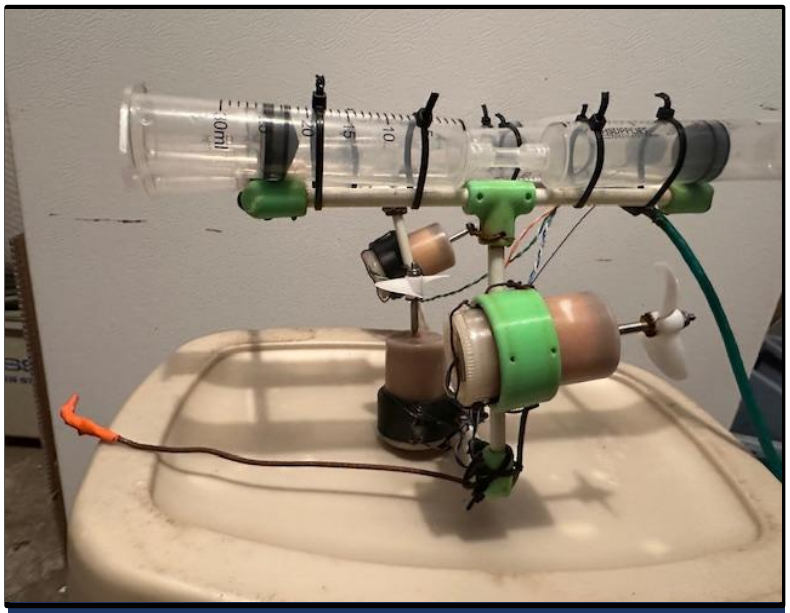
Team TarHeels – Open Class

New Bern High School Robotics Club, New Bern, North Carolina



Open Class Robot Final Design

2 Years participating in SeaPerch

2 Times at the International SeaPerch Challenge

Our SeaPerch is unique because: (100 words MAX)

It is made of fiberglass pipe, 3D printed plastic joints and motor mounts, and syringes for adjustable buoyancy. The weight without motors is XX grams. The weight with motors is XX grams. The basic frame is designed to be the lightest and most minimal while maintaining stability in the water. We tested several different length and shape hooks and the current length and shape worked best for the tasks in this year's Mission Course.

SeaPerch Design Overview: (100 words MAX)

We have built and tested stock PVC robots in previous years, and wanted to design an Open Class robot that is light, fast, maneuverable and powerful. The horizontal rectangle intersecting in the middle with a vertical square. Creates a minimal frame that is a stable shape in the water. The 3D printed plastic joints and motor mounts are stable and lightweight. The six connected syringes provide adjustable buoyancy to counterbalance weight of motors.

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

We need to continue to revise the motor mounts and joints so they will be as rigid as possible to maximize stability in the water. We also have learned that working together as a team, having good communication skills, listening to each other, trying different things to see what works best, never giving up, solving problems, having fun and practice, practice practice are all important to being successful in robotics, in school and in life.