

PENNSYLVANIA ROV ENGINEERS



POSEIDON SPECIFICATION SHEET

EXCELSIOR HOMESCHOOL COOPERATIVE - ALLENTOWN, PA

TEAM INFORMATION:

PROVE:

David Sampsell-Chief Executive Officer, Grade 10 Matthew Buonanno-Programmer, Grade 11 Stephen Gahman-Electronics Engineer, Grade 10 Micah Smith-Design Engineer, Grade 11 Natalie Sampsell-Graphic Designer, Editor, Grade 8 Hannah Smith-Graphic Designer, Photographer, Grade 9 Thomas Buonanno-Lead Researcher, Marketing, Grade 8 Tim Gahman-Tool Researcher, Safety Officer, Grade 8



Back (left to right): Matthew Buonanno, Stephen Gahman, David Sampsell, Micah Smith, Natalie SampsellFront (left to right): Thomas Buonanno, Tim Gahman, Hannah Smith

ROV Name: Poseidon

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: Start-up company, first year of operation Members Attending Competition: All Distance to International Competition, Orlando: 1,770 km

ROV SPECIFICATIONS:

Vehicle Dimensions: 0.85 m x 0.50 m x 0.45 m **Vehicle Weight:** 18.6 kg

Material: Primarily PVC, fiberglass, and Plexiglas 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 fully proportional control via an Xbox 360 controller and a microcontroller provide seamless pilot integration.



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