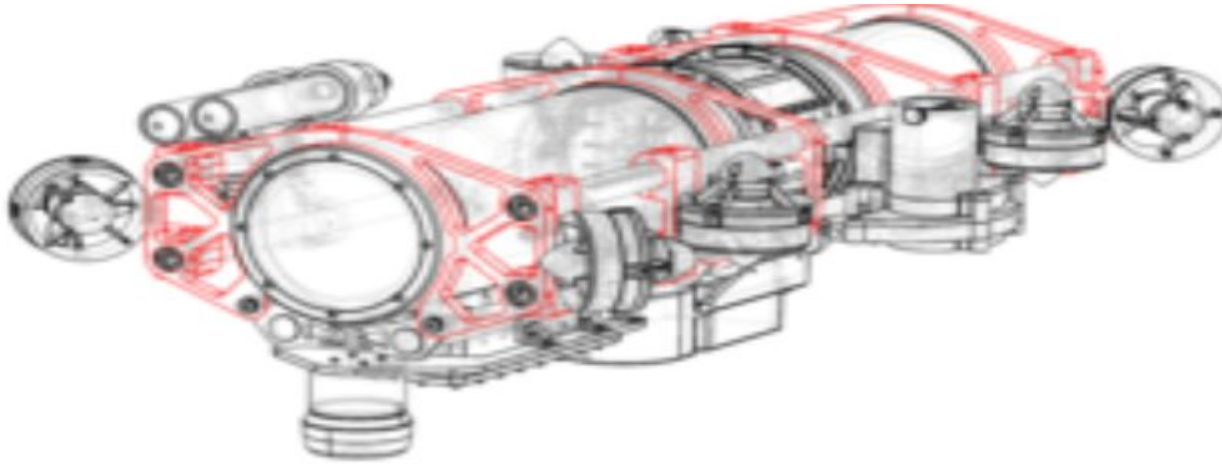


Carnegie Mellon TAUV (Tartan Autonomous Underwater Vehicle)



KINGFISHER

Project Description

Name: Acoustics Enclosure

Purpose and Specifications:

An enclosure is needed to hold hardware used to detect objects and aid the sub in navigation.

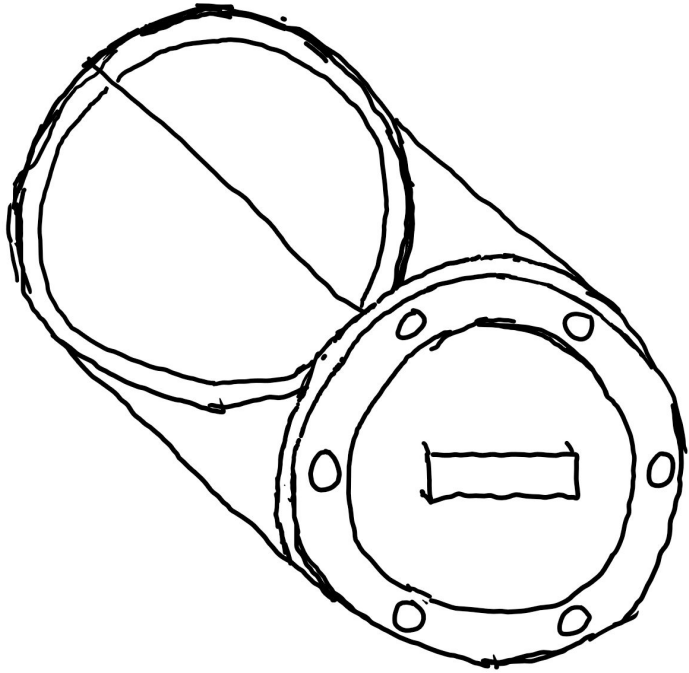
The enclosure should be 4 inches in diameter and hold:

- 2x ADALM Boards
- 1x Raspberry Pi
- 1x Power Board
- 4x Pre-Amps
- 4x XLR's

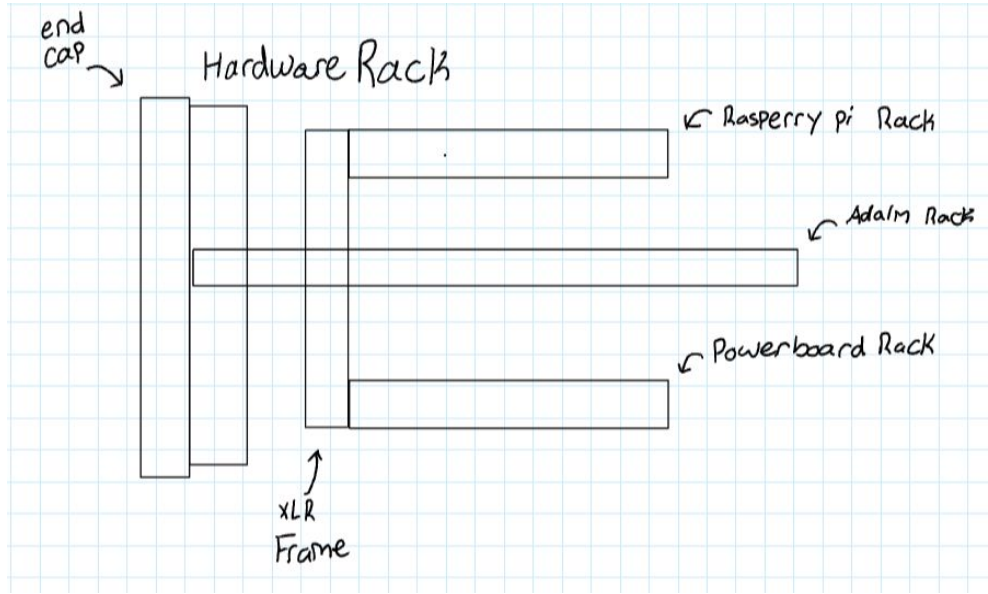
Side Note:

- The enclosure should be made with easy access to hardware (For quick adjustments for competition runs)
- Enclosure should not clash with vehicle design (Too long, Extravagant geometries, etc.)

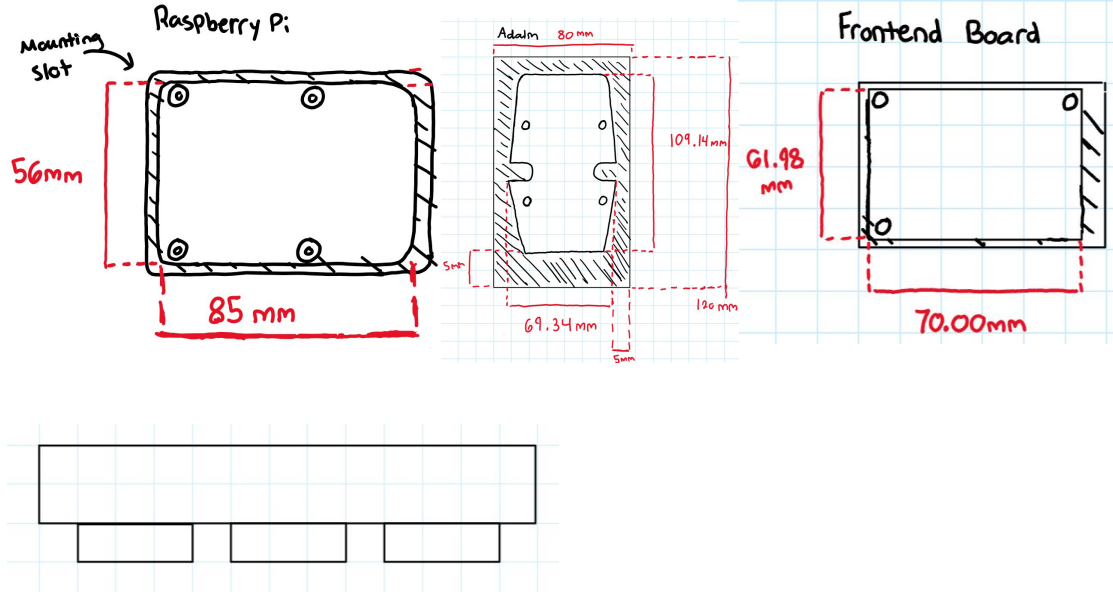
Conceptual Design - Body



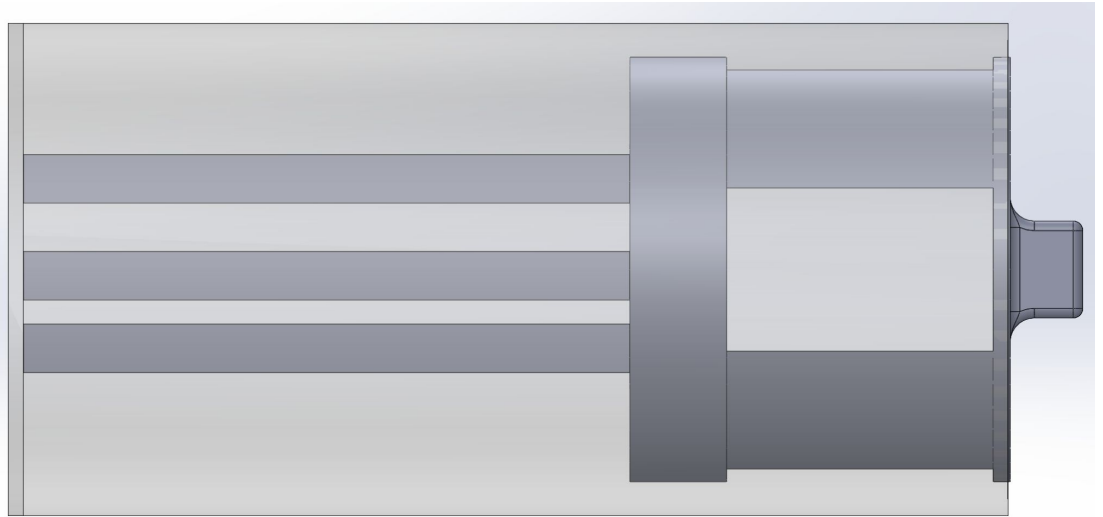
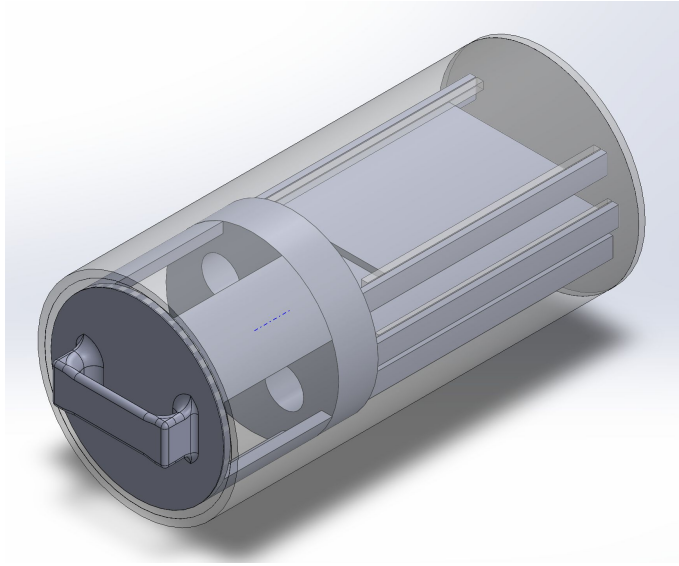
Conceptual Design - Hardware Rack



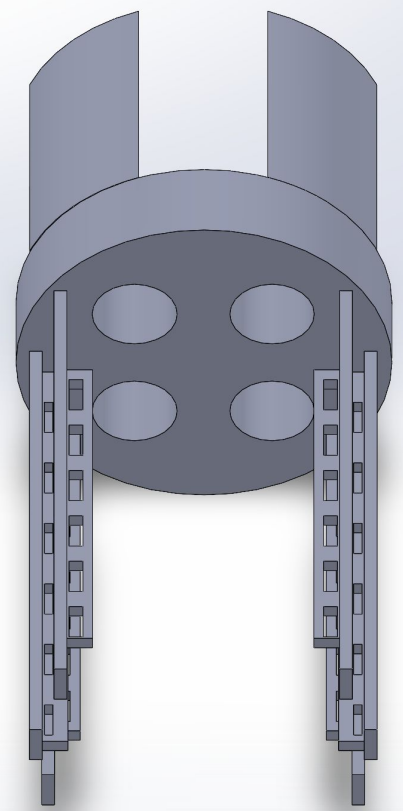
Conceptual Design - Mounting Slots



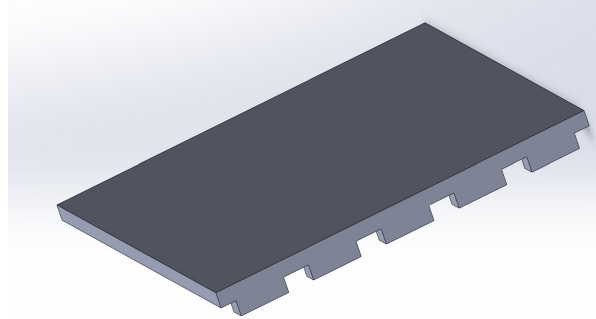
Solidworks Design



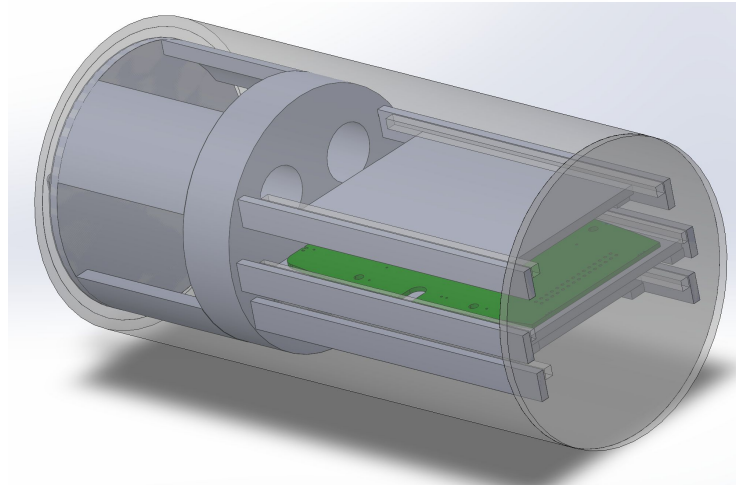
Additional Sketches and CAD



- Top View of the Hardware Rack with specified mounting slots



- Hardware mount concept



- Full assembly including a ADALM Board