Team: Infinite Monkey Gang

COMPANY SPECS

Company: Infinite Monkey Gang

School, club, or community organization: N/A Home state and/or country: Washington State, USA

Distance required to travel to the international

competition: 40 miles (driving)

History of MATE ROV competition participation:

The Infinite Monkey Gang competed in the last year's regional competition in the ranger class. This year, the Infinite Monkey Gang is a team filled with all returning competitors from the last year's regional competition.

Range of grade/college levels represented by the members of your company:

Silvia Calinov – High School 12th Grade Oren Tropen – High School 12th Grade Kaelin Laundry – High School 12th Grade Koyha Kato – High School 12th Grade Gabriel Gaertner – High School 12th Grade Kevin Ehlers – High School 12th Grade Natali Kendal-Freedman – High School 12th Grade



Upper row, left to right: Kevin Ehlers — CFO, Kaelin Laundry — Systems Engineer, Gabriel Gaetner — Missions Expert and Pilot, Oren Tropen — Systems Engineer. Lower row, left to right: Natali Kendal-Freedman — COO, Koyha Kato — Mechanical Engineer, Silvia Calinov — CEO.

ROV SPECS

ROV name: N/A

Total cost: Approx. \$350

Size and weight measurements: Length - 22 in, Width

- 20 in, Height - 7.5 in

Total student-hours to design and build: Each person spent approximately 90 hours from October to April **Safety features:**

- Complete metal mesh around all thrusters small enough for a finger to not able to fit through the mesh. Hot glue was placed around the mesh to create a smooth surface.
- Sanded down any zip ties to prevent anyone from cutting themselves on the sharp edges.
- Tether has strain relief to prevent any damage from surface control box in case of sudden tether movement.
- Implemented a master enable/disable switch in the program allowing for quickly disable in case of a malfunction.



Photo of vehicle

Special features: Our ROV uses a standard laptop as its control station, enabling the customer to use any Xbox controller to operate their ROV. This feature is convenient for customers because they don't need to carry around a large control box to be able to use the submersible. Additionally, our vehicle's motors can easily be rotated to create a more modular ROV. This modularity is also convenient to our customers because it makes it easy to store if it is smaller and can easily be expandable for efficiency of motors.