

# **Highlands Intermediate School TEAM SPECS**

**School Name** – Highlands Intermediate School

**Home state** - Hawaii

**Distance traveled to the international competition** – 216 Miles

**First-time MATE ROV competition participant?** Every team member is a first-time participant

**Team photo and caption indicating team member name and role (e.g. team captain).**



**Team Member Name (Grade, Role):**

**Back Row (left to right)/grade:** Kenneth Lee (8, robotics), Leighton Martin (8,robotics), Christopher Swider(8/building captain), Dayne Okamura(8, documentation), Aaron Higuchi(8,robotics)

**Middle Row/grade:** Naomi Tse(8,documentation), Devin Ajimine(7/building captain), Kasey Sugano(7,robotics), Brandon Lin(7,robotics), Brooke Ideue(7/research captain), Shea Takazono(7,electronics)

**Front Row/grade:** Erika Lin(7,reasearch), Kylie Swider(7,electronics), Carter Casuga(8,robotics), Nicholas Takehara(7,electronics), Austin Morishita(8,robotics), Keli Tokunaga(7/documentation captain)

**Range of grade levels represented by your team members-5<sup>th</sup> grade to 8<sup>th</sup> grade**

## **ROV SPECS**

**ROV name-** Kui Lima (Arm in Arm)

**Total cost-**\$2961.59 (Travel Expenses, ROV Expenses, and Mission prop Expenses)

**Primary material(s) used in construction-**PVC Piping

**Approximate dimensions in metric units-**25.40 cm tall, 30.48 cm wide, and 33.02 long

**Total weight in AIR in kilograms.-**ROV=3.6 kg, tether=2.72 kg

**Safety features-**We used a fuse to make sure our wires don't short circuit. No swimming!

**Special features-**Our arm is what sets us apart from the other teams. Unlike the other competition, we used a car door actuator to power the arm. We at first, tried to use a motor but it wasn't strong enough. Now, with our new arm, it is so strong that it works like two arms which was the reasoning behind our ROV name, Kui Lima (arm in arm).

**Photo of the vehicle-**

