

Seawolf Incorporated Seawolf Atlas ROV

Woodinville High School, Woodinville, WA, USA
1,590 km to International Competition



From left to right: Avi Mittal, Hunter Banks, Cedric Nagata

The Seawolf Atlas ROV

Seawolf Inc. is composed of 3 members:

Hunter Banks is the CEO and the pilot of the Atlas. He is in 10th grade, and this is his 3rd year participating in the MATE competition.

Cedric Nagata is the CAD designer and electrician. He is in 9th grade, and this is his 2nd year participating in the MATE competition.

Avi Mittal is the programmer and marketer. He is in 10th grade, and this is his 4th year participating in the MATE competition.

While each member of the company has struggled with making time to compete, we feel confident that our passion for robotics will see us through. Each member of the team has spent about 50 hours to date working on the Atlas systems.

The Seawolf Atlas is Seawolf Inc.'s 3rd ROV. It reuses many of the parts from the previous year's Hydra to save both time and money, but key changes have been made to increase effectiveness, efficiency, and ease of use.

Key Features: The frame is made of transparent laser-cut acrylic for increased visibility. Its six motors accelerate the Atlas up to 1 m/s and give it excellent maneuverability. External connections on the control box use Anderson connectors, allowing for easy mobilization and demobilization. An included hand-operated crane means the ROV does not have to waste time going to the surface and back – everything can be raised and lowered at once.

Safety Features: A master power switch can cut power to the whole system in under one second. The waterproof and durable Pelican case used for the control box protects the system from bumps and splashes. The motors automatically shut off if the joysticks are not plugged in.

The Atlas system is valued at \$1360. The ROV, tether, and crane together weigh 9.1 kg and measure 36 cm x 31 cm x 31 cm.