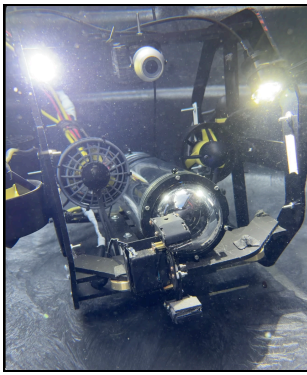




Longshot 3.0

CARROLLTON HIGH SCHOOL

SPECS SHEET



Left to right: Jake, Omar, Aaron, Joel, Christian, Mason, Austin

Team Members:

- Richard Ashlock** (Grade 11). *CEO, Electrical Systems, Project Management.* 1st Year.
Christian Long (Grade 10). *CFO, Co-Pilot.* 3rd Year.
Jake Preston (Grade 12). *Pilot Engineering.* 2nd Year.
Elicia Salgado (Grade 12). *Safety Officer.* 5th Year.
Omar DeJesus (Grade 12). *Electrical Systems, Software Engineer.* 1st Year.
Mason Scoville (Grade 11). *Engineering, CAD Design, Lead Tether.* 2nd Year.
Joel Nunez Gusman (Grade 11). *Social Media, Marketing.* 1st Year.
Austin Loolen (Grade 11). *Claw Specialist, Float Design.* 1st Year
Allie Ashlock (Grade 10). *Social Media, Marketing.* 1st Year.

Safety Features

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

ROV Specs:

ROV Name: LongShot 3.0
 Build Type: Newly built ROV
 Time spent working on robot: 5 months (1264 hours)
 Total Cost: \$3475.00

Specifications

- Height: 15 in (38.1 cm)
- Width: 16 in (40.6 cm)
- Length: 21 in (53.3 cm)
- Weight: 9.5 kg

Company Specs:

Trojan Triremes, Carrollton High School
 Carrollton, Georgia; United States
 Distance traveled to Fisheries and Marine Institute:
 Traveled 2596 Miles

Technical Features

- Modular octagonal design for motor and claw positioning
- Waterproof XT90 and Anderson Powerpole connector system
- Custom 3D-printed motor guards for safety and component protection
- SIX Blue Robotics T200 thrusters providing all degrees of movement
- Custom servo-powered claw centered beneath the brain for balance and visibility
- Blue Robotics clear electronics enclosure with heat-shrink sealed internal wiring
- 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 with wide angle camera
- Easily accessible, pit-stop style wiring layout inside enclosure for fast diagnostics