

2011-2012

# WATER RAPTORS



## Air force Academy High School, Robotics Team 2012 Chicago, Illinois

The Water Raptors will travel 1,154.9 mi to the MATE International Competition in Orlando, Florida. This is our second year competing in the MATE ROV competition. Last year we attended the International Competition and have five returning members from that team.

**CEO:** George Onefre (17, Junior)

**CFO:** Alicia Alvarez (16, Sophomore)

**Government & Regulatory:** Dionte Collins (16, Sophomore), London Westly (15, Freshman),

**Research & Development:** Jessica Audina (14, Freshman)

**System Engineer:** George Onefre (17 Junior)

**Design Integration:** Jeffrey Bridges-Reed (16, Junior), Christopher Odor (16, Sophomore),

**Testing:** Kevin Estrella (17, Junior), Carlos Ortiz (18, Junior), Christopher Odor (16, Sophomore),

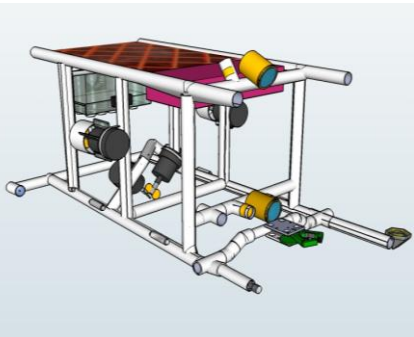
**Operations:** Mario Rios(17, Junior), Alicia Alvarez(16, Sophomore)

**Media Outreach:** Jessica Audina(14, Freshman), Ayana Cochran(15, Freshman)

**Engineers:** Heidi Herrera(15, Freshman), Kitty Lai(15, Freshman), John Paul Nelson(16, Junior) Moshe Brown(15, Freshman), Louis Zarycki(14, Freshman), Isaiah Moore(15, Freshman)

## ROV Model: WATER RAPTOR I

The primary materials used in the construction of the Water Raptor is PVC and love.



**COST:** \$2114.46 USD

**ROV Dimensions:** 1.0x1.0x1.0 ft (Main Frame)

**Attachments:** Compass, Magnet, Fluid Extraction System, and Robotic Claw

**Weight:** 14.33 lbs

**Safety Features:** on/off switch, removable tether, fuse, motor encasement

**Special Features:** Gripper arm, Vectored thrusters, Ducted thrusters, NXT motor control system