

# Analyzing and Redesigning Housing for Pressure and Temperature Sensors

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## Introduction:

- This project was to create a durable housing that would not leak when deployed on the coast

## Challenges:

- Figuring out the cause of the leakage when originally deployed
- Finding good ways to measure the model's dimensions
- Switching the model from one design program to another



**Goal: Create a housing for pressure and temperature sensors that can withstand a large coastal storm.**

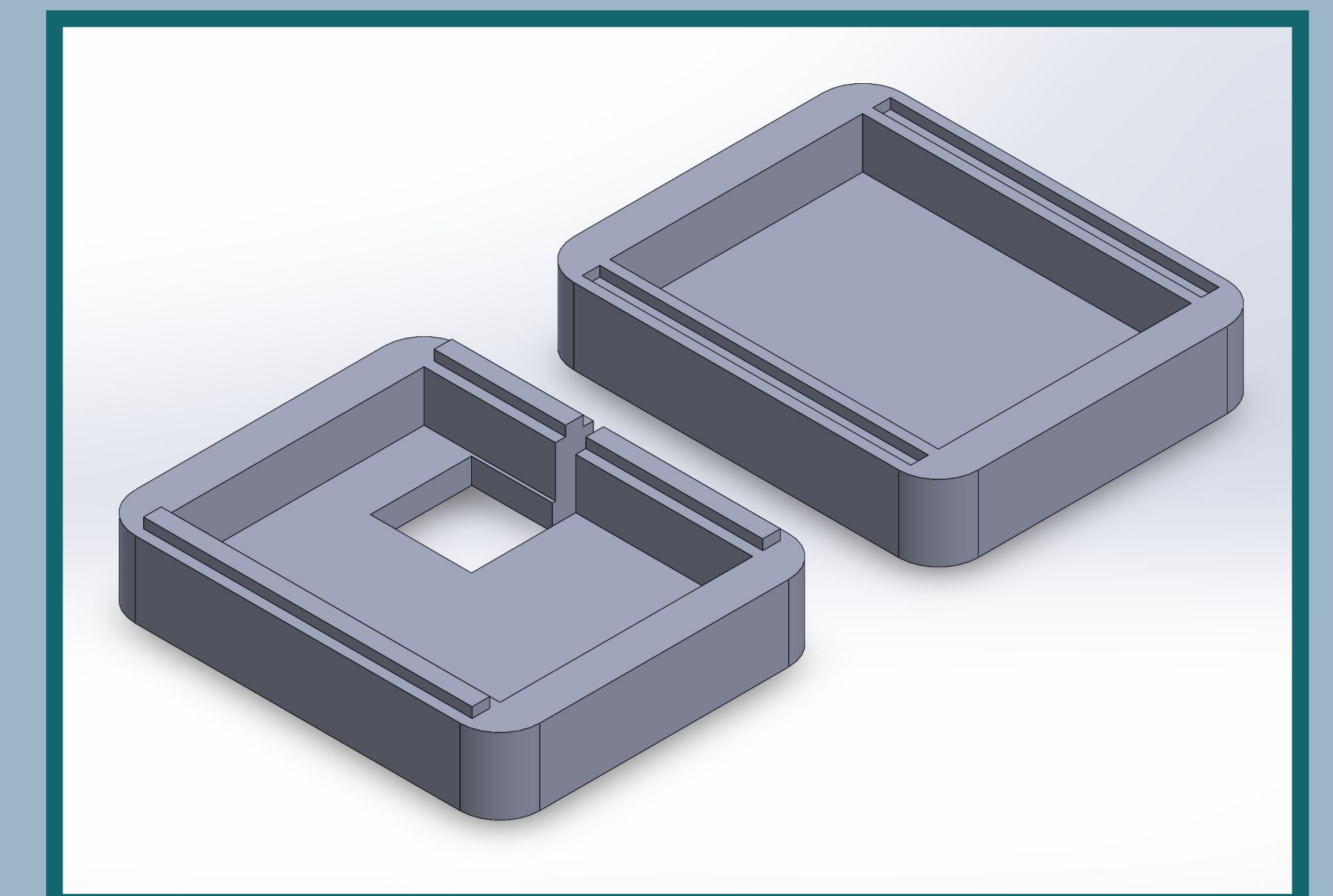
## Materials:

- SolidWorks and a 3D Printer were used to make multiple housing models



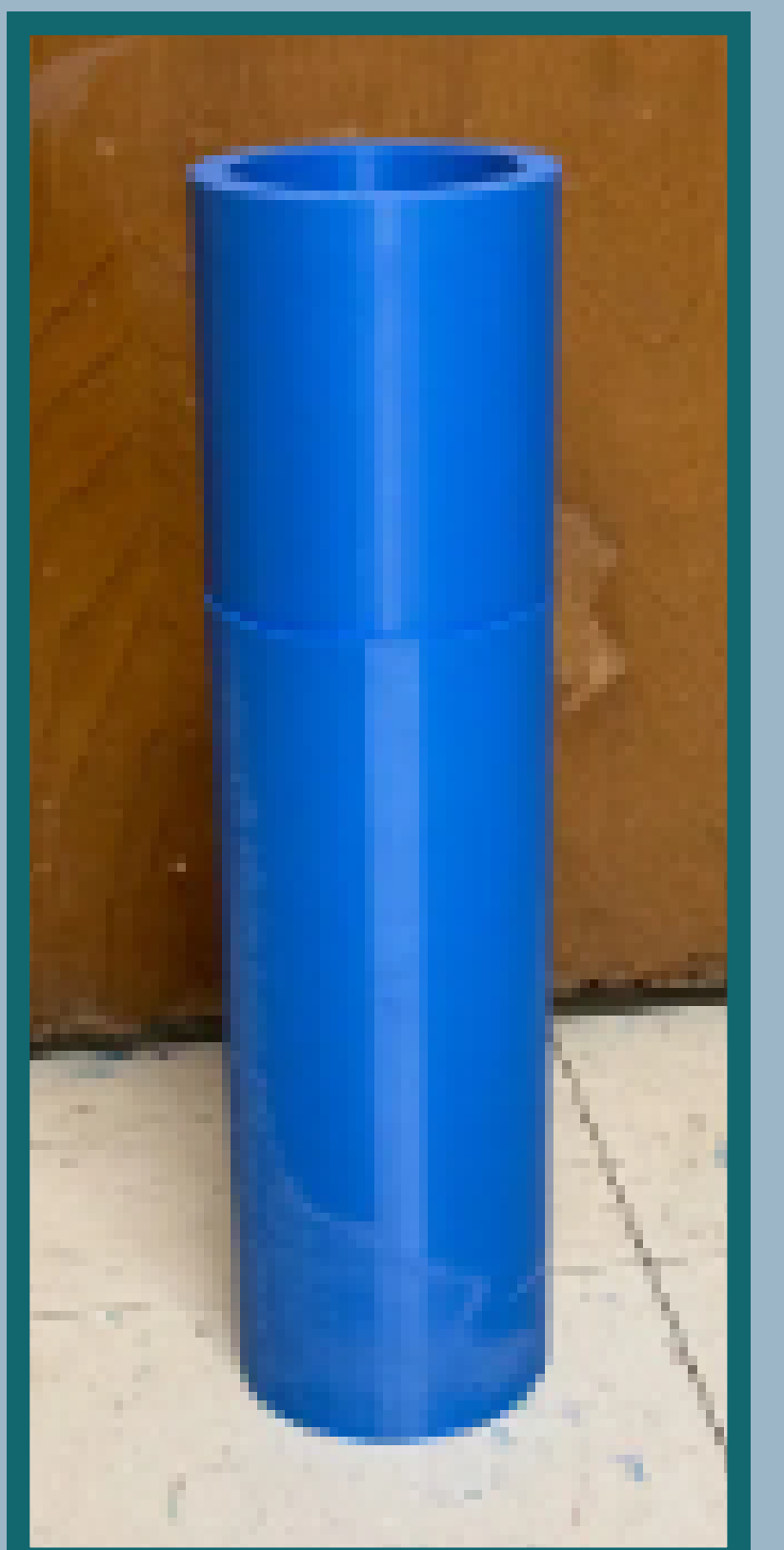
## Results:

- Designed a new housing model, close to the original, that splits the chamber into two separate spaces



## Future Work:

- Design a casing for the circuitry to keep it safe from impacts to the housing.



## Methods:

- Testing of the original model in the Chase tank
- It was found that the housing did leak due to loose screws and too much o-ring grease

## References:

- Dr. Fredriksson, an Ocean Engineering Professor at UNH, was able to share the original 3D model designs

