roboboat

POWERED BY **robonation**

WHAT IS ROBOTBOAT?

RoboBoat is where bold ideas leave the drawing board and hit the water. This program challenges international universities and top high school students to design, build, and test Autonomous Surface Vehicles (ASVs).

Built by students, powered by ingenuity. ASVs take on real-world challenges, from obstacle avoidance to precision navigation, mirroring the complex tasks faced by the maritime industry.

RoboBoat is a global community of innovators, industry leaders, and educators—shaping the future of autonomous maritime systems and the next generation of talent.

This is RoboBoat.

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TEAMS OF 2026

37 TEAMS

13 NEW TEAMS

6 TASKS

**10 COUNTRIES
11 U.S. STATES
& TERRITORIES**

Advancing Science, Technology, and Art
San Diego, California, USA

AGH University of Krakow
Krakow, Malopolska, Poland

Adana Alparslan Türkeş Science and Technology University
Adana, Sarıçam, Türkiye

Alanya Alaaddin Keykubat University
Antalya, Alanya, Türkiye

Beaver Country Day School
Chestnut Hill, Massachusetts, USA

Benedict College
Lexington, South Carolina, USA

Calibrator-Z
Dhaka, Bangladesh

Cornell University
Ithaca, New York, USA

Dreams of Bangladesh
Dhaka, Dhaka Division, Bangladesh

Embry-Riddle Aeronautical University
Daytona Beach, Florida, USA

Florida Atlantic University
Boca Raton, Florida, USA

Gdańsk University of Technology
Gdańsk, Pomorskie, Poland

Georgia Institute of Technology
Atlanta, Georgia, USA

Humber Polytechnic
Etobicoke, Ontario, Canada

Institut Teknologi Sepuluh Nopember
Surabaya, East Java, Indonesia

James Martin High School
Arlington, Texas, USA

Konya Technical University
Konya, Selçuklu, Türkiye

Konya Teknik Üniversitesi
Konya, Selçuklu, Türkiye

Kyushu Institute of Technology
Fukuoka, Japan

Lake Superior State University
Sault Ste Marie, Michigan, USA

Massachusetts Institute of Technology
Cambridge, Massachusetts, USA

Memorial University of Newfoundland
St. John's, Newfoundland, Canada

Military Technical College
Cairo, Egypt

Navier USN
Borre, Vestfold, Norway

Piri Reis University/PRU-İDA
Istanbul, Tuzla, Türkiye

Polynomial Institute
Dhaka, Bangladesh

Queen's University
Toronto, Ontario, Canada

Tech Autocrats
Dhaka, Bangladesh

Tecnológico de Monterrey
Monterrey, Nuevo León, Mexico

Turkish Naval Academy
Istanbul, Tuzla, Türkiye

Universitas Sebelas Maret
Surakarta, Central Java, Indonesia

University of Central Florida & Hagerty High School
Orlando, Florida, USA

University of Louisiana at Lafayette
Lafayette, Louisiana, USA

University of Michigan
Ann Arbor, Michigan, USA

University of Pittsburgh - Pittsburgh Electric Propulsion
Pittsburgh, Pennsylvania, USA

University of Puerto Rico Mayagüez
Calle Post, Mayagüez, Puerto Rico

1 Evacuation Route & Return

Entry & Exit Gates

The ASV must drive itself through two gates made of red and green buoys without touching them. *This task is mandatory to start a run and to qualify for semi-finals and finals.* This task demonstrates **basic autonomous control** and **sensing capabilities**.

Debris Clearance 2

Navigation Channel
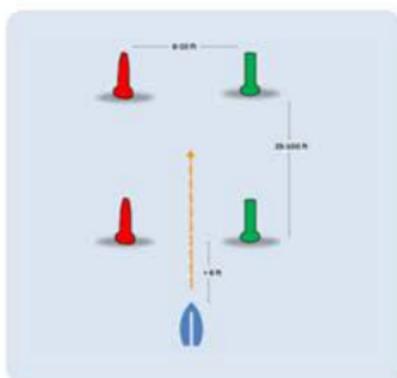
The ASV maneuvers through a simulated post-storm debris field, **avoiding obstacles** while navigating the path. Red markers indicate *hazards* the ASV must **avoid** and **report,** while green markers indicate *survivors* the ASV must **circle** and **report**, **simulating a rescue**, before exiting the channel.

# 3 Emergency Response Sprint

Speed Challenge

This task tests **speed**, **decision-making**, **propulsion**, and **maneuverability**. The ASV passes through the gate marked by one green and one red buoy, circles the yellow buoy, and exits the gate as quickly as possible.
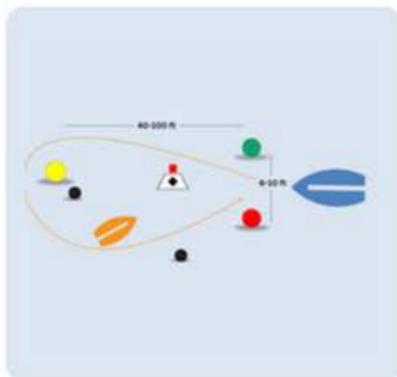
4 Supply Drop

Object Delivery

The ASV delivers *supplies* to anchored *rescue vessels* throughout the course, spraying water onto a triangular target on yellow boats and delivering racquetballs to a plus-shaped target on black boats. This task tests **target detection** and precise **payload delivery**.

5 Navigate the Marina

Docking
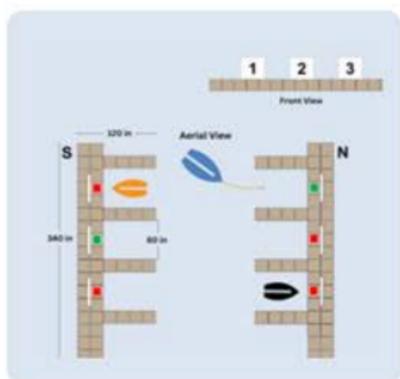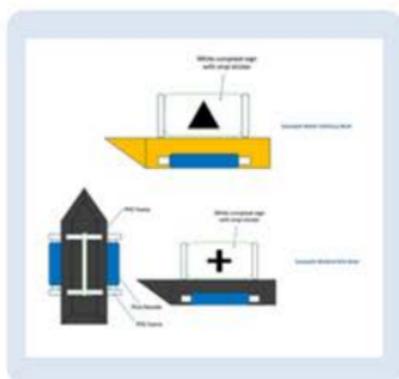
The ASV enters the marina and **docks** in any available slip marked by a green indicator. *Additional points are awarded if the ASV chooses the slip with the lowest available number.*

6 Harbor Alert

Sound Signal

This task simulates an **emergency maritime scenario** where autonomous systems **respond in real-time** to cues that must override other mission objectives. A sound signal will blast 1 or 2 blasts to alert the ASV to abandon its current task, and **report** to a designated zone. 1 blast sends the ASV to the emergency zone (speed challenge), while 2 blasts sends it to the marina (docking).