POSEIDON MK III SPECIFICATION SHEET

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

**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