# **CARROLLTON HIGH SCHOOL**



## **SPECS SHEET**







Venkata Koppireddy, Mason Scoville, Tanya Aggrawal, Christian Long, and William Haley Not pictured: Jake Preston (L to R)

9th Grade:	10th Grade:	11th Grade:
Christian Long: Co-pilot/CFO and Design Integrator (Returning Member)	Tanya Aggrawal: Marketing and Media Outreach (New Member)	Elicia Salgado: Government and Regulatory Affairs, Engagement Affairs (Returning Member)
William Haley: Fundraising and Testing (New Member)	Mason Scoville: R & D and ESG Research (New Member)	Venkata Koppireddy (V): CEO, and engineering (Returning Member)
		Jake Preston: Pilot and engineering (New Member)

## **Safety Features**

- a. 25 amp fuse protection on power circuits (x2)
- b. All connections soldered and protected with heat shrink
- c. No exposed or loose wiring—everything routed and shielded
- d. Onboard kill switch for emergency shutoff and reboot

## **Specifications**

- a. Height: 15 in (38.1 cm) b. Width: 16 in (40.6 cm) c. Length: 21 in (53.3 cm)
- d. Weight: 7 kg

#### **Technical Features**

- a. Modular octagonal design for motor and claw positioning
- b. Waterproof XT90 and Anderson Powerpole connector system
- c. 3D-printed motor guards for safety and component protection
- d. Four Blue Robotics T200 thrusters providing 5 degrees of movement
- e. Custom servo-powered claw centered beneath the brain for balance and visibility
- f. Blue Robotics clear electronics enclosure with heat-shrink sealed internal wiring
- g. Frame made from lightweight black plexiglass for strength and ease of fabrication

#### **Special Features**

- Octagonal layout enables precise motor and payload tool placement
- Reused plexiglass for sustainable construction
- Servo-based claw simplifies control while reducing power consumption and mechanical failure risk
- Tilting camera mount allows better viewing angles and task visibility
- Easily accessible, pit-stop style wiring layout inside enclosure for fast diagnostics

### **Company Specs**

Trojan Triremes, Carrollton High School Carrollton, Georgia; United States Distance traveled to MATE Dauphin Island Regional-338 miles

## **ROV Specs**

ROV Name: LongShot 2.0 Build Type: Newly built ROV

Time spent working on robot: 3 months (1095 hours)

Total Cost: \$3,377.48