

## **OCEANUS II**

A Titan Amongst Gods From Sea-Tech 4-H Located in Mt. Vernon, WA, USA



Our team Oceanus II is one of the four teams in Sea Tech 4-H from Mt. Vernon, WA, USA. This is the second year for team Oceanus. We designed the ROV (Remotely Operated Vehicle) on CAD (Computer Aided Design) and had the design water-jetted. The team assembled the frame and had the parts welded, then added thrusters, pneumatics, cameras and a claw. We worked on repairing several leaks on multiple components of our ROV and learned countless profitable lessons. Oceanus II has six members who have worked together with the guidance of their wonderful mentor Dr. Jay Cocheba.



**Spencer Cocheba:** CEO, 16 years old, 5th Year in MATE 4th Year in Sea-Tech **Isaiah Houghton:** CFO, 16 years old, 2nd Year in MATE, 1st Year in Sea-Tech **Andre Tinnon:** R&D, 16 years old, 3rd Year in MATE, 2nd Year in Sea-Tech

Satone Haratani: Environment Health and Safety, 14 years old, 1st Year in MATE and Sea Tech

**Alora Houghton:** Marketing Director, 16 years old, 1st Year in MATE and Sea Tech **Priya Kumar:** Director of Documentation, 14 years old, 3rd Year in MATE and Sea Tech

**Location:** Mount Vernon, WA – approximately 120 kilometers (75 miles) from the regional competition and 5,000 kilometers (3,100 miles) from the international competition

**Primary Materials:** aluminum, polyurethane foam, stainless steel, marine grade wiring, pneumatic tubing, and PVC

Safety Features: emergency shut off switch, safety labels, and shrouds around the thrusters

**Special Features:** parallel claw that rotates 90 degrees and is attached to a 90 degree swivel with a wide angled camera, vertical grasping tool

Size: 90cm by 48cm by 40cm (35.5in by 19in by 16in)
Weight: approximately 24,040 grams (53 pounds)
Ballast: approximately 6,804 grams (15 pounds)
Buoyancy: approximately 11,339 grams (25 pounds)

Cost: \$6,118.07