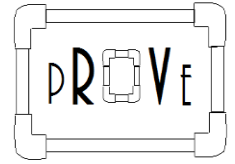




PENNSYLVANIA ROV ENGINEERS



POSEIDON MK III SPECIFICATION SHEET

▪ ALLENTOWN, PA ▪

TEAM INFORMATION:

PROVE:

Natalie Sampsell-

Chief Executive Officer, Editor, Grade 11

Benjamin Green-

Lead Programmer, Grade 12

Timothy Gahman-

Design Engineer, Grade 11

Hannah Smith-

Graphic Designer, Photographer, Grade 12

Noah Jarratt-

Props Designer, Fundraising, Grade 11

John Sampsell-

Props Designer, Safety Officer, Grade 8



John Sampsell, Hannah Smith, Natalie Sampsell, Timothy Gahman, Noah Jarratt, Benjamin Green (left to right)

ROV SPECIFICATIONS:

Vehicle Dimensions: .41 m x .62 m x .29 m

Vehicle weight: 12.25kg

Material: Primarily Composite, PVC, and Acrylic

Estimated ROV Cost – Full Value: \$1,200

Safety Features: A main power switch will shut off the ROV instantaneously in case of an emergency. A 25-amp fuse is also installed in case of a short circuit. Kort nozzles protect people from the propellers.

Special Features: A fully proportional vectored thruster arrangement gives Poseidon Mk 3.14 superior maneuverability in all axes of movement. Controlled via an Xbox 360 controller, custom Python software and a Raspberry Pi provides seamless pilot integration. Custom-built motor controllers allow bidirectional fully proportional control of all thrusters. Custom transparent pressure housings allow for easy inspection and removal of electronics. A rotating tool mount (RTM) allows multiple tools to fit into a compact space while still providing full functionality.

ROV Name: Poseidon Mk 3.14

Name of School: Excelsior Homeschool Cooperative

Construction Address: 2455 Chardonnay Drive, Macungie, PA

Name of Team: pROVE - Pennsylvania ROV Engineers

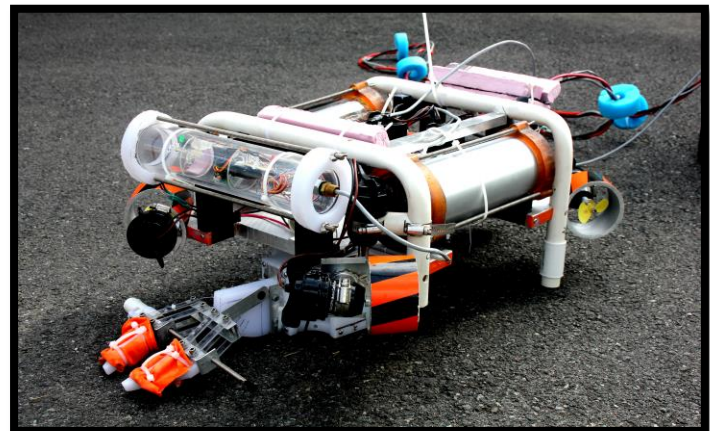
Mentors: Dave Sampsell, Robin Sampsell, David Green

Coaches: David Sampsell, Stephen Gahman

Company History: Fourth year of operation

Members Attending Competition: Natalie Sampsell, John Sampsell, Benjamin Green, Timothy Gahman

Distance to International Competition: 1,980 km



POSEIDON MK 3.14