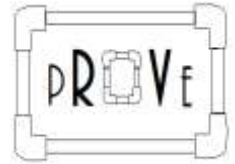




PENNSYLVANIA ROV ENGINEERS



POSEIDON SPECIFICATION SHEET

EXCELSIOR HOMESCHOOL COOPERATIVE - ALLENTOWN, PA

TEAM INFORMATION:

PROVE:

David Sampsell-

Chief Executive Officer, Grade 11

Matthew Buonanno-

Mentor Programmer, Grade 12

Benjamin Green-

Lead Programmer, Grade 10

Stephen Gahman-

Design Engineer, Grade 11

Micah Smith-

Design Engineer, Grade 12

Natalie Sampsell-

Tool and Graphic Designer, Editor, Grade 9

Hannah Smith-

Graphic Designer, Photographer, Grade 10



Back (left to right): Stephen Gahman, David Sampsell, Micah Smith
Front (left to right): Benjamin Green, Matthew Buonanno, Hannah Smith, Natalie Sampsell

ROV Name: Poseidon Mk. II

Name of School: Excelsior Homeschool Cooperative

Construction Address: 2455 Chardonnay Drive, Macungie, PA

Name of Team: pROVE - Pennsylvania ROV Engineers

Coaches' Names: Robin Sampsell, Heidi Smith

Mentors' Names: Dave Sampsell, Leonard Smith

Company History: Second year of operation

Members Attending International Competition: 5 of 7

Distance to International Competition, Seattle: 4506 km

ROV SPECIFICATIONS:

Vehicle Dimensions: 0.38 m x 0.51 m x 0.13 m

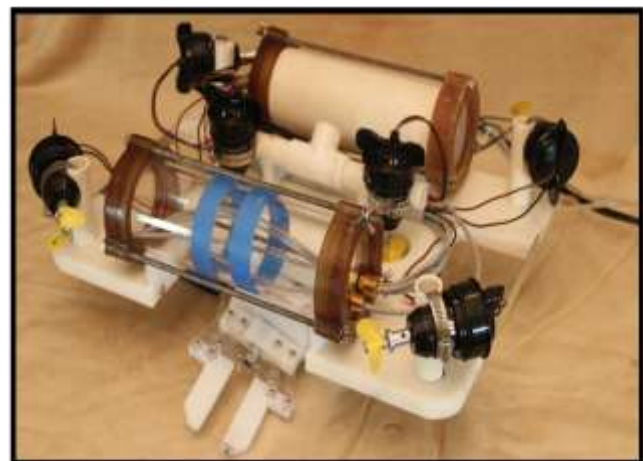
Vehicle Weight: 7.5 kg

Material: Primarily composite, PVC, and Acrylic

Total Cost: \$1,100 (including last year parts)

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 vectored thruster arrangement gives the ROV superior maneuverability in all axes of movement, and proportional control via an Xbox 360 controller and a microcontroller provide seamless pilot integration. Custom built motor controllers allow bidirectional fully proportional control. Transparent pressure housing allows for easy inspection and removal of control electronics.



POSEIDON MK II