

## ROV HORNET SPEC SHEET

### COMPANY SPECS

Company: SFROBOTICS (9th Year)  
Team Name: Mariner Mayhem  
City: St. Francis, WI  
Home Country: USA  
Distance to World Championship: 673 miles



(CAD sketch and images courtesy of Emmitt Esselstrom)

### SFROBOTICS COMPANY PROFILE



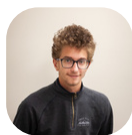
#### Andre Moreno

- 7th Year - Senior (2024)
- 2024 Career Goal: Computer Science
- Team Role: Software/ ROV Pilot



#### Desiree Halsey

- 3rd Year - Senior (2024)
- 2024 Career Goal: Physical Therapist
- Team Role: CFO / Technical Writer



#### Emmitt Esselstrom

- 5th Year - Junior (2025)
- 2024 Career Goal: Robotics Engineer
- Team Role: CEO/ Mechanical Engineer



#### Brady Thorne

- 2nd Year - 8th Grade (2028)
- 2024 Career Goal: Mechanical Engineer
- Team Role: Build/ Team Support



#### Cole Cushing

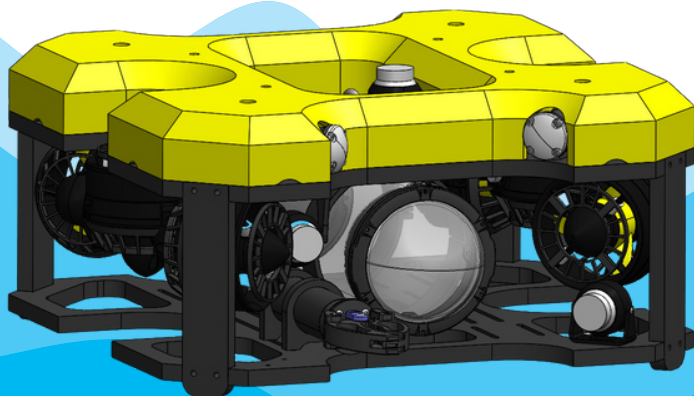
- 2nd Year - 8th Grade (2028)
- 2024 Career Goal: Mechanical Engineer
- Team Role: Build / Team Support / CAD

**Mentors:** Peter Graven and Luther Esselstrom

### ROV SPECS

ROV NAME: ROV HORNET  
Team Name: Mariner Mayhem  
Size: 43.8cm x 43.8cm x 21.6cm  
Weight: 11kg  
Total Estimated Cost: \$5700.50

- **Safety Features:** Safety Features: MATE approved thrusters (encased), 25A in-line fuse, slightly positive buoyancy, LED lights, water leakage sensor, strain relief on tether, yellow nylon tether sheathing, ROV heartbeat and safety labels.
- **Special Features:** rotating gripper, lightweight, small size, fast, connected camera system, and a servo controlled camera
- **Hours Spent on ROV:** 7 hours x 10 weeks (70 maximum involvement hours per person)  
Team did not meet the maximum hours possible.



(CAD sketch and images courtesy of Emmitt Esselstrom)

### ACKNOWLEDGEMENTS

SFROBOTICS would like to thank Kingsport Aquatic Center for hosting the MATE ROV World Championship. SFROBOTICS would like to thank JetCuts, BigRep and COEX in the manufacturing of ROV components. COEX for material donation and our financial supporter - the St. Francis Public School District.