Course Challenge Details

Course Map

Google Earth
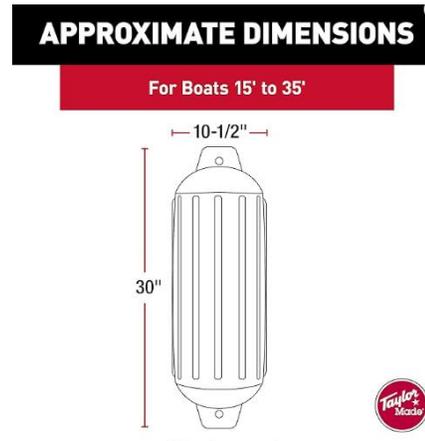
Buoy Markers

*Color Defined by Challenge

Taylor Made Products Super Gard
Inflatable Vinyl Boat Fender
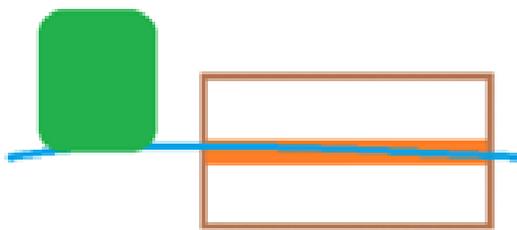
VIBRANT COLORS

Colors match gelcoat

Representative Image

APPROXIMATE DIMENSIONS

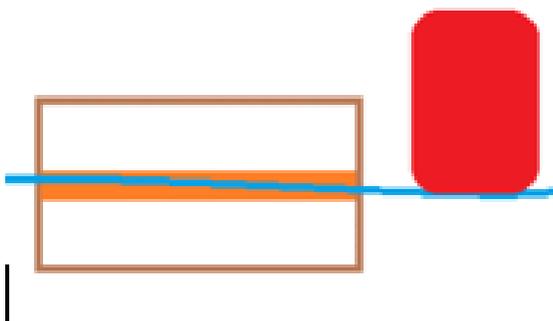For Boats 15' to 35'

10-1/2"

30"

Basic BUOY Navigation Rules:

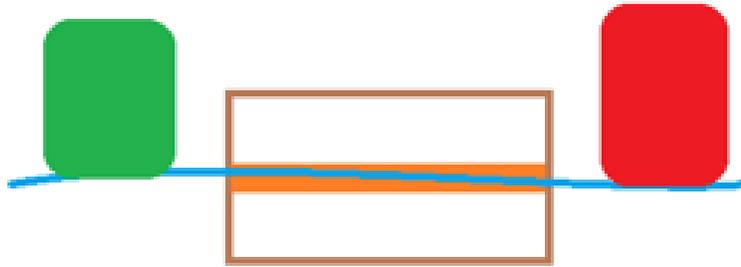GREEN BUOYS should be navigated to on the RIGHT side of the buoy.

RED BUOYS should be navigated to on the LEFT side of the buoy.

CHALLENGE #1 Gate Navigation

a. Successfully leave the dock untethered.
b. Navigate a 2 buoy gate.

c. Points will be awarded for navigating successfully through the gate.
    i. Partial points for any portion of the boat entering the gate.
    ii. Full points for the entire LPV passing through the gate.
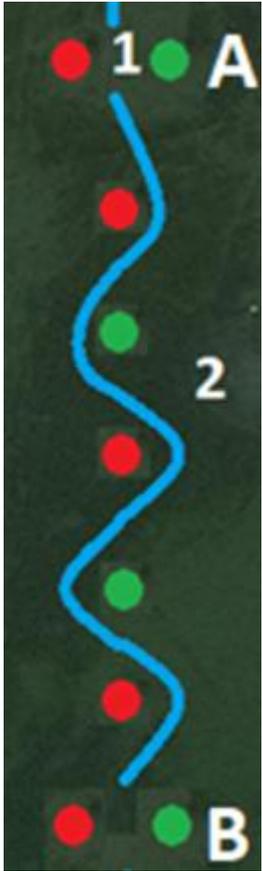   iii. Additional points awarded for zero contact with either buoy.

Lime Green

Red

CHALLENGE #2 Slalom Race

2. Slalom Race
   a. Successfully navigate the buoy slalom course, following Buoy Navigation Rules
   b. Points will be awarded for navigating successfully through the slalom buoy path.
      i. Additional points awarded for zero contact of each buoy.
   c. Bonus points will be awarded for "fastest" slalom time recorded versus all teams.
      i. Slalom time will begin after entering Gate "A".
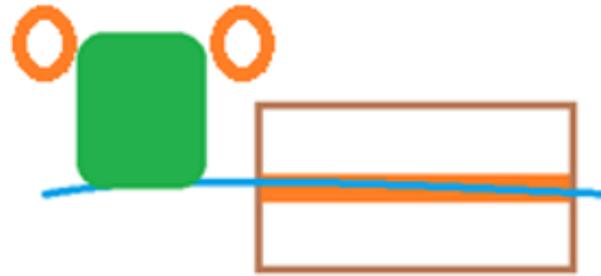   ii. Slalom time will end after crossing the plan of Gate "B".

Lime Green

Red

CHALLENGE #3 Game of Rings Race

a. Collect Rings along a specific path.
b. Navigate the Game of Rings Course, by following Buoy Navigation Rules
c. Rings will be placed on both sides of the colored buoys.
d. Points will be awarded for each ring collected in a single pass.
   i. Correct Rings per the Buoy Navigation Rules will be worth 10 points.
   ii. Incorrect Rings per the Buoy Navigation Rules will be work 5 points.

GREEN Buoys = RIGHT Ring   RED Buoys = LEFT Ring

e. Ring Points will ONLY be scored on a single directional pass of the buoys.
f. Time Bonus will ONLY be scoreable for LPV's that collect 5 rings.
   i. Bonus points will be awarded for "fastest" Game of Rings time recorded versus all teams.
   ii. Slalom time will begin after entering Gate "C".
   iii. Slalom time will end after crossing the plan of Gate "D".

CHALLENGE #3 Game of Rings Race

Lime Green   Red

Markers for Game of Rings will be stabilized with "Sand Anchor" to prevent rotation.

Something similar to:
 https://www.amazon.com/SturdyShape-Stainless-Protection-Suitable-Pontoon/dp/B0C3B5XGN1/ref=sr_1_1_ssp a?keywords=boat+sand+anchor&qid=169 8680847&sr=8-1- spons&sp_csd=d2IkZ2V0TmFtZT1zcF9hdG Y&psc=1

- PLA 3D Printed Ring
    - Red Rings on Red Marker
    - Green Rings on Green Marker
- 5.75" OD
- 3/8" Cross-section Width

CHALLENGE #4 Pick a Color

a) Navigate to a specific-colored buoy
b) Contact the buoy with the LPV to receive points
c) Teams can define the colored buoy that their LPV will seek & contact
d) Additional points can be earned by having judge randomly select the color for the team

CHALLENGE #5 Sensor Deployment

a) Teams will be able to define a deployable sensor
b) Navigate to the "Zebra" buoy
   a) 2" wide black electrical tape will be "spiral" wound around the white buoy
c) Deploy the sensor
   a) Sensor must not be tethered to the LPV
d) Sensor upon initial deployment must be with 6' radius of Zebra Buoy
e) Sensor must stay with in this defined halo for duration of scoring

VIBRANT COLORS
Colors match gelcoat
Representative Image

CHALLENGE #6 Shore Deployment

a) Navigate to the Black Buoy which signifies the recommended shore deployment area

b) Deploy a student designed object that is left on the beach within the defined area

c) To receive full points the object must remain on the beach under its own capability after deployment

CHALLENGE #7 Search & Rescue

Rescue Billy 6 to 9 Month Old - Infant Water Rescue Manikin

https://www.amazon.com/Rescue-Billy-Month-Old-Manikin/dp/B002TECK7G/ref=sr_1_1?crid=OQF17DPPKQYM&keywords=rescue+manikin+billy&qid=1695756643&s=sporting-goods&sprefix=rescue+manikin+billy%2Csporting%2C70&sr=1-1&ufe=app_do%3Aamzn1.fos.ac2169a1-b668-44b9-8bd0-5ec63b24bcb5

a. Find & Retrieve a floating infant
b. Scoring
   1. Retrieve the object and the object stays in the water will have "Value 1"
   2. Full removal of the object from the water will have "Value 2"
   3. Any damage to the object will result in decreased points
   4. Retrieval process must be deemed safe for retrieving a human

An APPROVED infant life preserver will be on "Rescue Billy" to allow the manikin to float upright
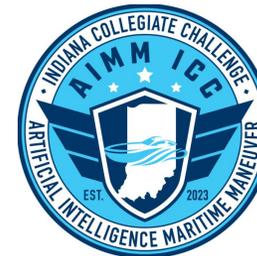
CHALLENGE #8 Sensor Communication
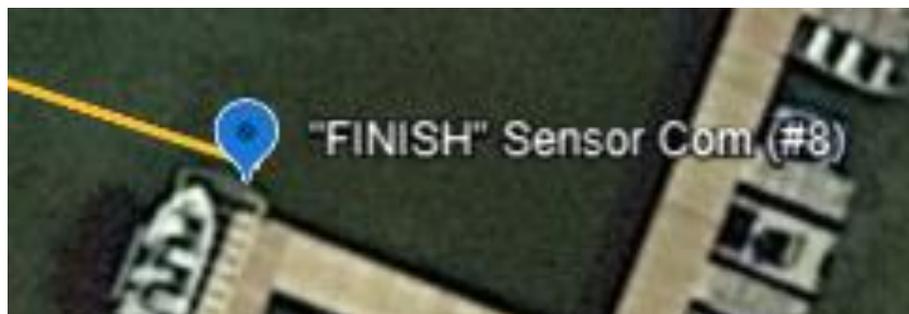
From Dock

a. Communicate wirelessly with the Deployed Sensor from Task #5

b. Validate the data to receive additional points

Total Time Bonus:

If a team completes a minimum of 4 tasks, they will be eligible for the fastest course points bonus. The team's time will be divided by the number of tasks completed to create an average "per-task" time. The team with the smallest per-task time average will be awarded a bonus, the other total time bonus eligible teams will be ranked for this time and point value will be awarded.