



# Team High Ball Project Proposal

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# Agenda

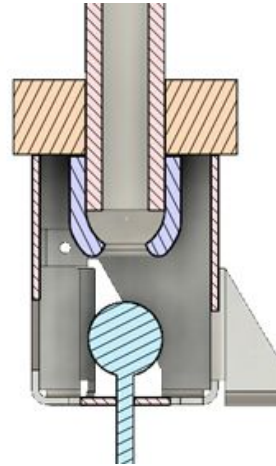
- Introduction
- Design
- Updates
- Timeline
- Next Steps

# Introduction

- Position controlled high altitude balloon
- Helium and ballast release to control altitude
- Varying wind currents will direct the balloon
- Low cost method for deploying payloads

# Design

- Styrofoam housing
- Novel cutdown mechanism
- Position control software



# Hardware Updates

- PCB - Revision 2 \* in progress
- Schematic - Revision 3 \* Complete
  - Battery Monitor
  - Bug Fixes
- Fabrication
  - 3D Parts \* Complete



# Software Updates

- Github with template
- Subsystem Outline
- Sensor Code \* 60% complete
- Communication \* 30% complete
- Simulation \* 60% complete

# Timeline

- Testing/Documentation Completion Target (Sept. 15)
- HW/SW Completion Target (Sept. 22)
- Full Ground Test (Sept. 30)
- First Launch - Beginning of October (Oct. 6)
- Second Launch - TBD

# Next Steps - Hardware

- Fabrication
  - Waterjet - currently offline / Partially Functional
  - Milling Parts
- PCB - Finish Design
  - Electrical Integration
- Foam Housing
  - Model, Cut, and Build



# Next Steps - Software

- Control Algorithm
- Ground Interface
- Finish Code Development
- Create Code Test Environment



# Questions?

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