Orange Mango, LLC presents ALPHA

The Hill School
717 E High Street,
Pottstown, PA 19464

Distance required for international competition: 990 miles
History of MATE participation: This is our first year entering in this competition, and in fact, the first year of The Hill School's Robotics team.

Orange Mango Robotics

(From left to right)
Damian Baraty (instructor/supervisor), Kevin Kim (Design Engineer / 11th), Konstantine Golobokov (Chief Security Officer / 12th), Nathan Rakos (CFO / 12th), David Null (CEO / 12th), Adam Schiavone (CTO / 12th), Dylan Spector (Game Theorist / 11th), Owen Davies (Chief Safety Officer / 10th)
Max Opechowski (Communications Director / 12th), not pictured.

ROV Tech Specs

Name: Alpha
Price: $700
Safety Features:

3D printed motor housings: Ensures that all propellers are safe from any unwanted contact.
Laser filters: Ensure that onboard lasers do not damage the eyes of humans or wildlife.
Rigorous Water Proof System: Every on board electronic device or exposed junction goes through a thorough process of wrapping and epoxy sealing to ensure safe handling and electron transfer.

Special Features:

Robotic Arm: Double hinged, two finger grip, robotic arm attachment.
Laser system: Lasers placed 16 inches apart used to accurately measure objects.
3D printed Motor housings: Designed to help reach maximum thrust capacity from propellers.
Easy-to-use joystick control: Logitech™ Extreme 3D Pro Joystick provides an intuitive control interface.
Floating Umbilical: Keeps excess tether from interfering with the functions to the robot.
Pololu™ motor controllers: With a maximum current draw of 25 amps, these motor controllers are virtually invincible.
4 way wide angle camera system: Provides simultaneous displays of the robot's surroundings.
Detachable accessory system: The robot is designed in such a way as to fit all sorts of custom attachments for any situation.

Photo of Vehicle: