Team: Viking Explorers

Distance Traveled: 3972 km on a bearing of 256
Years Participating: Seventh year

Team Members who will be in Hawaii:
- Baxter Hutchinson – Team Captain, Finished Electrical Technology May 2010
- Mariel Cisneros – 2nd year Engineering
- Ben Erwin – 1st year Electrical
- Stephen Estrin – Robotics Student
- Yasin Khalil – 2nd year Engineering
- Alonso Mendosa (on MATE Internship until June 6th) 1st Year Electrical
- Ferruh Unlu – Robotics Student

Team Members unable to make the Hawaii Trip
- Karen Heggen – in hospital – 1st year Electrical
- Stuart Cook – on summer long MATE Internship for the SERPENT program with LSU – 2nd year Electrical
- Joseph Hawkins – Engineering – transferred to CSULB
- Harleigh Williams – hired full time by Underwater Systems, Inc. – 1st year Electrical

Team Photo: Due to two members being away on a MATE internship, one in the hospital, and work, the next time we will all be together will be at the competition. Left to Right, Baxter, Mariel, Yasin, and Ben

**ROV SPECS**

**ROV:** Viking SHIELD

**TOTAL COST:**
- Reused Items: $4,337.09
- Donated Items: $18,701.65
- Purchased Items: $3,428.28

**PRIMARY CONSTRUCTION MATERIAL:** Teflon Sheet, Aluminum and PVC sheet.

**APPROXIMATE DIMENSIONS:**
- **Mode 1:** 56 cm wide x 35.6 cm high x 55 cm long.
- **Mode 2:** 48 cm wide x 35.6 cm high x 55 cm long.

Mode 1 is with wings extended for stability and Mode 2 is with wings retracted for maneuverability in the cave.

**WEIGHT IN AIR:** 22 kgs

**SAFETY FEATURES:**
1. Integrated propeller shields on the thrusters
2. Color contrasting propellers
3. Light weight for easy carrying and launching

**SPECIAL FEATURES:**
1. Multifunctional Gripper – houses microphone, temperature sensor and multiple tools for redundant methods of accomplishing tasks
2. Retracting wings to reduce size for navigation in the cave
3. Team designed and built 48V 150 Watt thrusters.
4. Integrated Crustacean sampling device
5. Integrated Bacterial Mat sampling device with built in aiming camera.
6. Easy access to all electronics at top of ROV under acrylic dome. Team built cards are mounted on a motherboard that allows for easy plug in assembly.
7. Status display instantly shows operational status of the ROV.