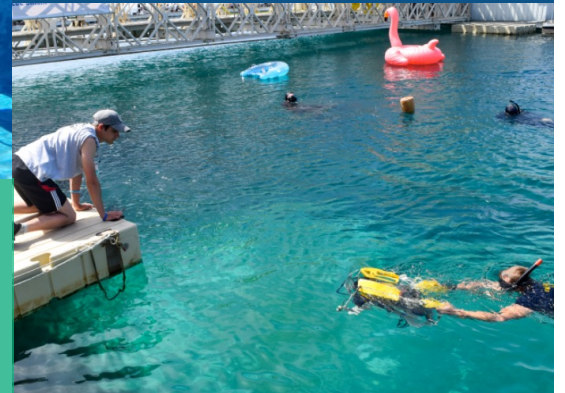
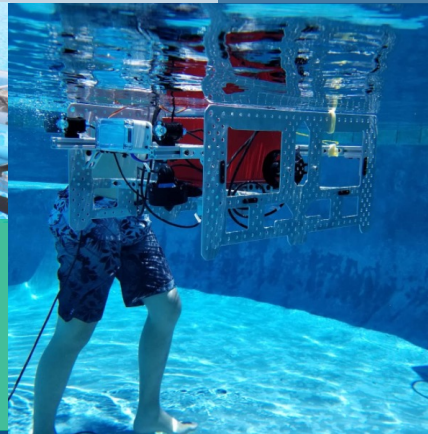
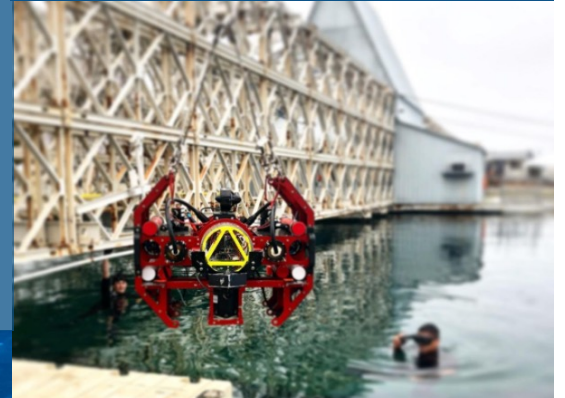




ROBOSUB TEAM TIME

Wednesday, May 18, 2022 | 7:00 PM Eastern Standard Time



RoboSub 2022 | Venue & Dates

University of Maryland
Eppley Recreation Center
College Park, Maryland, USA
July 27 – August 2, 2022

We're looking forward to seeing you again *in person* to celebrate 25 years of RoboSub!



robosub.org

Welcome 2022
RoboSub
Community!

GET
STARTED

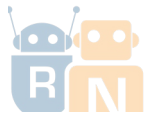
- 1 Edit your name to "Name | Team Name"
- 2 Put your answer in Chat:
What's your favorite time of year?



RoboSub
TeamTime

AGENDA

- [19:00 - 19:05] Welcome
- [19:05 - 19:25] Pool & Course Layout, Tasks Review
- [19:25 - 19:40] Deliverables & Deadlines
- [19:40 - 19:45] Competition Schedule
- [19:45 - 20:00] Announcements & Questions



Team Handbook V2.0 Released



•REC



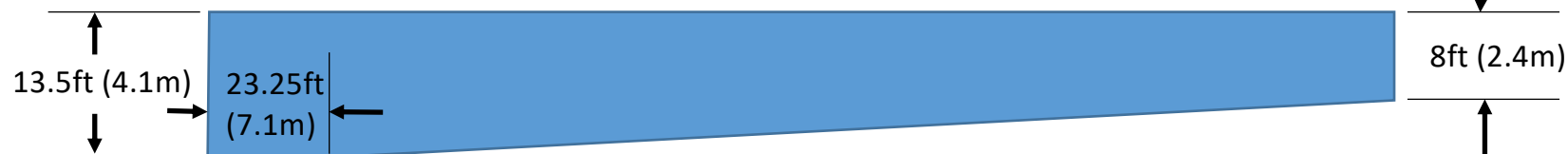
25th Annual

RoboSub 2022

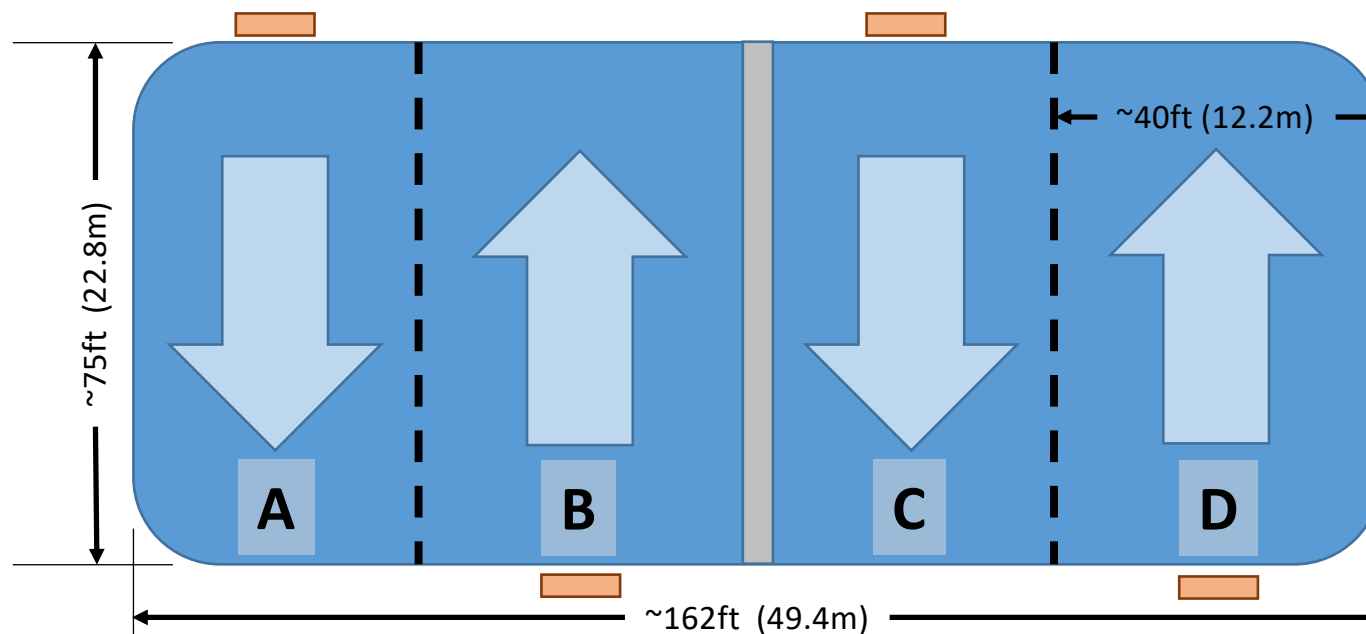
Pool & Course Layout
Things to Think About
Tasks Review

Pool and Course Layout

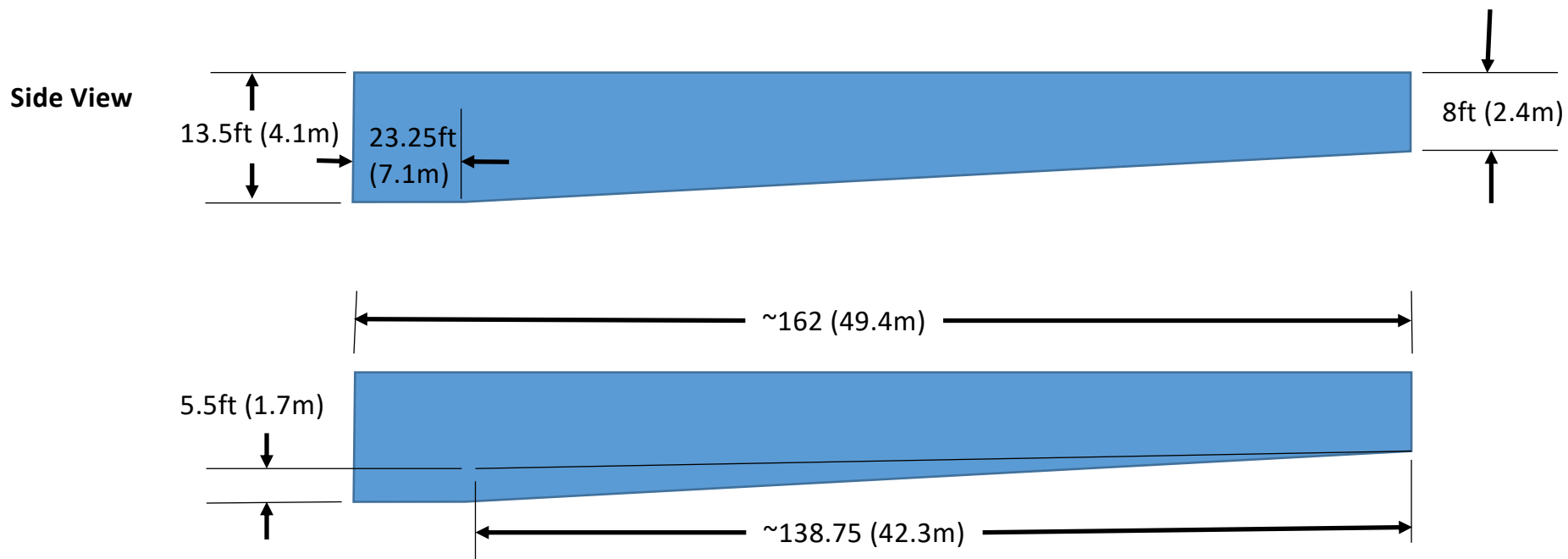
Side View



Top View



Pool and Course Layout

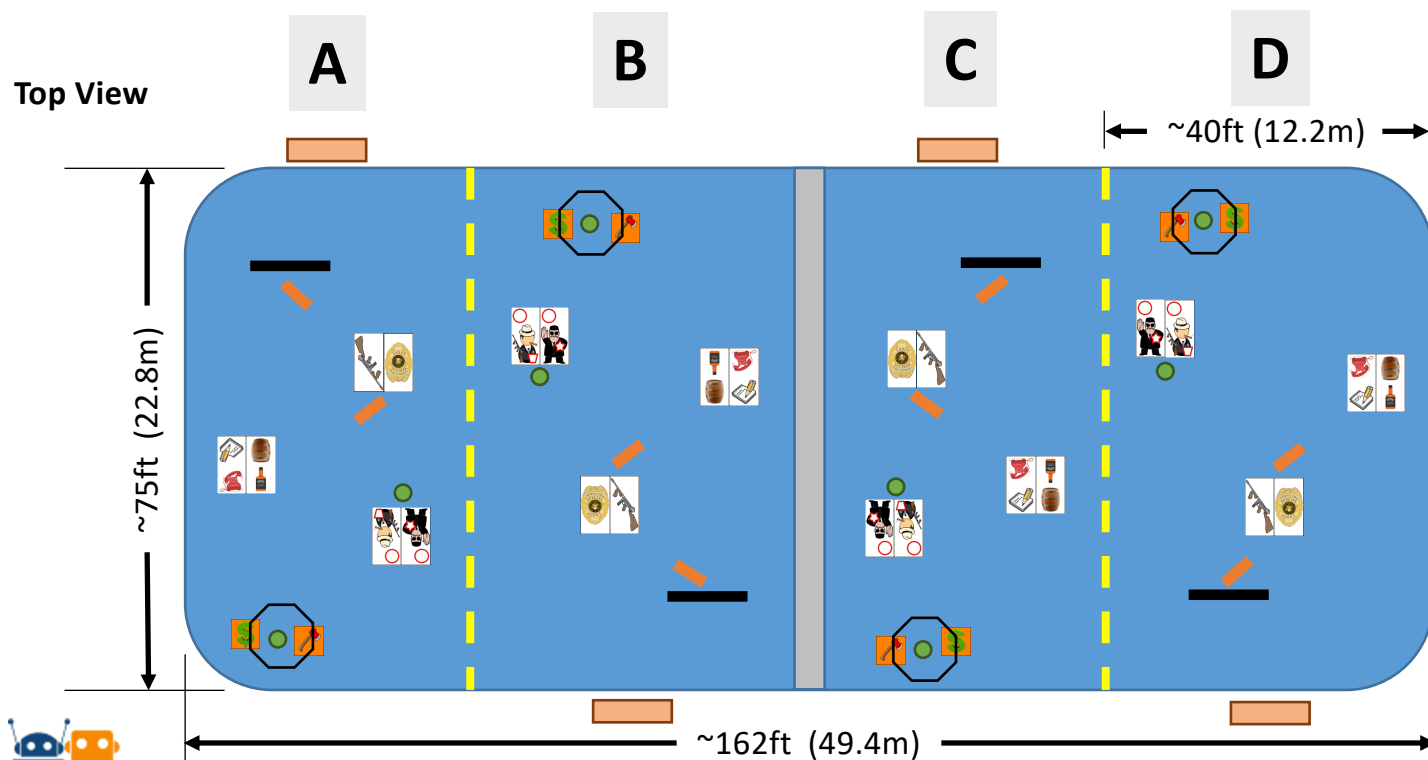


$$\tan \theta = O/A = 5.5/138.75$$

$$\theta = 2.2^\circ$$



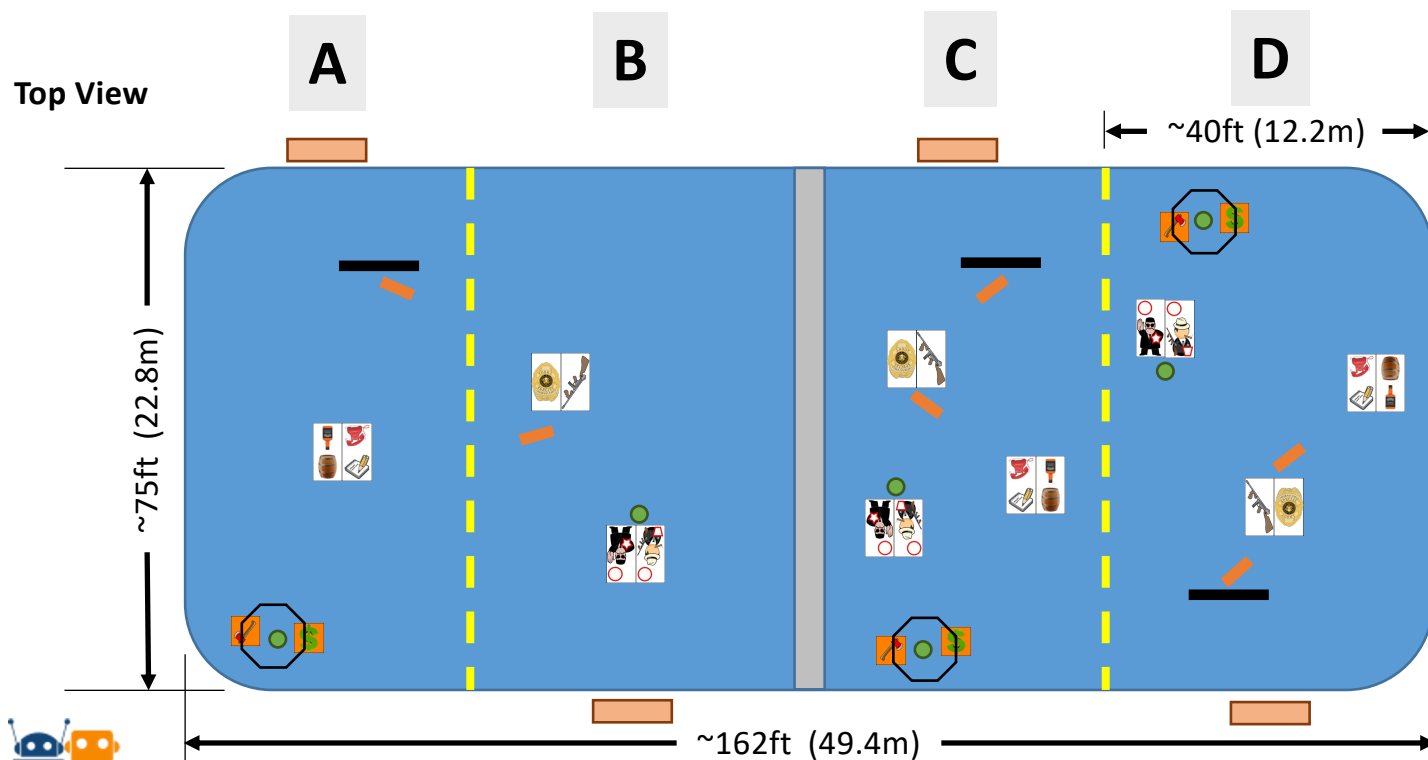
Pool and Course Layout (Practice/Semi finals)



Key	
	Bulkhead
	Lane Marker
	Gate
	Path
	Pinger
	Make the Grade
	Collecting
	Survive the Shootout



Pool and Course Layout (Finals)



Key	
	Bulkhead
	Lane Marker
	Gate
	Path
	Pinger
	Make the Grade
	Collecting
	Survive the Shootout



Things to Think about

Pool rebar

- Messes with compass

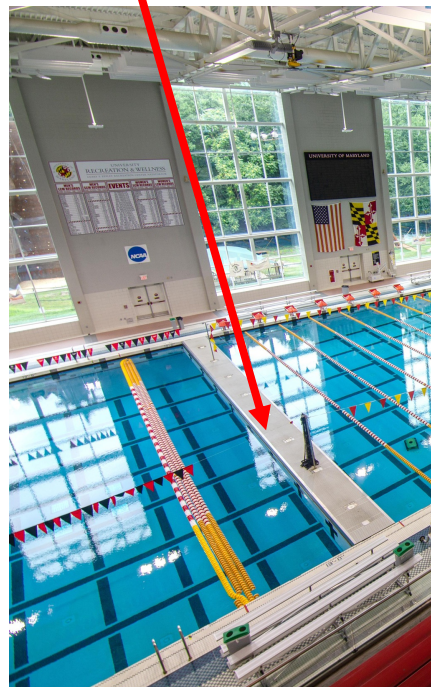
Pinger reflections

- Bulkhead
- Sides of pool

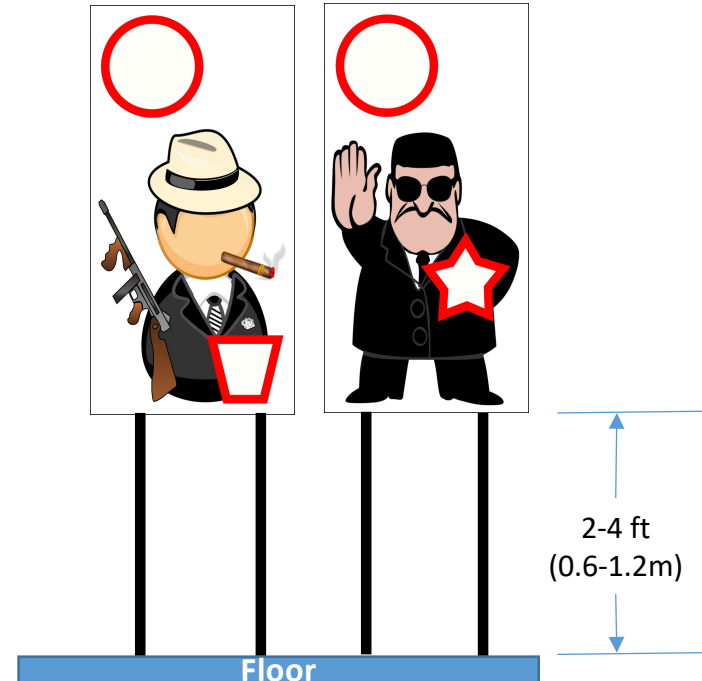
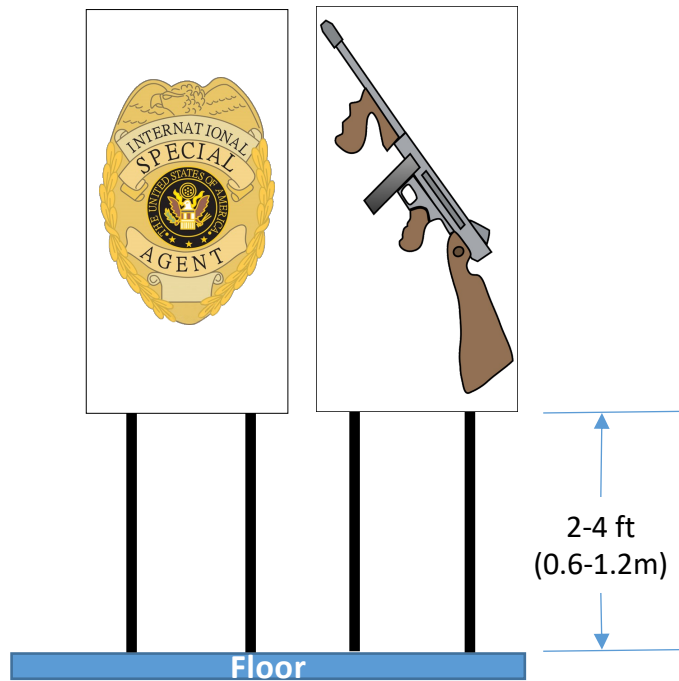
Pool floor

- Criss cross pattern
- Messes with downward tasks
 - Collecting (Bins)
 - Cash or Smash (Octagon)

Bulkhead



Tasks

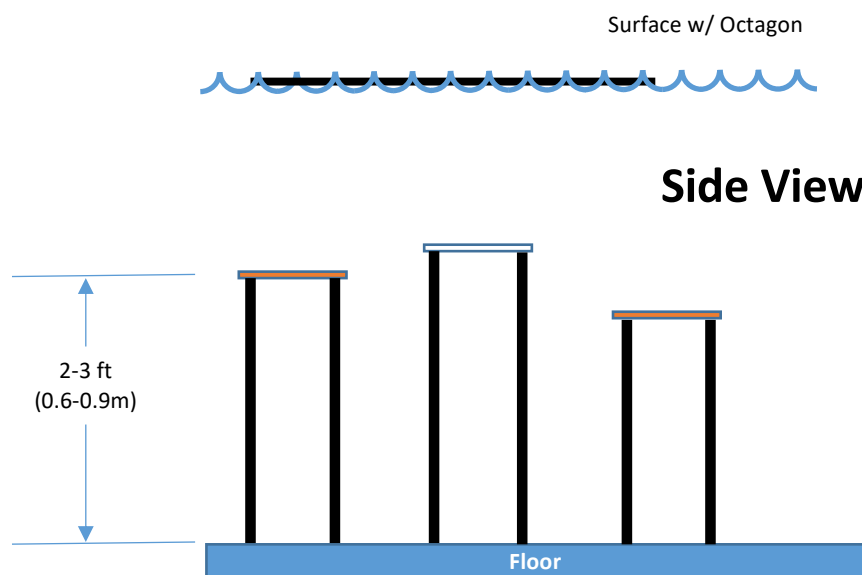
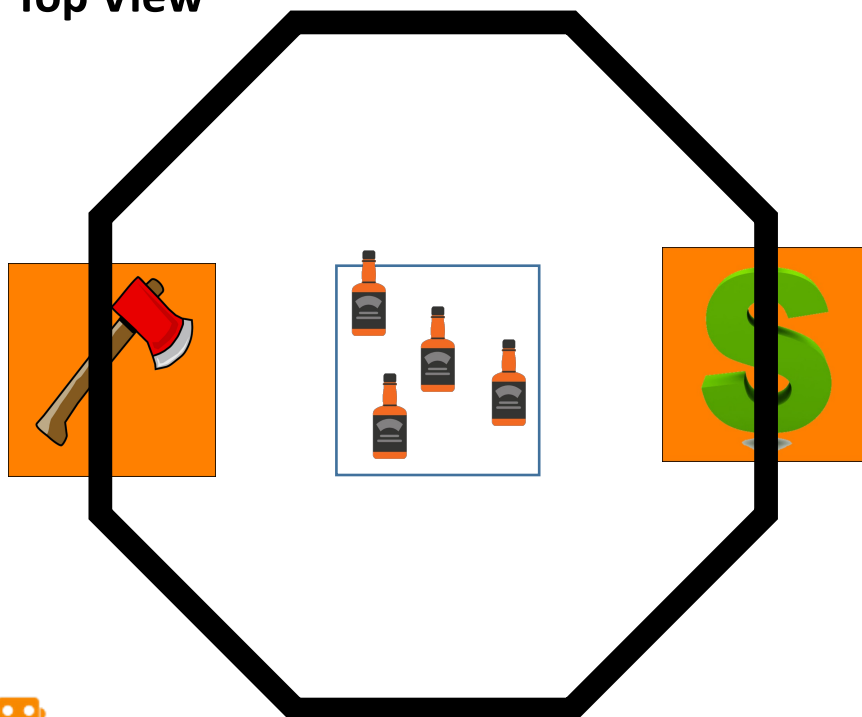


(drawing **not** to scale)



Tasks

Top View



Side View



(drawing **not** to scale)



Bottles



~16oz

2.25x2.25x7in
(57x57x178mm)

A



2.25x2.25x8.2in
(57x57x208mm)

C

Product Size



6.5x6.5x6.73in
(165x165x171mm)

B

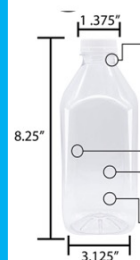


~32oz

2.75x2.75x11in
(70x70x280mm)

A

Leakproof
Easy to Clean



3.2x3.2x8.25in
(81x81x210mm)

B

Product Dimension

1000ml
(33oz)

Clear
Bottle



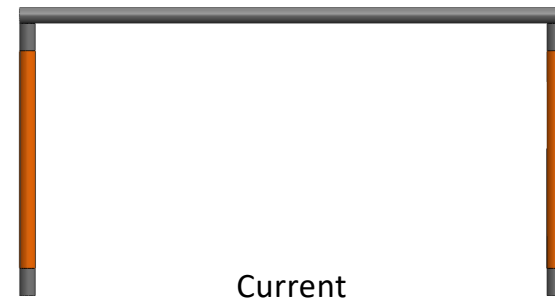
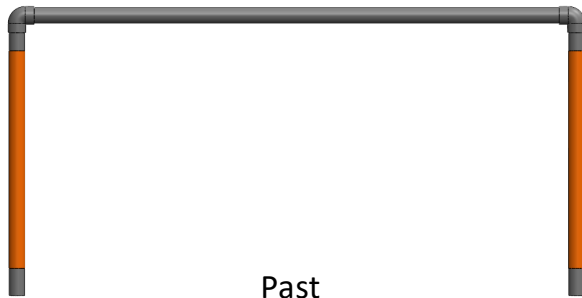
2.8x2.8x10in
(75x75x260mm)

C



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Gate Construction



Modification #2

- Replace the 3" PVC pipes with corrugated 3" box structure
 - Top 1 ft would be black
 - Lower 4 ft would be orange



Sunday, 5 June Deadline

- **Team Information**
 - Including Liability Waivers, YPPs, Resumes
- **Merchandise Order**
 - Including T-Shirts, Parking, Dorm Housing Add-ons
- **Team Demographics**

Sunday, 12 June Deadline

- **Design Documentation**
 - Technical Design Report, Competition Strategy Video, Website
- **Online Teams | Video Demonstration**
- **In-Person Teams | On-Site Requirements**
 - Shipping, COVID-19 & Battery Safety Plans
- **Optional Submissions**
 - Community & Outreach
 - Vehicle Pre-Qualification Video (In-Person Teams)



HOUSING / PARKING OVERNIGHT POOL USE

HOUSING – UMD Dorm Housing – Register by June 5

- *7-Day Dorm – Check-in: July 27 / Aug 3 (Single/Double Occupancy)(with or without breakfast)*
- *9-Day Dorm – Check-in: July 26 / Check-out: Aug 4 (Single/Double Occupancy)(with or without breakfast)*
- *Lunch Package – Dining Hall All-You-Can-Eat lunches – 6 lunches - July 28, 29, 30, 31, 01, 02*
- *Cancellations - Before July 12 = 100% refund / After July 12 = No refund*

PARKING – On-Campus Parking - \$18 per day per vehicle (exempt on Saturday and Sunday)

OVERNIGHT POOL TESTING – RoboNation will provide overnight pool testing in the natatorium.

Testing times are still TBD.





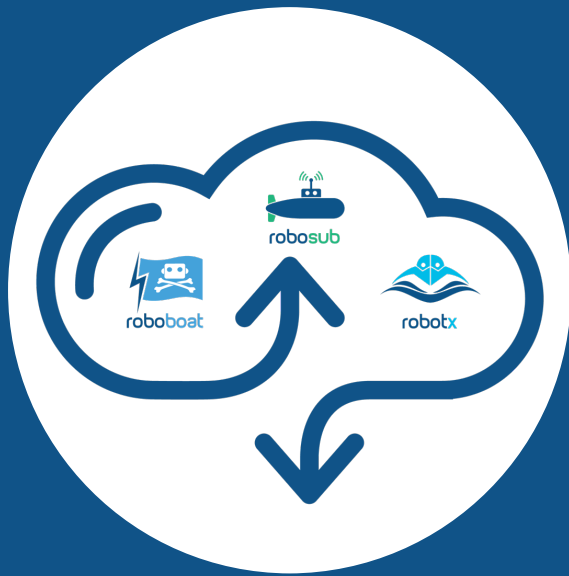
LOTS OF AVAILABLE RESOURCES!

Data Sharing

Upcoming TeamTimes

Check RoboSub BAND & Forum

MathWorks Mini-Series



RoboSub 2022

Data Sharing

 robosub.org/data-sharing

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



RoboSub 2022

Announcements

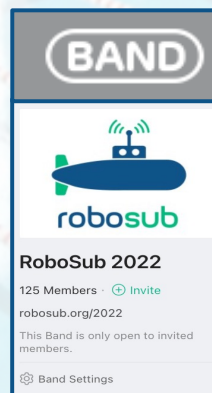
 robosub.org/2022

RoboSub TeamTime Meetings


Fridays @ 7PM ET

- 10 June
- 15 July

Sign up for the Band App



Hop on the RoboSub Band(wagon)!

 robosub.org/2022/band

Latest on the Forum

 robosub.org/forum



Distance between tasks video in a physical pool prior to competition

#1 ☐

04-16-2022, 03:27 PM

Good afternoon!

Was wondering if the distance between the marker and the gate and the submarine has to be 33,9.8 ft apart respectively? Our usual pool testing site is not as long so can we just space out as much as we can fit in the pool for the video? Any clarification/advice would be great!

Additionally, the images of each task link up above: <https://robosub.org/data-sharing/access>. does not work for me. It states: "his shared file or folder link has been removed or is unavailable to you."
Thank you in advance!



04-17-2022, 10:51 AM

#2 ☐

Hey  @mechanger

How much room do you have to work with in your pool?

That link works for me. Have you requested access to the [data share](#)?



04-17-2022, 11:40 AM

#3 ☐

Approximately 40-45 feet in length!

Also, we will request the data share, thank you for the link!



robosub.org

Latest on the Forum

 robosub.org/forum



04-18-2022, 07:20 PM

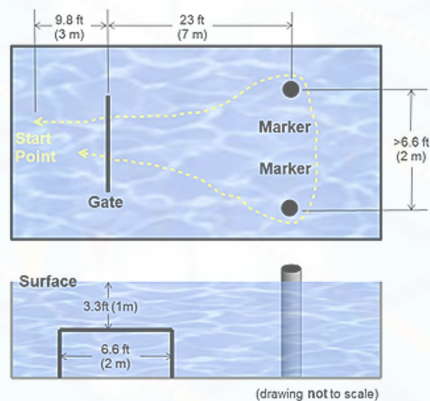
#4 ☐

Sooooo, close...

Let's go with this:

- Distance from the start to the gate is the same
- Distance from the gate to the markers is reduced
- You have to go around a second marker
- The second marker is greater than 6.6ft (2m) distance from the first marker

Will that work? If so, make sure you mention this change for the pre-qual when you submit your video.



Edit your name to "Name | Team"



robosub.org

MATHWORKS

mini SERIES

March 24th

April 14th

May ~~19th~~ 16th

@ 7:00 PM EDT



Watch Recordings:

 robonation.org/community-hour

March 24:

Working with MATLAB, Simulink, and ROS

April 14:

Modelling and Simulation of an AUV

May 16:

System Identification of Blue Robotics Thrusters



RoboSub 2022

 robosub.org/2022

Got Questions?

 Email
autonomy@robonation.org

 Discussion Forum
robonationforum.vbulletin.net



robonation



seaperch



seaglide



gosense



roboboat



robosub



robotx



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 university-competitions@robonation.org