

November Community Hour Notes

Table of Contents

1. Teams Represented	2
2. 2021 Season – Intent to Compete – November 1, 2020	2
2.1. <i>Welcome</i>	2
2.2. <i>2021 Season – Soft Launch.....</i>	2
2.3. <i>2021 Season Discussion – Breakout Rooms</i>	3
2.3.1. <i>Recap of 2020 Season</i>	3
2.3.2. <i>Envisioning the 2021 Season.....</i>	4
2.4. <i>Closing.....</i>	5
2.4.1. <i>Giveaways</i>	5
2.4.2. <i>Next Community Hour.....</i>	5

1. Teams Represented

ROBOBOAT TEAMS

- Embry-Riddle Aeronautical University
- Diponegoro University
- Hindustan Institute of Technology & Science
- Institut Teknologi Sepuluh Nopember
- Norwegian University of Science and Technology
- Tecnológico de Monterrey
- Tel Aviv University
- Troop 243
- Universitas Indonesia
- University of Michigan
- University of Louisiana at Lafayette

ROBOTX TEAMS

- Embry-Riddle Aeronautical University
- Nanyang Technological University

ROBOSUB TEAMS

- Alexandria University
- California State University, Los Angeles
- Cornell University
- Desert Wave
- Duke University
- École de Technologie Supérieure

ROBOSUB TEAMS (CONT.)

- Embry-Riddle Aeronautical University
- Harvey Mudd College
- Hindustan Institute of Technology & Science
- Indian Institute of Technology, Madras
- Institut Teknologi Sepuluh Nopember
- KY Somaiya College of Engineering
- McGill University
- Montana State University
- Norwegian University of Science and Technology
- San Diego City College
- San Diego Miramar College
- San Diego State University
- St. George's School
- Syracuse University
- Tecnológico de Monterrey
- Texas A&M University
- The Ohio State University
- Université du Québec a Trois-Rivieres
- University of Colorado at Boulder
- University of Michigan
- University of Victoria
- University of Waterloo
- University Prep Science & Math High School

2. 2021 Season – Intent to Compete – November 1, 2020

2.1. Welcome

What is Community Hour?

- **Who?** Competition participants (past, present, and future) from RoboBoat, RoboSub, and RobotX and RoboNation University Programs staff.
- **What?** A community-level gathering.
- **Why?** Network with members of the RoboNation community, that represent the University Competitions. Build awareness of the resources that exist and the depth of the support network. Disseminate relevant information and guidance. Create opportunity to interact with the community and ask questions.

2.2. 2021 Season – Soft Launch

Registration & Intent to Compete

- Intent to Compete: no commitment

 roboboast.org/2021

 robosub.org/2021

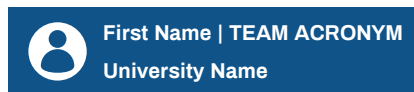
- Registration: expected release in early 2021

NEW Requirements

- **Generic email:** to be used in Data Sharing effort*
- **Team acronym** (10 characters or less): to be used in Band App and Data Sharing effort

Band App

1. Submitting the intent to compete will give your team access to the RoboBoat/RoboSub group in Band.
 - Directions included in follow-up email sent to team contact and generic email.
 - All team members are encouraged to join.
2. Account setup in Band
 - Name tag
 - First line: First Name | TEAM ACRONYM
 - Second line: University Name
 - (if multiple team members with the same first name, include first initial of last name)*



3. Turn on notifications
 - Don't miss out on important announcements and opportunities!

**More information on Data Sharing effort coming in 2021.*

2.3. 2021 Season Discussion – Breakout Rooms

For this guided discussion, individuals were broken up by groups of 6 (approximately) to discuss different presented scenarios for the upcoming 2021 competition season. The scenarios and summarized feedback are provided below.

2.3.1. Recap of 2020 Season

Seeking Feedback

- How did you benefit from the online efforts of the 2020 season?
- What could RoboNation have done differently?

Feedback Discussion (paraphrased)

- *What RoboNation did in 2020 (online efforts) is as much as could be done by RoboNation, short of the on-site competition.*
- *Live presentation via video calling.*
- *Having access to breakdown of scoring to improve future development.*
- *Is it fair for teams to share footage of vehicle (old or new) in their video? What about those that do not have access to a body of water?*
 - *Hard for RoboNation staff to label footage in video before sharing it with judges, who may not be aware when looking at a video.*
 - *Teams may be able to test individual components.*
- *Lot of work goes into writing code. Is there a way to showcase how the code works and functions and the teams understanding of it?*
- *Competition to provide good resource for a hobbyist.*
 - *Teams sharing code (open source)*
- *Simulation environment as a backup? RoboNation to provide environment and interface (sensor readings provided, response is how fast each motor is commanded).*
 - *How would RoboNation handle development of AUV simulation environment? How could such an effort be evaluated knowing the different ways teams plan and implement their software solutions.*
 - *Are we ready to implement something like this soon? What are the milestones and what is the timeline?*

Sharing Feedback from 2020 (participants, judges and staff)

This portion was not designed to collect feedback, it was merely there to share potential ideas and the changes that would enable implementation.

- Requirements Analysis (integrate into design report) – Intended to help justify vehicle design.
 - *Team would provide a snapshot of the requirement they derived from the competition tasks and how they led to the system design.*
- Test Plan (separate submission) – Encourage teams to make testing part of the product development cycle.
 - *Testing should be integrated as a parallel effort during the design and development phase.*
- Holding teams accountable for not following requirements.
 - *Teams that abide by published requirements versus those that do not.*

2.3.2. Envisioning the 2021 Season

On-site Competition – if in-person competition happens (paraphrased)

- What accommodations would make you feel comfortable (safety wise) at the competition?
 - *Limiting number of representative from each team, minimizing (or even eliminating) public attendance.*
 - *Streaming the event live*
 - *Schedule competition window so team is only onsite for a limited amount of time.*
 - *How would pool access work for teams (RoboSub and RoboBoat)?*
- Other considerations?

To minimize the number of teams on-site, should RoboNation consider eliminating teams prior to competition? What are the milestones that could serve as an elimination point?

- Documentation
- Vehicle Performance
 - *Taking the pre-qualification requirements from previous years and adding more tasks (simple set of tasks and a difficult set of tasks).*
 - *With such a milestone serving as a “go, no-go” point, lack of competition could result in elimination, which could be detrimental to future efforts.*
 - *What about teams that do not have a vehicle developed enough to provide such a video.*
 - *Teams that have not been to competition do not reap the benefits of seeing other designs and deriving ideas.*
 - *What about teams that do not have access to a pool/aquatic facility?*
 - *Why is the pre-qualification video not a requirement already?*
 - *How to achieve a balance between being fair to returning teams while lowering the barrier for new teams.*
 - *Design competition to help prepare teams for the following year?*
 - *Allow new teams more time to submit a deliverable (versus standard time for returning teams).*

Online Competition – if in-person competition does not happen (paraphrased)

- Document submissions
 - *Some teams are not able to build anything (no/limited access to project space).*
 - *Take a similar approach to 2020 (design report, team video and website). RoboNation cannot do much more than what was done in 2020.*
- Showcase vehicle performance
 - *Suggestions on showcasing performance online?*
- Other considerations?
 - Simulation
 - *Can be a challenge for some teams (RoboBoat and RoboSub)*
 - Showcasing individual component testing or even sub-system testing.
 - *Not all the teams will have the bandwidth to support something new.*

Shipping

- Question about shipping equipment and customs (to and from competitions venue).
 - *Documentation from previous competition should help with this.*
 - *Such inquiries should be posted on the Forum so when RoboNation staff responds, other are aware of the information as well.*

End of Recording

2.4. Closing

2.4.1. Giveaways

1 - \$25 gift card was given to a participant who provided feedback in the video call registration form, assessing the breakout rooms as a good tool to engage with other teams in the community, which ultimately led to the inspiration to utilize the same feature in the breakout discussions for the first Community Hour!


1 - \$25 gift card was given to a participant who was the first to join the 2021 Band group with the correct name tag format.

Thank you to the two winners and all who joined the call for the important parts you play in this community!

2.4.2. Next Community Hour

No December Community Hour

--pushed to January

- Good luck with finals!
-  Happy Holidays!

January Community Hour

- Details to come!

What topics do you want to see 
robonation.org/community-hour