

# AquaCards Inc.

## About the team



R.O.V Name: ROVO (total of 1024 hrs. To design and build)

**Riyon Affara** (12<sup>th</sup> grade, Melvindale High School, 3<sup>rd</sup> year of MATE competition): CEO 240 hrs. Spent working on the r.o.v

**Giovanni Sanchez** (12th grade, Melvindale High School, 3<sup>rd</sup> year of MATE competition): Chief Financial Officer/Pilot 264 hrs. Spent working on the r.o.v

**Marco Lopez** (11th grade, Melvindale High School, 2<sup>nd</sup> year of MATE competition): Pilot/Fabrication Technician 120 hrs. Spent working on the r.o.v

**Luis Plaza** (12<sup>th</sup> grade, Melvindale High School, 2<sup>nd</sup> year of MATE competition): Tether assistant/Payload tools operator 135 hrs. Spent working on the r.o.v

**Apolonio Cazares** (12th grade, Melvindale High School, 1<sup>st</sup> year of MATE competition): Safety Specialist/CAD Designer 165 hrs. Spent working on the r.o.v

**Jonathan Velazquez** (12th grade, Melvindale High School, 1st year of MATE competition): Designer 100 hrs. Spent working on the r.o.v

(left to Right): Marco Lopez, Luis Plaza, Giovanni Sanchez, Riyon Affara, Jonathan Velazquez, and Apolonio Cazares

### Distance to travel to the international Competition

18656 Prospect St. Melvindale, MI 48122 to Johnson Space Center, 2101 NASA Road 1, Houston, TX 77058  
1,318 miles

## R.O.V Specs

**Cost:** Budget \$6,200 Amount spent \$3,213.33

**Dimensions/Weight:** .33m tall by .58m long  
by .33m wide; 9.8Kg

## Features:

- 22.55m long tether neatly zipped-tied together
- Water proofed control box with easy accessibility to the wires
- 360° rotating claw with high grade gears.
- 4 Colored cameras with 24 LED light built into them
- Portable Dvd Players as our monitors
- Two .5842m long air cylinders used for buoyancy

## Safety Features

- Caution Labels for moving parts
- 25A fuse within 25cm of power on the positive line
- Strain relief on tether and all cables
- No sharp edges on the rovo and zip-ties covered with duct tape



