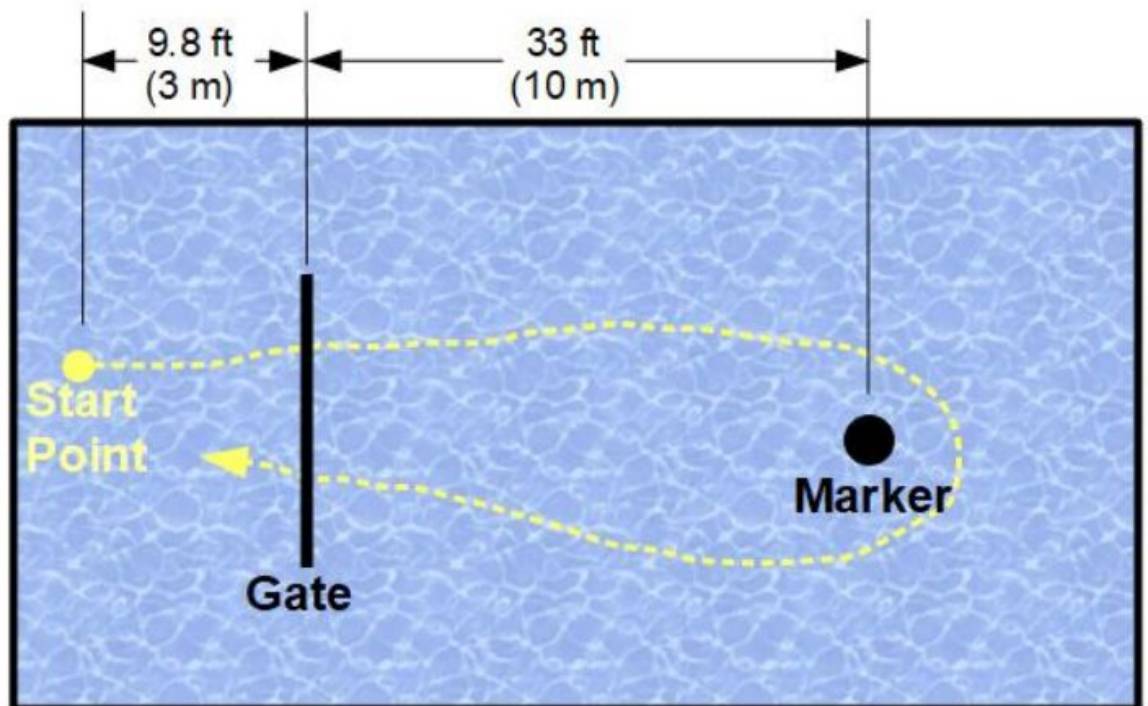
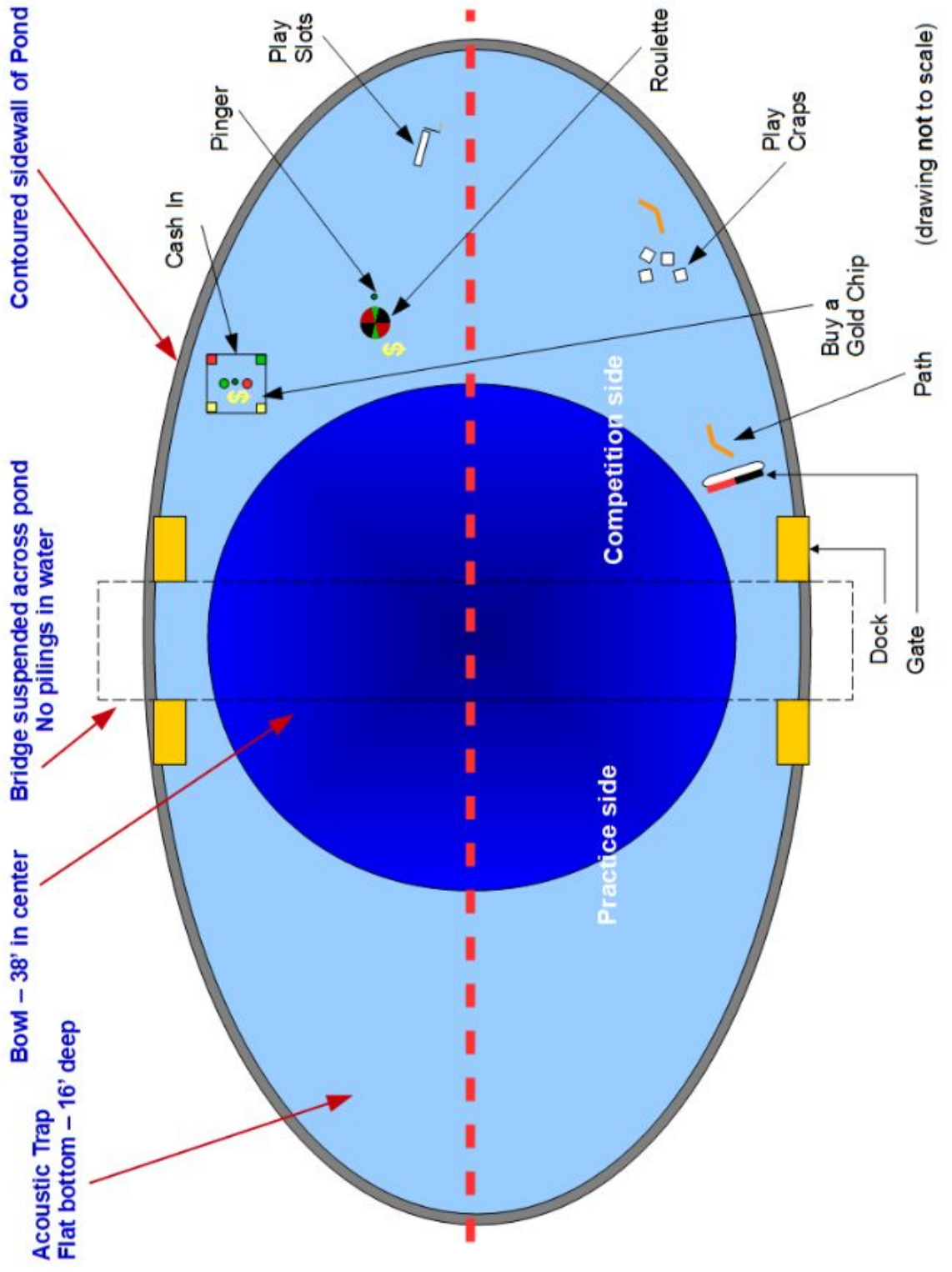


RoboSub([All about RoboSub](#))

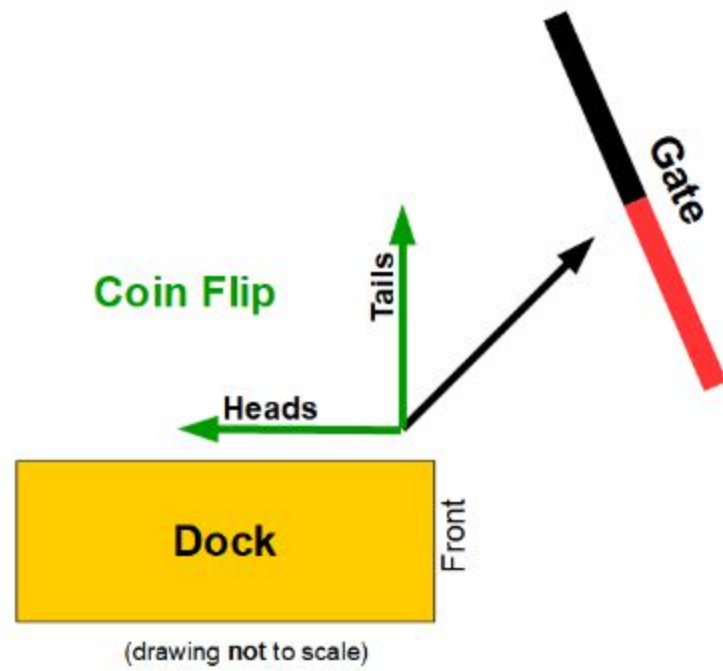
- Venue - San Diego, California , USA
- Registration - Opens-> September
Closes-> November
- Competition date - End of July
- [RoboSub 2018 Video](#)
- Qualifications and competitions([Link](#))
 1. Pre-qualification : Sending them the video of the task mentioned which is passing through a gate circle around the marker and pass back through the gate.



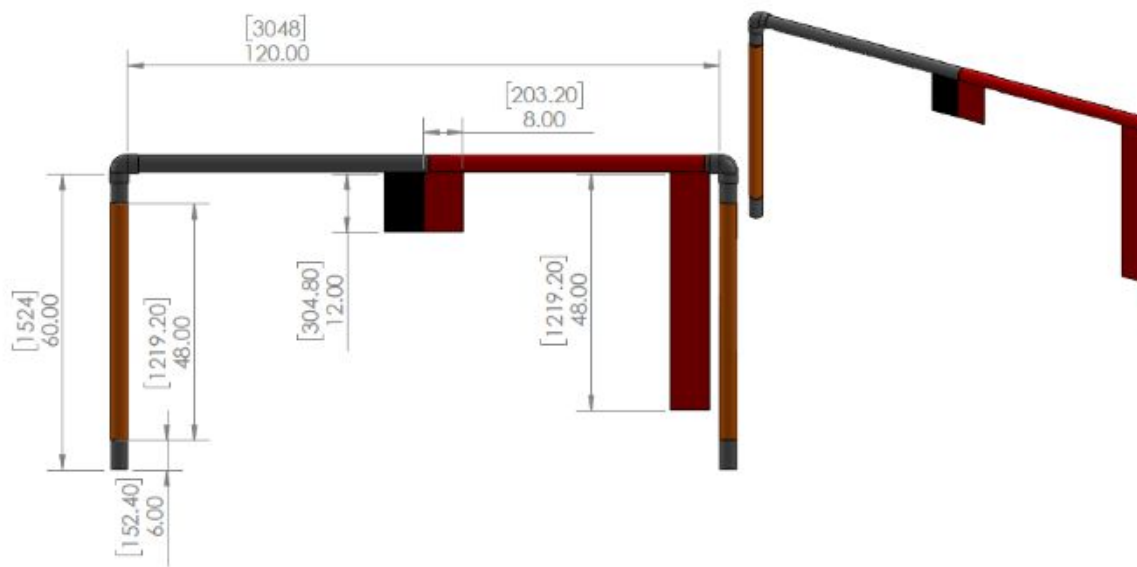
2. Practical runs : Practice in their arena.
3. Qualifications : The vehicle must pass through the gate autonomously.
4. Competition task :
(2018 RoboSub)



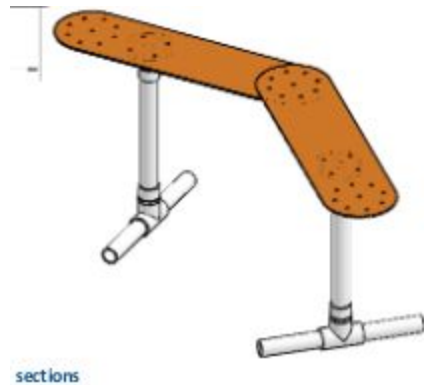
❑ Find Casino :



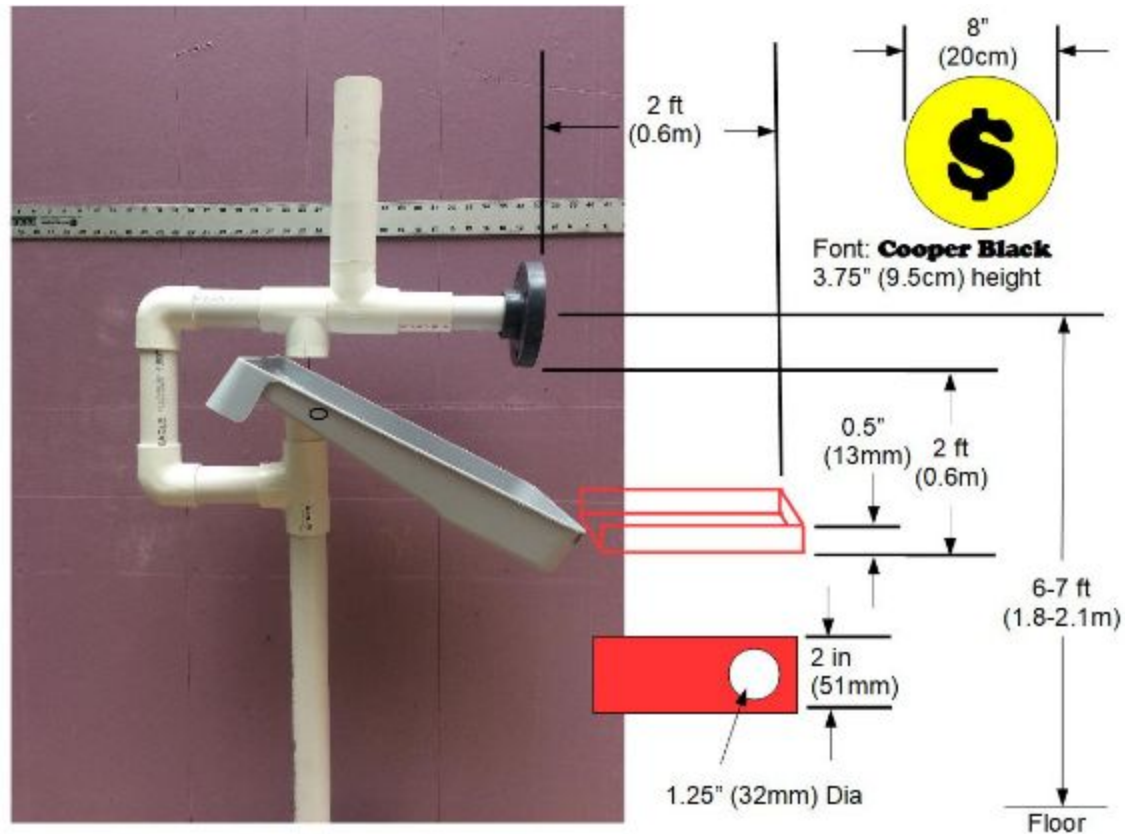
❑ Enter the gate : The vehicle can pass through the gate at any depth from the floor to just below the surface.



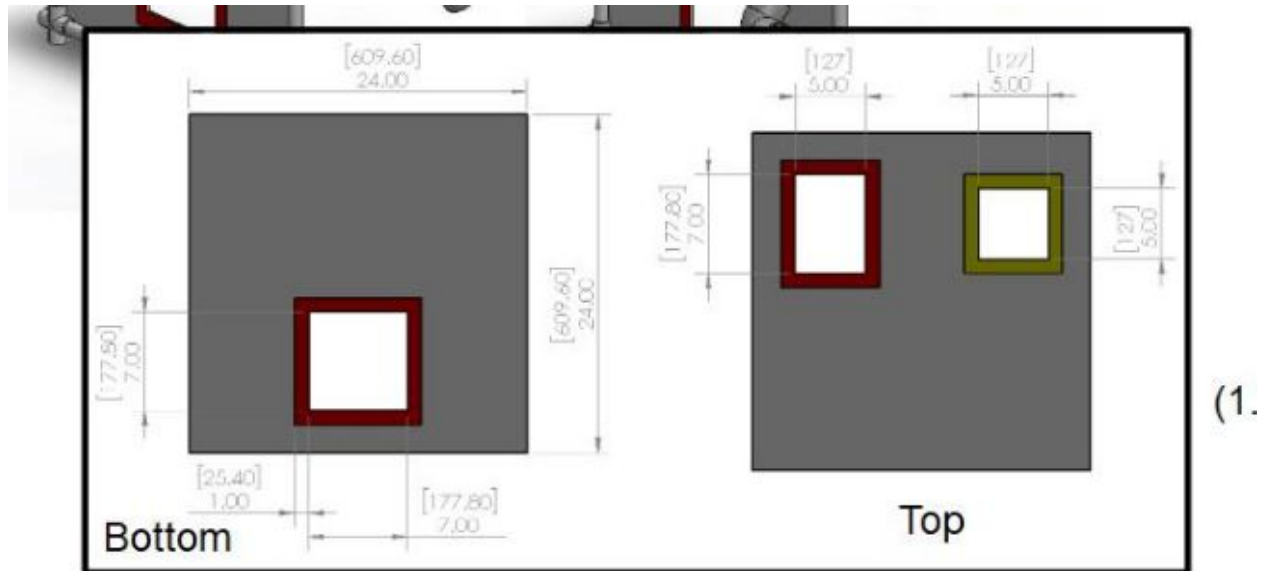
- ❑ Path : The path will be covered orange. Each path marker will be placed directly after the current task and point to the next task.



- ❑ Shoot buoys : Touching the floating cubes awards points , more points can be won depending on the bonus rules
- ❑ Buy gold chips : Gold chips can be acquired by pushing on a plate on the chip dispenser . These chips can be taken to further sections to acquire more points.

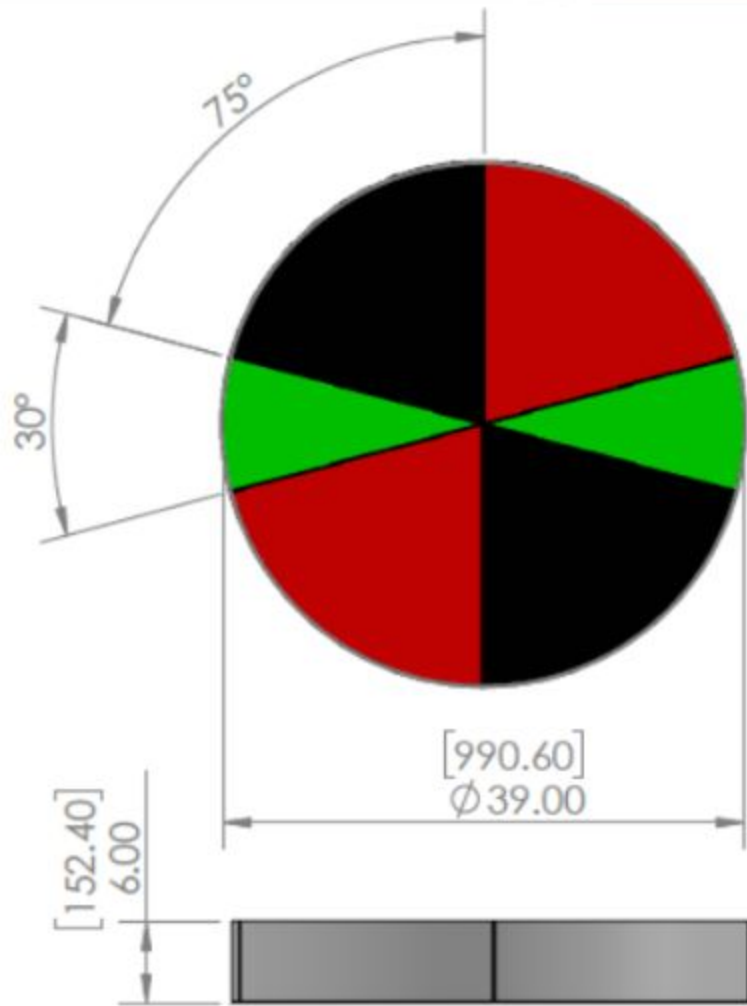


- ❑ Play slots : A gate containing three slots , one of them is already open , two have to be opened by pulling an arm , out of these two one of them is of smaller size (all the three slots have coloured borders).Thus the points can be acquired by shooting torpedoes(two can be shot), min marks is for shooting through the already open slot, then for the bigger closed slot (opened by pulling arm) and maximum can be obtained by shooting through the closed smaller slot.



- ❑ Play roulette : An acoustic pinger will be used to guide the vehicle to this task. This task consists of a circle segmented into six bins. Two bins will be BLACK and two similar sized bins will be RED. Two smaller bins will be GREEN. A vehicle may carry two BLUE golf balls (chips), or markers of their own design. A chip landing anywhere will score points. A BLUE chip landing in the same color scores more points(or a Red/Greenchip in a Red/Greensection). A GOLD chip in the green bin scores maximum points. Only one GOLDchip may

be played per attempt.



- ❑ Cash In : An acoustic pinger, located between the RED and GREEN bins on the floor, will be used to guide the vehicle to this task. There are four GREEN golf balls contained in the GREEN bin, and there are four RED golf balls contained in the RED bin. Centered on the pinger and floating on the surface is a square area. In each of the corners of the square is a funnel. There are two YELLOW funnels, one GREEN funnel and one RED funnel. The RED funnel and the YELLOW funnel, opposite the RED, are submerged below the surface. The GREEN funnel and YELLOW funnel, opposite the GREEN, are

-
- Pinger Timing**
- A
- B
- C
- D
- 0.5s
- 1.0s
- 1.4s
- 2.0s
- (timing **not** to scale)

- ❑ Each vehicle is expected to have 15 minutes to complete the entire mission (with an additional 5 minutes of dock preparation time). Any vehicle that touches a buoy, passes over the obstacle, places at least one marker in the bin (or fires at least one torpedo through the opening) and surfaces within the floating area will receive bonus points proportional to the unused time. Each vehicle must begin the run by passing under a validation gate. At any time during the run, if a vehicle breaches the surface, the run is terminated