

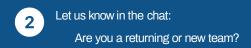
TeamTime Friday, October 28, 2022 | 12:00 Noon Eastern Time (US & Canada)













Team Handbook Version 1 Released

AGENDA

[12.00-12.05]	Welcome & Introductions
[12:05-12:10]	Dates, Theme & Venue
[12:10-12:20]	Eligibility, Competition Structure
[12:20-12:35]	Tasks
[12:35-12:45]	Timeline (Registration, Due Dates, Etc.)
[12:45-13:00]	Questions?

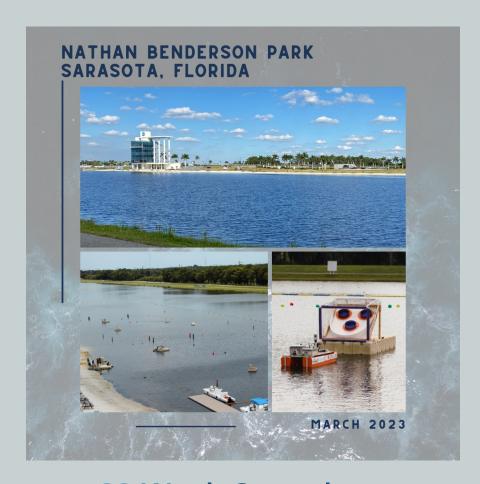












20 Week Countdown







Julianna Smith
Program Manager



Laverne Imori
Community Engagement
Coordinator



Lindsey Groark

Program Director



Cheri Koch Senior Events Manager









Autonomy Challenge

Build an ASV to showcase autonomous performance.



Design Documentation

Prepare documentation showcasing ASV design and competition strategy.

Design Documentation

- Team Website
- Technical Design Report
- Competition Strategy Video
- Testing Plan
- Design Presentation







All teams must build an ASV to compete; only one vehicle in the competition.



Teams must be comprised of:

- 75% or more full-time students
- 25% or less alumni



Most team members must be college or high school students. Teams may also include middle school students. Interdisciplinary teams are encouraged.



Minimum of three (3) team members.





NEW: First-Year Teams

- First-year teams are eligible to participate without bringing an ASV to competition.
- First-year teams are expected to participate in Design Documentation and send representative(s) to the on-site event as a learning experience.
- These teams include those who've never competed at RoboBoat before, or if your team has been out of the competition for 1 year.





RoboBoat 2023

Task Overview



Autonomy Challenge

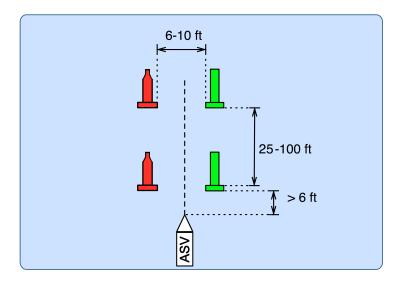
Introduction to the Tasks





Task 1: Navigate the Panama Canal

ASV navigates through two pairs of red and green buoys, without touching the buoys.

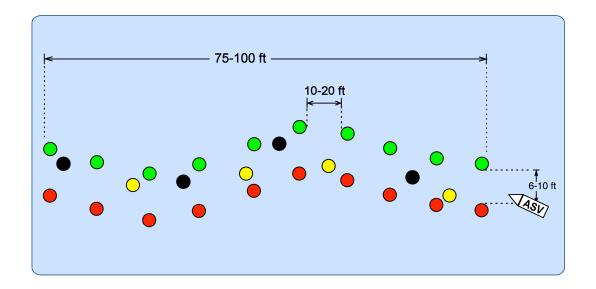






Task 2: Magellan's Route / Count Manatees & Jellyfish

ASV maneuvers through pathway, staying within the red and green buoys, and avoiding contact with obstacles.

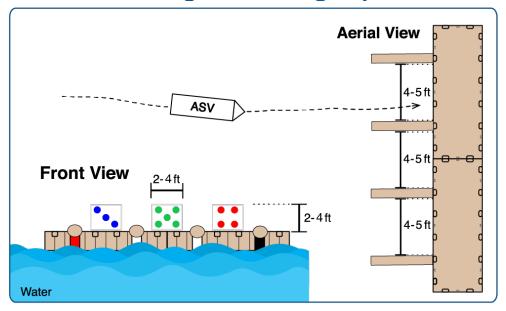






Task 3: Beaching & Inspecting Turtle Nests

ASV locates and maneuvers into an assigned docking bay.

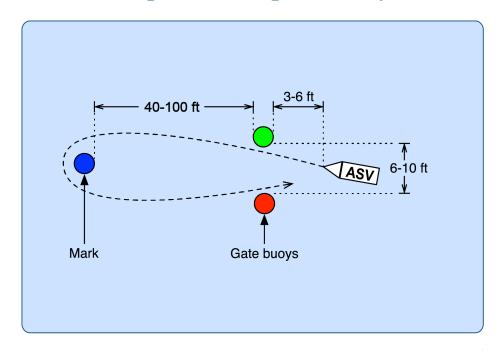






Task 4: Northern Passage Challenge

As quickly as possible, ASV enters through red and green buoys, goes around the blue buoy, and exits through red and green buoys.

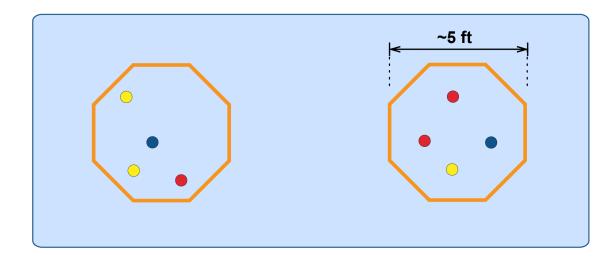






Task 5: Ocean Cleanup

ASV detects underwater pinger designating the correct area to collect racquetballs. The collected racquetballs can be used in Task 6 - Feed the Fish.

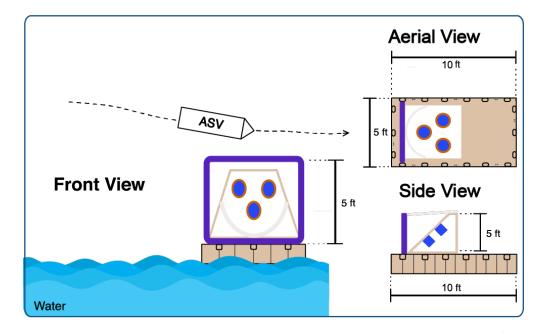




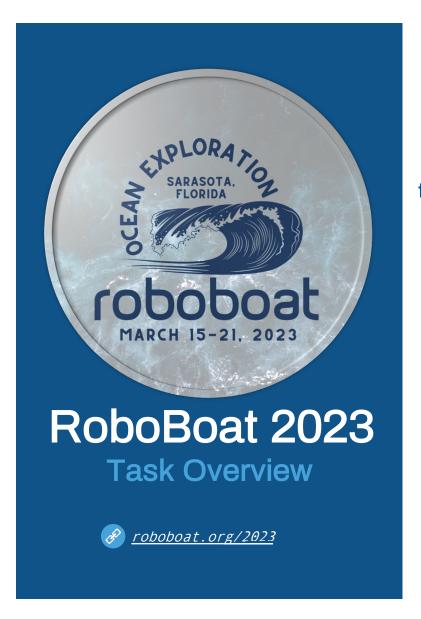


Task 6: Feed the Fish

ASV locates the purple frame and deploys racquetballs through frame into any of the three buckets.

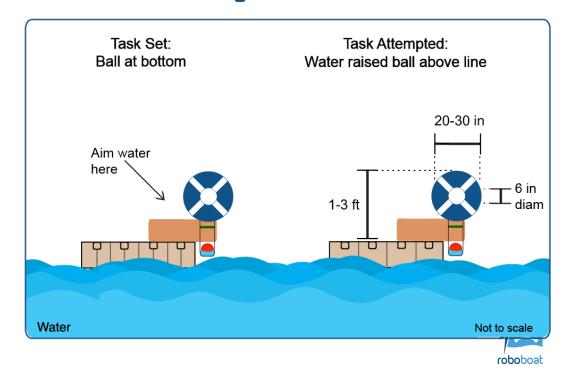






Task 7: Ponce de Leon / Fountain of Youth

ASV locates target and delivers water through center, filling up the tube with enough water to raise the ball to the green line.

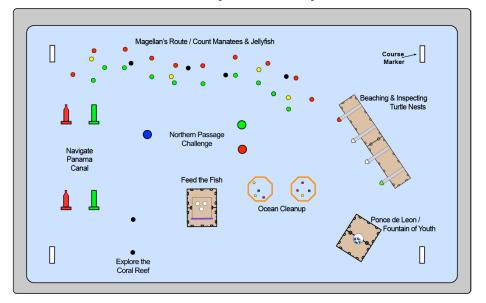




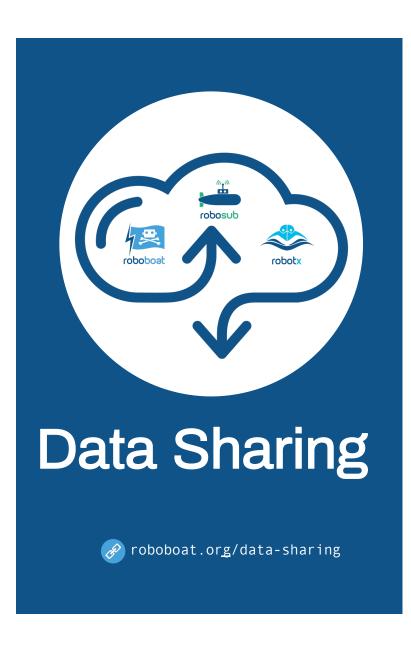
Task 8: Explore the Coral Reef

ASV returns through the gate created with two black buoys after attempting tasks.

Preliminary Course Layout







What is Data Sharing?



Centralized Repository



Community Driven



Competition focused

Vision
Acoustics
Mechanical Designs
Electrical Designs



DATA FOR ALL TEAMS



LARGE DOMAIN OF DATASETS



BETTER PLATFORM FOR NEW TEAMS

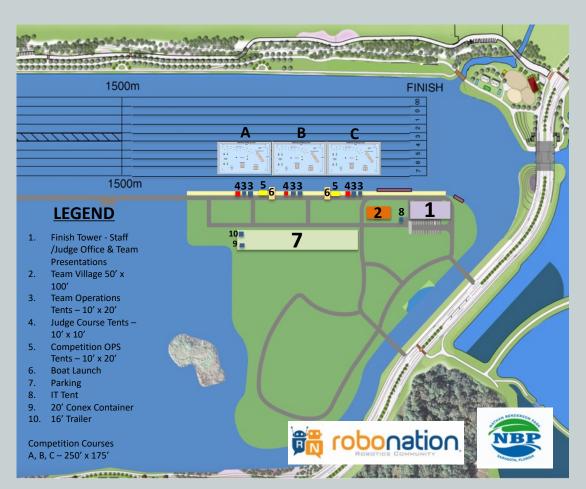


RoboBoat 2023

Preliminary Venue Layout



roboboat.org/2023







How to Get Started:

- ☐ Team Handbook
- Registration
- ☐ ASV Design Process
- ☐ TeamTime Meetings





Registration

October 26 – December 16 Fee is \$750 USD

- roboboat.org/2023
- BOGO Teams
 - Contact
 autonomy@robonation.org if
 you did not receive email

Note: No Intent to Compete or Early Bird Registration





Date/Deadline	Event
25 October – 16 December 2022	Registration
25 January 2023	Full Refund Cancellation Deadline
27 January 2023	Pre-Competition Deadlines:
	Team Information
	On-Site Requirements
03 February 2023	Pre-Competition Deadlines:
	 Design Documentation
	 Optional Community & Outreach
05 February 2023	50% Refund Cancellation Deadline
15 – 21 March 2023*	RoboBoat 2023

^{*} These dates are tentative and are still being finalized with the venue.







RoboBoat 2023 TeamTime Meetings

Friday, October 28, 2022 @ 7:00 PM Eastern Time (US & Canada)

- o Kickoff Competition Overview & Task Ideas
- o Open to all interested teams.
- o Click on this link to register.

January Meeting (pending)

Open to registered teams.

February Meeting (pending

o Open to registered teams.





GOT QUESTIONS?

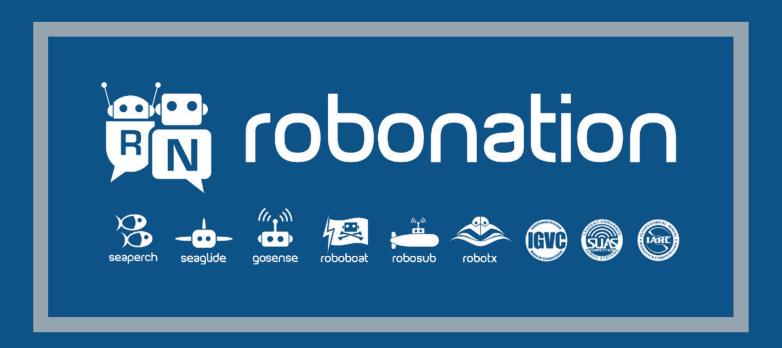




HAPPY HALLOWEEN!







RoboNation is a 501c3 nonprofit organization whose mission is to provide a pathway of handson 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 university-competitions@robonation.org