

teame

January 10, 2025

agenda

Edit your name to "**Name | Team Name**" E.g., Laverne | University of RoboNation



COMPETITION

Introduction to the competition, including the teams, staff, and timeline.

EVENT DETAILS

Overview of the event, including schedule, hotel, testing, and shipping.

TASKS & SCORING

Breakdown of the tasks and scoring for the autonomy challenge.







30 teams

9 first-years 21 returners

1 champ

6 tasks



roboff Staff



BILL | TECHNICAL



JULIANNA | COMPETITION



CHERI | LOGISTICS



YADIRA | LOGISTICS



JOE | TECHNICAL



ALICIA | MARKETING



ALISON | REGISTRATION



LAVERNE | COMMUNITY



EBBIE | CANINE COORDINATOR



the teams



FLORIDA ATLANTIC UNIVERSITY



KYUSHU INSTITUTE OF TECHNOLOGY



TECNOLÓGICO DE **MONTERREY**



GDAŃSK UNIVERSITY OF TECHNOLOGY



LAKE SUPERIOR STATE UNIVERSITY



THE UNIVERSITY OF **TEXAS AT DALLAS**



ADVANCING SCIENCE TECHNOLOGY AND ART



GEORGE MASON UNIVERSITY



MASSACHUSETTS INSTITUTE OF **TECHNOLOGY**



TURKISH NAVAL ACADEMY



AGH UNIVERSITY OF KRAKOW



HACETTEPE UNIVERSITY



MEMORIAL UNIVERSITY OF NEWFOUNDLAND



UNIVERSITAS SEBELAS MARET



BAHRIA UNIVERSITY



HUMBER POLYTECHNIC



MILITARY TECHNICAL COLLEGE



UNIVERSITY OF CENTRAL **FLORIDA * HAGERTY HIGH** SCHOOL



BAYLOR UNIVERSITY



INSTITUT TEKNOLOGI SEPULUH NOPEMBER



NAVIER USN



UNIVERSITY OF LOUISIANA AT LAFAYETTE



CORNELL UNIVERSITY



JAMES MARTIN HIGH SCHOOL



QUEEN'S UNIVERSITY



UNIVERSITY OF MICHIGAN



EMBRY-RIDDLE AERONAUTICAL UNIVERSITY



KARADENIZ TECHNICAL UNIVERSITY



SOUTH DAKOTA MINES



UNIVERSITY OF PUERTO RICO-MAYAGÜEZ



30 TEAMS 10 COUNTRIES 9 FIRST-YEAR TEAMS



competition overview







competition timeline

Jan 20 - Event Submissions
Deadline

Jan 27 - Design Documentation Deadline

Feb 11 - TeamTime #2

JANUARY 2025

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FEBRUARY 2025

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9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	



pre-competition deliverables



Technical Design Report

Write a report describing the teams' design principles and competition priorities.

Max: 6 pages

Team Website

Website documents your team, system design, and competition approach, evaluated on (1) Content and (2) Quality.

Team Video

Prepare a video that is a creative showcase highlighting the teams' personality, mission and culture.

Max: 3 minutes

Submit in registration portal: robonation.smapply.org/acc/l/



TIP: Review your submission from the perspective of a judge.

in-person deliverables

Design Strategy Presentation

Prepare a
presentation with a
concise description
of your team's
strategic vision, and
how the vehicle
design compliments
your goals.

Time: 20 min.

System Assessment

Prepare your ASV to be inspected by judges to assess technical design, technical innovation, and craftsmanship of the design.

Time: 30 min.

TIP: Define your team's competition strategy and how that influenced your design choices, testing, and overall approach.



Delivered in-person during the competition:

March 4-6

event details





schedule overview

Daily Meetings

O745 Morning MtgStarting Tuesday

1715 Evening MtgStarting Monday

Venue Hours

O730 Venue OpensStarting Tuesday

1800 Venue ClosesNot including Sunday

Monday afternoon

Day 1

1300 Start

Team Check-in Orientation Safety Checks

2000

Overnight Testing

Tuesday -Thursday

Day 2-4

0800 Start

Practice/Qualifying Presentations Assessments

2000

Overnight Testing

Friday -Saturday

Day 5-6

0800 Start

Practice Semi-Finals Rounds

2000

Overnight Testing

Sunday

Day 7

0800 Start

Finals Round 1 & 2

1800

Awards



event hotel & overnight testing

Ameniti Bay Sarasota Hotel & Suites

Booking Information:

- Hotel booking link to be shared on Discord
- Event Rate: \$244 + 13% tax + \$4.95 green fee
- Booking deadline: February 2

Overnight Pool Testing:

- Hours: 10pm 2am, starting March 3
- Open to all RoboBoat teams
- Follow event pool rules to make sure we can come back!





shipping tips

START PLANNING NOW!

- Equipment may be shipped to the event hotel (Ameniti Bay Sarasota).
- IMPORTANT DATES
 - Shipment Arrival February 24 (no earlier)
 - Crate Storage Feb 24 March 3 / March 9 12
 - Outbound Shipping March 9 12
- Shipping Guidelines
- Outbound shipping Ensure that outbound shipping is arranged before you get onsite!
- Batteries are exceptionally difficult to ship.



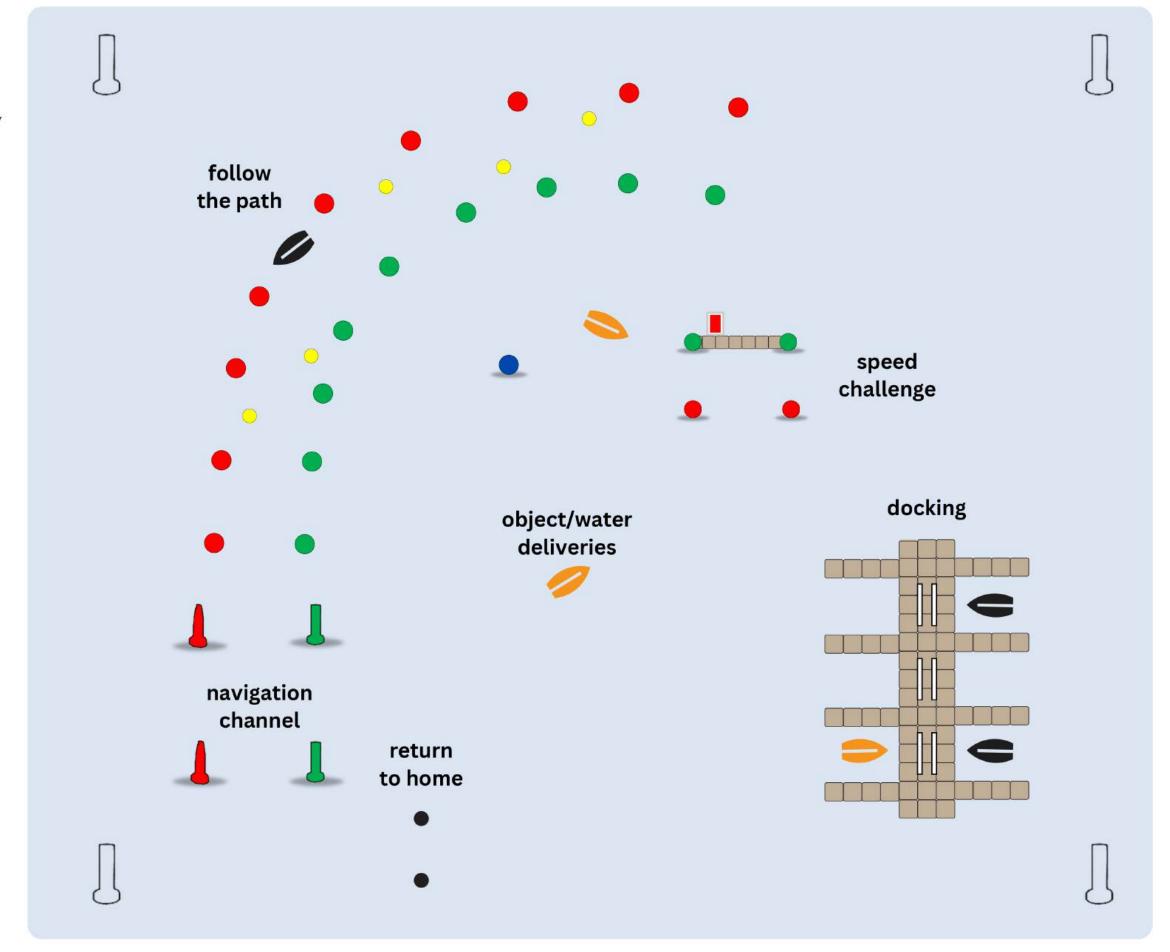


tasks & Scoring





task overview





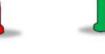
tasks

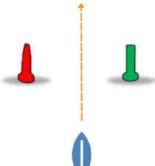
Mandatory Check



Safety Check

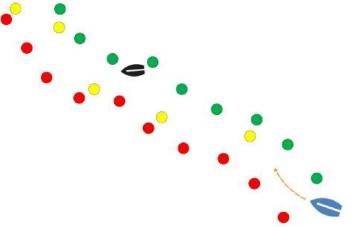
Task 1 Navigation Channel





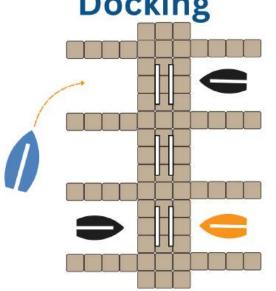
ASV maneuvers through both gates. Required to start Semi-Finals / Finals run.

Task 2 • Follow the Path



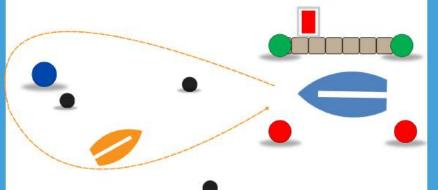
ASV maneuvers path, avoids striking any buoys, and counts obstacle buoys to report after pathway is complete.

Task 3 Docking



ASV locates and docks in the unoccupied docking bay with the correct color of the day.

Task 4 Speed Challenge



ASV enters the holding bay and observes the light panel. Upon a green light, the ASV completes the maneuver as quickly as possible.

Task 5 Object/Water Delivery



Throughout the course, the ASV locates black vessels to deliver racquetballs to and orange vessels to deliver water to.

Task 6 Return to Home







ASV returns to two black buoys during a Semi-Finals / Finals run to end the run.



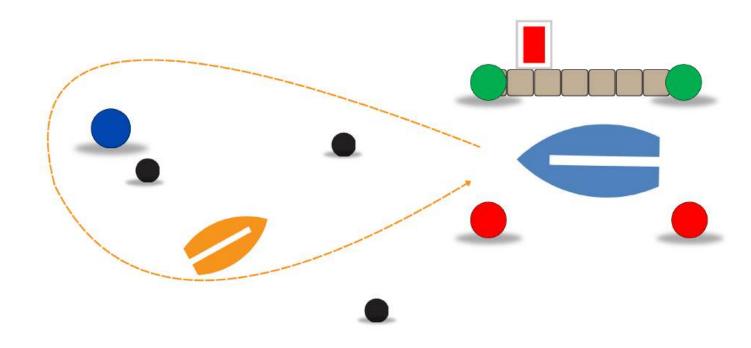
task updates

Task 4 Speed Challenge



Light panel example:
The power source, solar panels, will be visible.

(Note: light panel will not be mounted on tower)

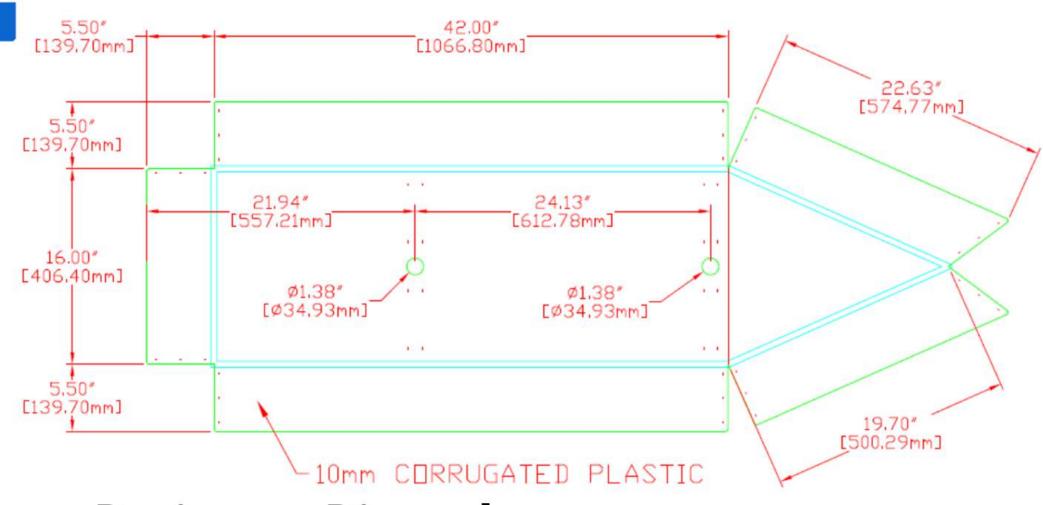


Behavior change:
No reporting on black buoys in this task.

task updates

Task 5
Object and Water Delivery





Design on Discord

scoring updates

Follow the Path

- bonus points for navigating all 10 gates in sequence
- no more limit on point deductions for striking buoys

Docking

- points only awarded when docking in <u>unoccupied</u> bay
- points awarded for docking forward / backward

Speed Challenge

station-keeping at the starting line

Object & Water Delivery

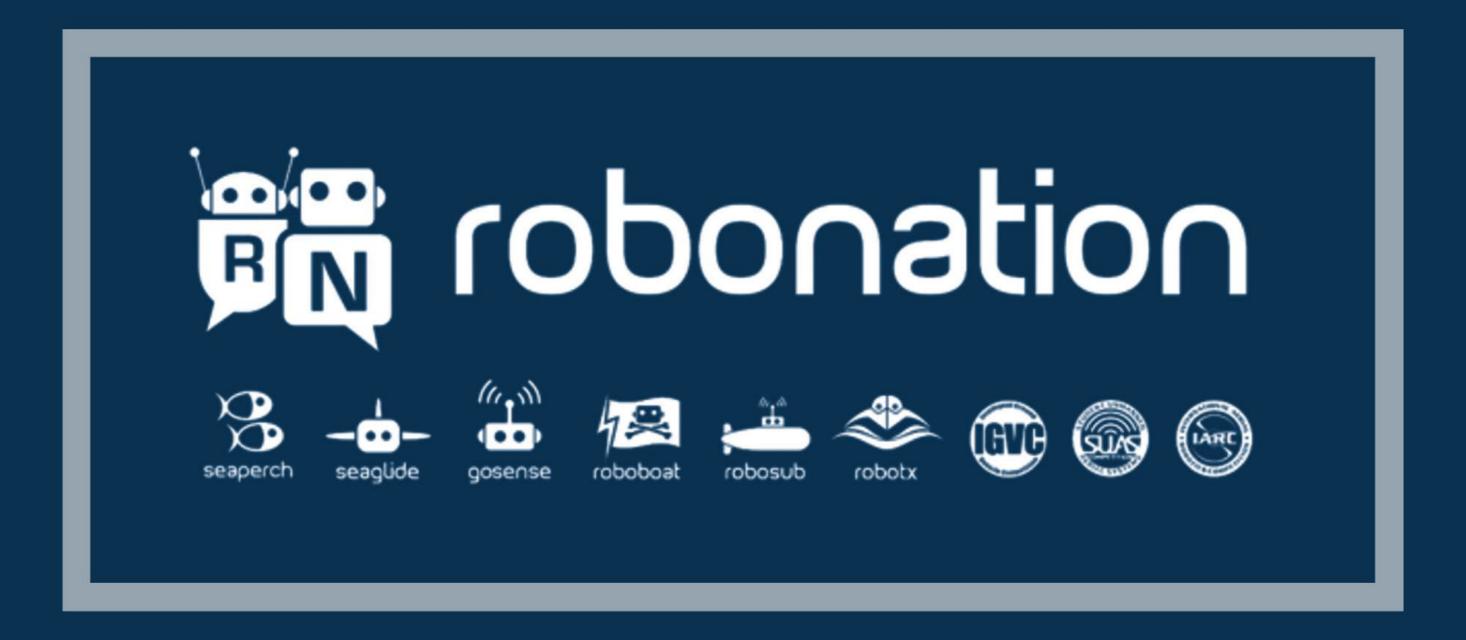
points increase the more boats you find and act on

questions?

- robonation.org/discord
- competitions@robonation.org







RoboNation is a 501c3 nonprofit organization whose mission is to provide a pathway of hands-on educational experiences that empower students to find innovative solutions to global challenges. Working together with the industry, research and educators, we have grown to include over nine student competitions and programs and engage more than 250,000 students per year.

For more information contact competitions@robonation.org