

Team Humpback

Massachusetts Bay Division



STOCK – HIGH SCHOOL

- 3 Years participating in SeaPerch
- 0 Times at the International SeaPerch Challenge

Our SeaPerch is unique because: (100 words MAX)

When designing and building our ROV we had to be able to meet all the criteria in the challenges in the mission course, while also not altering our ROV to the point of no longer being a stock boat. What we did to modify our ROV was we attached a hooked piece of wire to the front. This hook would allow us to latch onto the handle to open the door, as well as open it. With this hook, we could also grab each of the batteries and move them over to the other platform. Another thing we were able to do with the hook was to pick up and move the tools that were strung to the course. Overall, attaching the hook to the front of the ROV was definitely a good idea, but there could have been other approaches we could have taken to complete these tasks.

SeaPerch Design Overview: (100 words MAX)

When looking at the challenges that were bought to us by these two sets of challenges, we had to construct an ROV that was both fast and light enough to rapidly move through the speed course but was also strong enough to open the door and move the batteries in the mission course. What we had to do first though was build our motors. Initially, we struggled with the motors, trying to figure out how each piece fit into what and how it all worked, but after 2 days, we finally built all of the motors we needed (and more for other ROVs).

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

My team learned a lot from this experience and will continue to grow in this field and improve our design. Hopefully, we will be able to do better in later competitions and be able to apply what we have learned during this time. One thing I can say is how much I am glad to have had this experience, as it has taught us not only about STEM but also team building and cooperation skills. When it comes to the STEM element of the program, my team is glad to have been able to learn all the different mechanics that go into designing and constructing an ROV. This new knowledge will help my team look at the challenges that we may face in the future in a more scientific way, and we will be able to apply the ingenuity we have learned from this experience.