

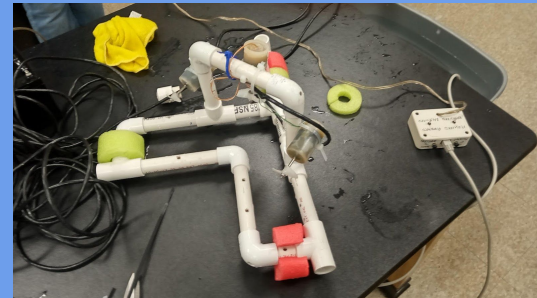


St. Katherine of Siena School, Philadelphia

# Company Overview

PantherPerch is a new organization founded in 2022. It is the result of demerger of SMTPerch, which our advisor ran for five years at his previous school. Today, PantherPerch has nine students from sixth, seventh, and eighth grade at St. Katherine of Siena School in Philadelphia.

The 2023 ROV model is extremely buoyant, unique, agile, and sleek. It uses the high quality PVC pipe that makes it lightweight and swift. It can defuse hydrogen bombs, remove trash and debris from the sea floor, defusing mines, pool maintenance, vehicle towing, and vehicle maintenance



# Recruiting Methods

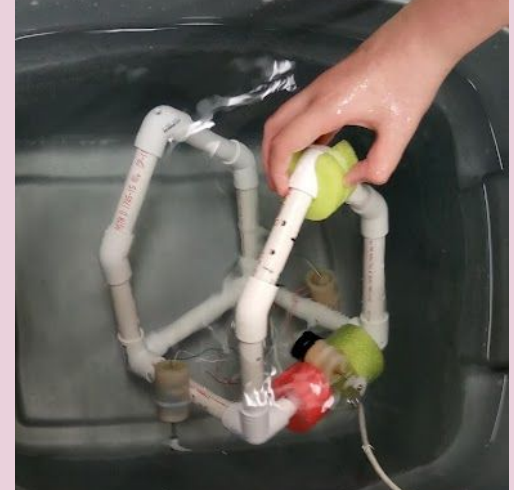
SeaPerch gave Saint Katherine of Siena students the opportunity to participate in the SeaPerch competition. We were given the chance to sign up for the SeaPerch program by our technology teacher Mr. Jackson. Mr Jackson recruited Brian, Alannah, Michael, Nolan, Nicholas, Lucas, Jayden, Raphael, and Jake. In order to be accepted into the PantherPerch team, we were required to write a paragraph on why we deserve to be on this team. At our first meeting we had to sign an agreement that we have to follow the rules and have fun. Some of the rules are *“I will follow lab safety rules, I will treat the equipment, tools, and kit as if it is my own, and I realize that this is new to everybody on our team.”*



# Design and Manufacturing Process & Engineering Process

We started the design and manufacturing Process relatively early. We constructed two different perch models. One was a model with instructions in the book called the 'V-Wing' and the other perch was a custom-made design by one of our 8th grade team members named 'The Pentagon' also nicknamed 'The House'. We ended up choosing, from the results of a vote, the V-wing.

This particular model was constructed by the 6th graders during our first meeting. During the editing process, it took us multiple times to get our perch balanced while in the water including adjusting pool noodle length and position, adding caps to open holes, and adding an arm.





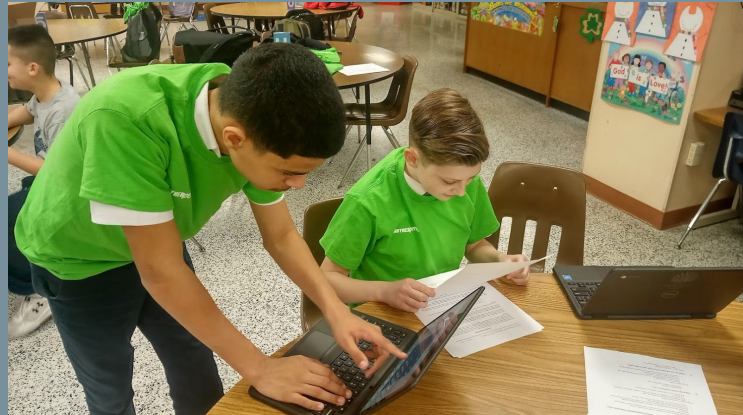
# Budget Information and Implementation

We added several new components, such as a 45 degree elbow and a cap at the end. We also attached an arm which consisted of an elbow with an auxiliary piece of pipe for structural support and to hook in the primary targeted specimen which is identified when our company arrives to the domain of the competition. This enables our arm to contain universal support to quarry any object or living organism that is located on the seafloor or comes within close proximity of the perch. These pieces cost a total \$2. This inexpensive addition allows us to produce a large volume at a minimal cost.

These additions and modifications didn't really contain any adverse effects or trade-offs except for a single one. We added more weight through the components tethered to the perch which are listed above in exchange for more buoyancy and balance.

# Use of Computer Technology

The use of technology in our team was the use based around Google Classroom. Google Classroom allows us to access many files that are useful to our build. We used chromebooks to document our information. To simulate parts that were not yet built we used a digital scale.



# Questions?

Thank you for your time today. We're like to take any questions from our future stakeholders.

