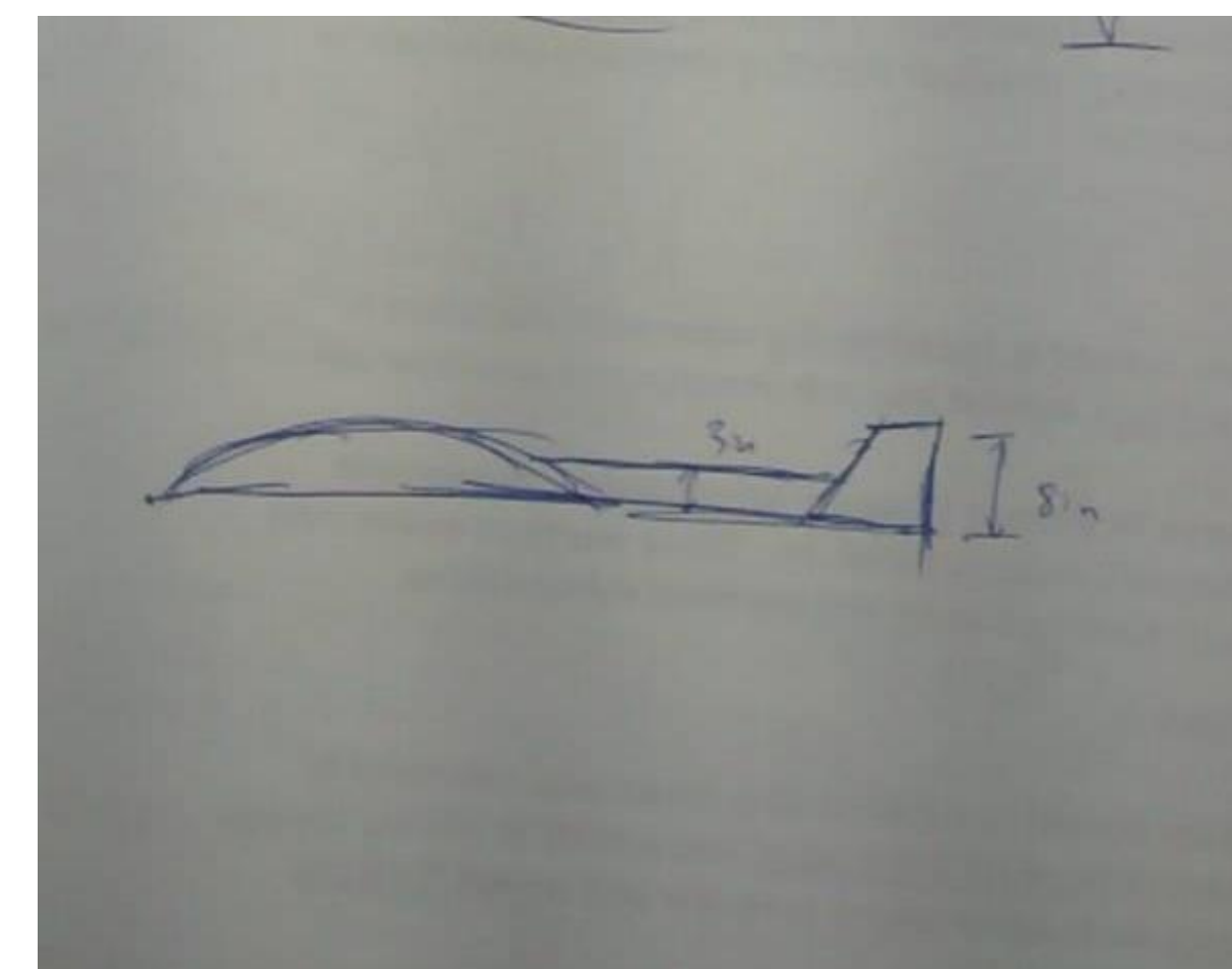
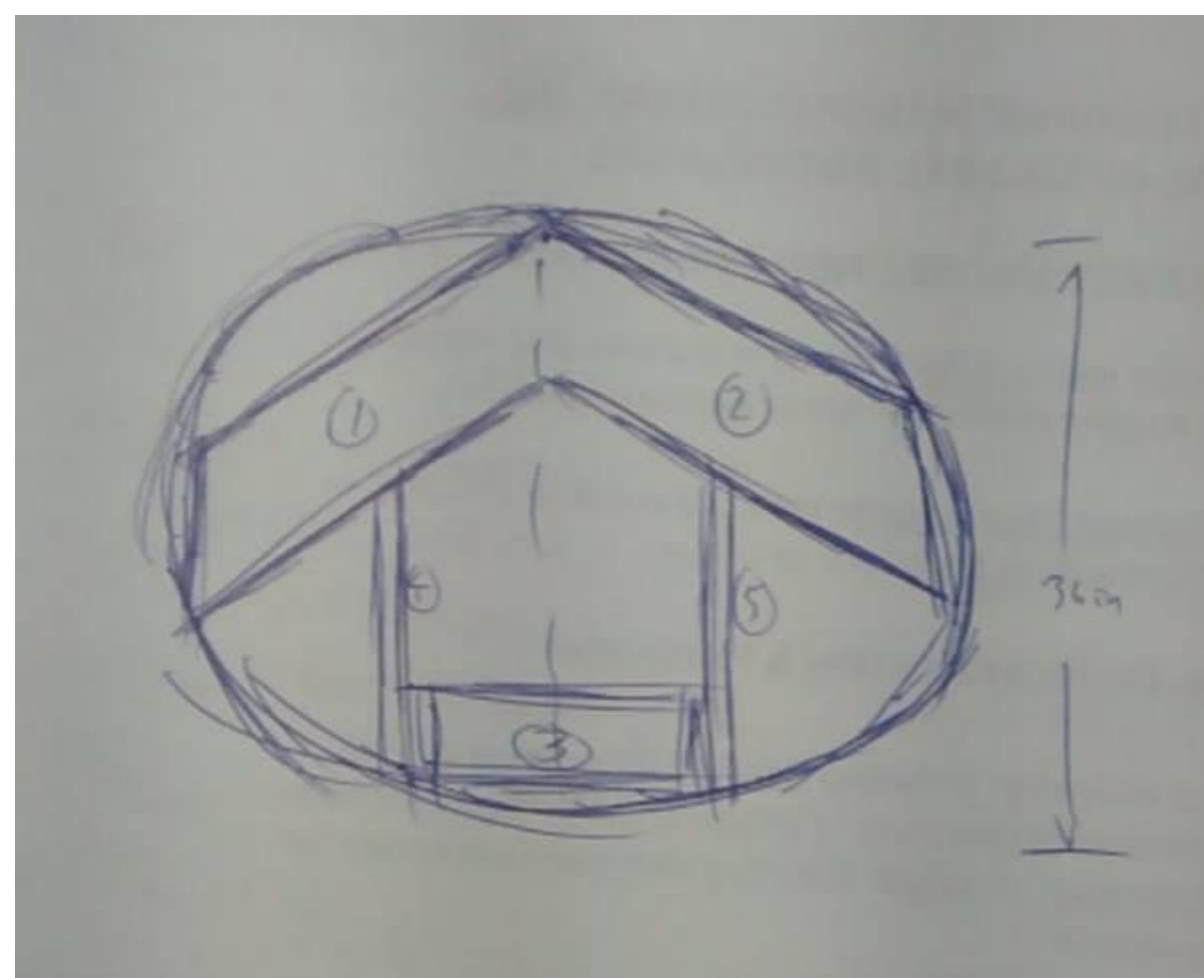


Objectives

- Design a circular planform UAV
- Build the circular planform UAV
- Fly the circular planform UAV
- Analyze performance data
- Make improvements

Requirements

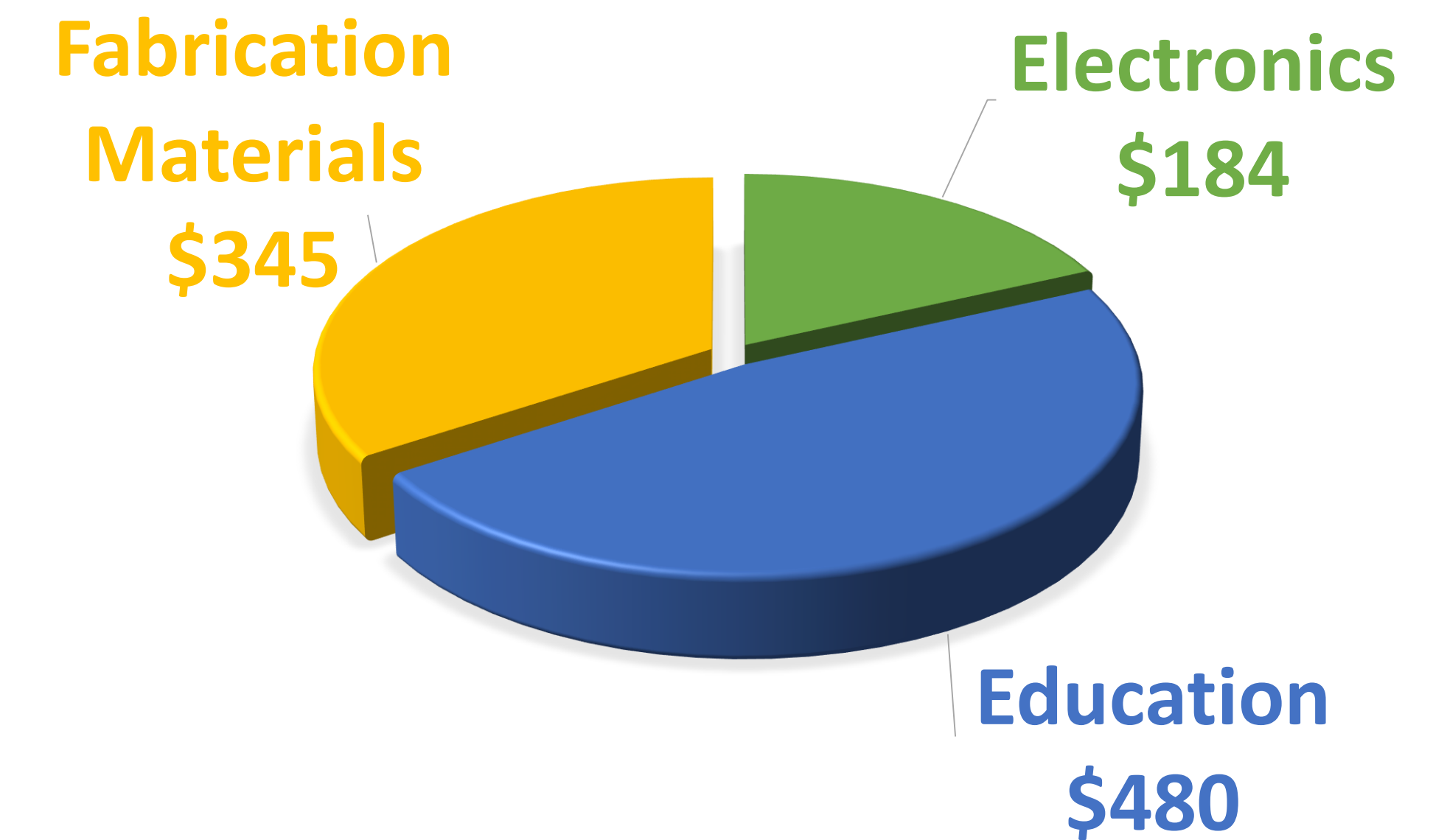
- Rate of climb: 600 ft/min
- Range: 3 miles
- Endurance: 20 minutes
- Stall speed: 11 mph (16.13 ft/sec)



Innovation & Bigger Picture

- Innovative circular planform aircraft
- Validating the flight dynamics of a circular planform aircraft

Cost



Next Step

- Finish up preliminary design and CAD modeling.
- Fabricate the first prototype.

Fall	Winter	Spring
Conceptualize	Design Documentation	Final Assembly
Requirement Calculations	Procurement	Validation
Aircraft Configuration	Fabrication	Flight Test

Team Members & Contact Info

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