



German Swiss International School 11 Guilford Road Hong Kong Year 11 and 12 Students Est. 2017

Returning Ranger Team

Distance required to travel to the international competition: 12,719 km

## The Team:

Elliot Jinoo Hong – Chief Executive Officer, Software & Electrical Engineer, Designer, Pilot Arushee Kadam – Electrical & Mechanical Engineer, Designer, Co-Pilot Audrey Yung – Chief Financial Officer, Mechanical Engineer, Onshore Crew Member Jeffrey Chak, Software Engineer, Safety Officer, Onshore Crew Member Cyrus Lam – Mechanical Engineer, Safety Officer, Tether Supervisor

Mr. John Shearman - Mentor Name of ROV:

NOAA

Approximate Manufacturing Cost: 2000USD

Weight: 8.4kg

*Dimensions:* 39 cm x 28.5cm x 33.5 cm

*Material:* HPDE



## Safety features:

- 20A in line fuse less than 30cm away from power supply
- Shrouded and guarded thrusters
- Emergency kill switch to cut power
- Warning signs on water tight compartment

## Additional features:

- 3D printed motor mounts
- Custom built control box with big joysticks for precision -tailor made for the ROV
- o Fully detachable tether
- Removable front panel for various tools
- Only 6 thrusters in a special configuration to balance between stability, maneuverability, and power efficiency