

SeaWolf, Incorporated

Atlas 2

Woodinville High School, Woodinville, WA
70 km to International Competition



Left: From left to right: Avi Mittal, Cedric Nagata, Joshua Tang, Liam Kozel, David Villarreal Ortiz, Hunter Banks, Jackie Lemke

Right: SeaWolf Atlas 2 ROV

SeaWolf, Inc. has substantially expanded since last year, and is now composed of 7 members.

Returning:

Avi Mittal is the CEO and propulsion engineer. He is in 11th grade, and this is his fifth year competing in MATE.

Cedric Nagata is the design engineer. He is in 10th grade, and this is his third year competing.

Hunter Banks is the pilot. He is in 11th grade, and this is his fourth year competing.

New:

David Villarreal Ortiz is the CFO and electronics engineer. He is in 9th grade, and this is his third year competing.

Jackie Lemke is the Marketing Officer. She is in 12th grade, and this is her first year competing.

Liam Kozel is a Payload Specialist. He is in 9th grade, and this is his third year competing.

Joshua Tang is a Payload Specialist. He is in 12th grade, and this is his first year competing.

Avi, Cedric, and Hunter have each spent 100 hours on the Atlas 2, while Liam, David, and Joshua have each spent 50 hours. Jackie has spent 8 hours on the ROV and a further 40 on marketing.

The SeaWolf Atlas 2 is the company's 4th ROV and is based on its previous ROV, the Atlas.

Key Features

The Atlas 2 frame is made of laser-cut acrylic. It is constructed using SeaWolf's tab-and-screw system, which enables easy assembly and disassembly while making the frame sturdy. Its six motors give it excellent maneuverability. The claw is capable of pitching and gripping, which allows sufficient dexterity to complete all the mission tasks. An elevator speeds sample collection and equipment deployment.

Safety Features

A master power switch can cut power to the entire system. The motors will not be powered if the controller is not plugged in. The durable Pelican case protects against bumps and splashes. A power light on the monitor warns if the system is live. The robot has grip points to prevent improper handling.

The Atlas costs \$1620. The ROV, tether, and elevator weigh 9.5 kg and measure 36 cm x 31 cm x 34 cm.