

March Community Hour Notes

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1. Teams Represented

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ROBOBOAT TEAMS

- Diponegoro University
- Institut Teknologi Sepuluh Nopember
- Sebelas Maret University
- Team Inspiration
- Tecnológico de Monterrey
- Tel Aviv University
- Troop 243
- Universitas Indonesia
- University of Michigan
- University of Louisiana at Lafayette
- University of Puerto Rico at Mayagüez

ROBOSUB TEAMS

- Ain Shams University
- Alexandria University
- Arizona State University
- California State University, Los Angeles
- Desert Wave
- École de Technologie Supérieure
- Embry-Riddle Aeronautical University
- Federal University of Santa Catarina
- Harvey Mudd College
- KJ Somaiya College of Engineering
- McGill University

2. Agenda & Notes

2.1. Welcome [12:00-12:10]

[12:00-12:10] Welcome

- [12:10-12:15] 2021 Competition Season Overview
- [12:15-12:25] Networking
- [12:25-12:45] RoboBoat, RoboSub and RobotX Details
- [12:45-12:55] Questions?

ROBOSUB TEAMS (CONT.)

- Montana State University
- Norwegian University of Science and Technology
- Nirma University
- Palomar College
- San Diego City College
- San Diego State University
- Syracuse University
- Team Inspiration
- Tecnológico de Monterrey
- Texas A&M University
- The Ohio State University
- Troy High School NJROTC
- Universite du Quebec a Trois-Rivieres
- University of Colorado at Boulder
- University of Maryland
- University of Michigan
- University of Puerto Rico at Mayagüez/RUMarino
- University of Waterloo
- University Prep Science & Math High School
- Vellore Institute of Technology
- Wroclaw University of Science and Technology





2.2. 2021 Competition Season Overview [12:10-12:15]

RoboBoat

- Vehicle: Autonomous Surface Vehicle (ASV)
- Dates/Location: March June, Online
- **Eligibility:** High School, Undergraduate, Graduate
 - Encourage engaging alumni/industry members, can be up to 25% of team
- **Registration:** <u>roboboat.org/2021/register</u>
- More Information: <u>roboboat.org/2021</u>

RoboSub

- Vehicle: Autonomous Underwater Vehicle (AUV)
- Dates/Location: March August, Online
- Eligibility: High School, Undergraduate, Graduate
 - Encourage engaging alumni/industry members, can be up to 25% of team
- **Registration:** <u>robosub.org/2021/register</u>
- More Information: robosub.org/2021

Maritime RobotX Challenge

- Vehicle: Multi-Domain Autonomous Maritime System of Systems
- Dates/Location: November 11-17, Sydney, Australia
- Eligibility: Undergraduate, Graduate

 Encourage engaging alumni/industry members
- **Registration:** Coming soon!
- More Information: <u>robotx.org/2022</u>

2.3. Networking [12:15-12:25]

Participants broke out in breakout rooms of 4-5 to introduce themselves and network.

Have T-shirt design ideas you want to share? Upload them at the links below!

- RoboBoat: roboboat.org/t-shirts
- RoboSub: <u>robosub.org/t-shirts</u>

Teams are welcome to submit multiple ideas. Half-baked or full designed ideas welcome. All submissions are due on **May 09, 2021**. Results will be shared at the **May Community Hour**.

2.4. RoboBoat, RoboSub, and RobotX Details [12:25-12:45]

RoboBoat / RoboSub

- **Submissions:** 3 required submissions
 - Skills Video(s) NEW
 - Technical Design Report
 - o Website

<u>Click here for RoboBoat submission guidelines.</u> <u>Click here for RoboSub submission guidelines.</u>

Proposed adding a fourth and optional submission: **OPTIONAL Demonstration Video** *(next page)*





Proposed adding a fourth and optional submission: OPTIONAL Demonstration Video

- Showcase vehicle behaviors
- Not scored
- In-water OR simulation environment

Optional Demonstration Video Poll Results from Meeting:

• Is this something your team would like to have this year?

- **54%** -- Yes!
- **32%** -- Need more information
- 14% -- Sounds like a good idea, but we won't be able to submit
- Would you be showcasing your vehicle in the water or a simulation environment?
 - 19% -- Water
 - 22% -- Simulation Environment
 - 49% -- Combination
 - 10% -- Neither
- If you have a simulation environment, would you consider open-sourcing for other teams to use?
 - 28% -- Yes!
 - 32% -- Our team is considering
 - 16% -- Not this year
 - 25% -- Don't have a simulator
- **Registration:** March 29 April 30
 - \$300 Early-Bird [March 29 April 04]
 - \$400 Registration [April 05-30]
 - Payment Options: Credit Card, Electronic Payment (ACH or Bank Wire Transfer)
- Data Sharing: Soft launch for 2021 season
 - NEW requirements collected in registration:
 - Team Generic Email → to be used to create Box account (Data Sharing platform)
 - Team Acronym (10 characters or less) → to be used to create folders within the Data Sharing platform
- Cancellations:
 - RoboBoat: <u>roboboat.org/cancellation-policy</u>
 - Before May 31 100% refund
 - Before June 25 50% refund
 - RoboSub: <u>robosub.org/cancellation-policy</u>
 - Before June 30 100% refund
 - Before August 06 50% refund

All cancellation requests must be submitted in the official Cancellation Form.

RobotX 2021-2022 (next page)





RobotX 2021-2022

- WAM-V Applications: Opened on April 3! Accepting proposals from interested teams, to have the chance to receive the award of a WAM-V platform.
 - Apply here: <u>robotx.org/apply</u>
 - Applications close April 30
- 2022 Maritime RobotX Challenge
 - Dates/Location: November 11-17, Sydney, Australia
 - **Eligibility:** Undergraduate, Graduate
 - Encourage engaging alumni/industry members
 - **Registration:** Coming soon!
 - More Information: robotx.org/2022
- Data Sharing
 - Soft launch for 2021-2022 season
 - NEW requirements collected in registration:
 - Team Generic Email \rightarrow to be used to create Box account (Data Sharing platform)
 - Team Acronym (10 characters or less) → to be used to create folders within the Data Sharing platform

2.5. Questions? [12:45-12:55]

* Email: <u>university-competitions@robonation.org</u>

- * Forum: <u>robonationforum.vbulletin.net</u>
- * Topic ideas? <u>robonation.org/community-hour</u>
- * Future community hours? robonation.org/community-hour

Community Hour Questions

Is this meeting recorded?

• Community Hours are recorded for reporting and archive purposes. The slide presentation and notes are published on <u>robonation.org/community-hour</u> following the sessions.

RoboBoat/RoboSub General Questions_

When is the early-bird deadline? (RoboBoat/RoboSub registration)

• The early-bird registration closes on April 04. All early-bird payments are due on April 04.

We talked about utilizing the previous year's mission theme for the next in-person competition. Will we plan for that for RoboSub 2022? The same "Roarin' 20's" theme?

• It is under consideration! We will have to talk this internally and get back to you when we release the RoboSub 2022 Mission and Scoring document.

(RoboSub) Would the dimensions/drawings of the props be released? Like if we wanted to prepare a task, we would need some measurements for building them for practice... so would you be mentioning the dimensions for the props/images for the task?

• Yes! We will release the dimensions for the RoboSub course props, in the case any teams are interested in building them this year.





Can we still buy last year's t-shirts?

• Yes! <u>Click here for RoboBoat 2020 t-shirts.</u> <u>Click here for RoboSub 2020 t-shirts.</u>

If we participated in RoboBoat/RoboSub last year, could we get feedback on our submissions from the previous year?

• Your 2020 team lead should have received it last August, following the awards party. If you haven't received it yet or have any questions around the responses, please let us know at <u>university-competitions@robonation.org</u>.

Are you doing technical lectures during RoboBoat/RoboSub?

• We don't currently have any scheduled but are looking into finding a few amongst our 2021 sponsors! If you want to suggest any, please let us know at <u>university-competitions@robonation.org</u>.

RoboBoat/RoboSub Submission Questions_ --Skills Video(s)--

Is there any further/specific requirement for the videos?

• Yes! <u>Click here for RoboBoat submission guidelines.</u> <u>Click here for RoboSub submission guidelines.</u>

If you submit two videos, is it no more than 11 minutes per video or 11 minutes for both videos?

• 11 minute max. per video.

Is there a reason for the 2 video limit?

• Based on the length and amount of information asked for in these videos, we do not want to overload teams with too many submissions. Additionally, with a large number of teams and limited number of judges, we have to approach the number of submissions realistically with the volunteer time we have available.

Is physical testing or mission shooting a requirement or a plus?

• The purpose is not to show vehicle performance, it's focused more on explaining your approach to the design, development and testing that particular subsystem or topic. Your team will not receive additional points for physical testing.





How will teams who submit two videos be judged with those that submit one video? Do you take the average score of the two videos? The highest score?

- Each of the video categories will be score for content. Judges will have expertise in those areas. Your team won't be penalized for only submitting one video because you'll be scored against other teams that have submitted videos in that category.
- There are two components to consider when developing these 1-2 videos: (1) technical content, (2) clear and concise communication.

How are you going to compare teams that only submit one video versus two videos, when it comes to the overall score?

• Due to each team having different restrictions this past year, we will not have an overall score for RoboBoat 2021 or RoboSub 2021.

In terms of the video guidelines, I know there's different topics to choose from and there's different categories that should be addressed. One is competition strategy. Does that apply for all those topics because I can see if you choose two topics how the competition strategy could be very similar sounding.

• Each video is a standalone video, so the intent is for the videos to communicate the full message, addressing each category. Whether it is for the judges' evaluation or being used after competition to promote your team, it is not guaranteed that a viewer will watch both videos so we think it is in your best interest to address these categories to support the overall message in the video(s).

Is the idea around the video(s) to see what the progress of the boat is? Do we get a better score if we are further along and can show it in the water, more than just in simulations? Or is the idea to showcase what you have?

• To ensure fairness to all teams this year, the Skills Video(s) should convey your team's approach on how you would design your system/subsystem. If you are able to design and physically test this year, that's great! However, it will not award you additional points.

--Technical Design Report--

In section 4 of RoboBoat guidelines it says, we should describe various tests planned and/or accomplished to date, both in water and simulation. So, it's not mandatory for us to make a boat, right? We just need to explain?

• It is not mandatory to build a physical boat/sub this year. The submissions are focused on documenting your approach whether that is able to be implemented this year or just hypothetical plans.

And if we make a boat, is there any additional points for that in the technical report?

• There is not any additional points for building a physical boat/sub for this year's submissions.

Same for RoboSub, correct?

• Yes! These answers apply to RoboSub, as well.





Are scientific findings (Research contribution, performance graphs/metrics, etc.) appreciated in technical report or irrelevant?

• If it supports your approach heavily and helps the judges understand some of the decisions your team made, then yes it would help to include in your submission! If it is not relevant or does not help to communicate your rationale, then your team may consider leaving it out.

--Website--

Our team has one unified competition website that shows multiple competitions we compete in. Do you want the link to the RoboSub page or the full team website?

• We'd suggest to include the direct link to your RoboSub page. However, in the case that the judge maneuvers away or comes to your website on the home page, make sure that your RoboSub team's information is clear and easy to find.

What exactly should the website have?

Click here for RoboBoat submission guidelines. Click here for RoboSub submission guidelines.

--Optional Demonstration Video--

Could there be some sort of incentive for the optional demonstration in order to make it "feel" like a competition? Maybe free shirts for the team who demonstrates the most?

- We are taking this under consideration! Any suggested incentives can be shared with us at <u>university-competitions@robonation.org</u>.
- Another suggestion from a team: "free lidars"

Could this be something that is also shown in other deliverables? Like to show competition strategy/video?

• Yes! You are allowed to include this footage in your Skills Video(s), however, keep in mind that you still need to have clear messaging in your Skills Video(s). Consider how this footage could support the Skills Video(s)' overall message.

