

Mt. Ararat Serpents

Mt. Ararat High School, Topsham, Maine, United States



HIGH SCHOOL STOCK CLASS

Two Years participating in SeaPerch

Two Times at the International SeaPerch Challenge

Our SeaPerch is unique because: (100 words MAX)

Our Seaperch is unique because of multiple design decisions. We used PEX pipe instead of PVC to save weight and increase the malleability of the pipe. We also curved the PEX pipe to decrease the size of the ROV and the amount of pipe needed. This required us to customize more unique parts of our ROV such as the Thruster mounts that had to be attached at an angle.

SeaPerch Design Overview: (100 words MAX)

Our ROV consists of a reformed PEX pipe to create a curved frame, the frame consists of a curved arch coming up from a straight base in the front, with 4 curved pieces of pipe coming out of the front to meet in a single point in the back. The front of the ROV has multiple tools that are used to complete various tasks throughout the mission course. The main tool has a Y-shaped prong that enables the ROV to easily pick up objects without having to worry about them sliding off of the tool.

Our biggest takeaway this season is: (100 words MAX)

Our biggest takeaway from this season is the importance of time management and consistent commitment. The ROV wasn't fully functional until a couple of weeks before the regional competition. This was due to a few factors such as a lack of attendance, equipment malfunctions, and having a complex design. Better time management would have allowed us to perfect the ROV earlier and allowed more practice time with the ROV before the competition.