2019 SeaPerch Season – Pool Event Rules

Please note: These are suggested rules for Regional Competitions that will be utilizing the recommended Regional Course design and are not required at all competitions. Individual competitions may have different rules, please check with your Regional Coordinator or Competition Lead for guidelines on the rules for your regional competition.

1. General Pool Event Rules

a. The ROV must move only under its own power. Teams will incur a 2-minute penalty if they pull or otherwise maneuver the ROV by the tether.

b. If the ROV or tether becomes tangled on the course structure or is otherwise unable to move on its own power, a team member must notify the judge that they would like to try to free the ROV, or request diver assistance to free or retrieve the ROV. Under this circumstance teams may pull on the tether. The session timer will continue to time the run and a 2-minute penalty will be added to the elapsed time. If the ROV is pulled by the tether or moved by a diver, the ROV must be returned to the location that it was moved from before it may continue competing.

c. The team must use the same ROV that was presented at compliance for both pool events.

d. The ROV may be worked on or adjusted during competition, however the session timer will continue to run.

e. Adjustments to buoyancy, including adding or removing buoyancy materials, may be made during competition.

f. Nothing connected to the ROV (with the exception of buoyancy and the Beacon continuous mode activation device) may be added or removed after compliance checks are completed. Parts connected to the ROV may be adjusted between the two pool events.

g. A Beacon continuous mode activation device (magnet and holder designed to be left on the Beacon in order to set the Beacon into continuous mode) is not considered part of the ROV and does not have to be attached to the ROV during competition in the obstacle course. However, any part of the ROV designed to hold the Beacon continuous mode activation device is part of the ROV and must remain on the ROV during competition in the obstacle course.

h. A Beacon momentary mode activation device (magnet and holder designed to set the Beacon into momentary mode and not designed to be left on the Beacon) are considered part of the ROV and must remain on the ROV during competition in the obstacle course.

i. Only two team members are allowed on the pool deck in the competition area during an event.

j. The on-deck team members may switch drivers at any time and as many times as they choose.

k. All team members must wear shoes with rubber soles while on the pool deck.

2. Rescue & Recovery Mission Rules

a. Teams are allowed one 15-minute run for the Rescue & Recovery Mission.

b. **Course Navigation**:
   i. *Start of run*: The ROV must be surfaced and touching the wall under its own power (team members may not be touching the ROV).
   ii. *The First Hoop:* Following successful completion of *Task 1 – Beacon,* the ROV must pass through the first hoop before proceeding to any other tasks and its tether must remain in the first hoop while the ROV is competing. No points will be awarded if the ROV exits the mission field and reenters without passing through the hoop.
   iii. *Remaining Tasks Order:* The remaining tasks may be competed in any order. The ROV does not have to pass through the remaining obstacle course hoops while competing in the Rescue & Recovery Mission.
   iv. *Mission Completion (End of Run):* The ROV must exit the mission field through the first obstacle course hoop. The mission is complete when the ROV touches the pool wall while surfaced (any part of the ROV is above the surface of the water). Upon return to the pool wall, teams should indicate to the judge that they have completed the mission and do not intend to conduct additional tasks. The mission is stopped if the allotted time expires even if the ROV has not completed all tasks.
   v. *Scoring:* Teams will only be awarded Finish Time points if all tasks within the course have been successfully completed. (i.e. Teams that forfeit the Vault task will not receive additional Finish Time points).

c. **Task 1 – The Beacon**
   i. *Task Requirement*: The ROV must maneuver to the Beacon and either momentarily activate the LEDs (momentary mode) by passing a magnet close to the magnetic sensor (switch) or leave a magnet on the Beacon in a position to turn on the LEDs such that they remain on until the magnet is removed (continuous mode).
   ii. *Scoring:*
      i. Momentary Mode: The judge must acknowledge the Beacon LEDs were turned on for any period of time.
      ii. Continuous Mode: The Beacon LEDs must remain on for the duration of the team's run. If the magnet does not stay in position to keep the Beacon in continuous mode, then only points for momentary mode will be awarded. If the Beacon LEDs switch off and it is found that the magnet stayed in position, but that the Beacon failed, then points will be awarded for continuous mode. Teams do not have to retrieve the magnet at the end of the run.

    iii.   *Other Notes:*
- i. Teams may choose to forfeit this task and proceed to subsequent tasks. Once the ROV enters the first hoop, the points for this task will no longer be attainable.
- ii. The Beacon LEDs must be activated either in momentary or continuous mode before the ROV passes through the first hoop.
- iii. Magnets and magnet holders will not be provided by event coordinators unless otherwise indicated by Competition Coordinators.

d. Task 2 – The Vault
- i. *Task Requirement:* The ROV must open the Vault gate and enter through the Vault hoop in order to retrieve the canisters.
- ii. *Scoring:*
  - i. Points will be awarded upon successful unlatching and opening of the Vault.
  - ii. No points will be awarded for opening the gate if a canister is picked up by the ROV prior to successful opening and navigation through the Vault.
  - iii. The ROV must enter and exit through the Vault hoop for each canister retrieval during *Task 3 – The Staging Station*. Failure to pass through the Vault's hoop for each canister retrieval will result in a subtraction of original points for *Task 2 – The Vault*.

e. Task 3 – The Staging Station
- i. *Task Requirement:* The ROV must retrieve canisters from under the Vault opening and place them on the platform or sockets on the staging station.
- ii. *Scoring:* Points are awarded for canister placement upon mission completion.
  - i. Canisters placed on the Staging Station platform board may be moved to a socket at any time before the mission is completed. Points will not be awarded for canisters that fall or are knocked off of the Staging Station.
  - ii. The ROV must enter and exit through the Vault hoop for each canister in order to retain points received for *Task 2 – The Vault.*
- iii. *Other Notes:*
  - i. Canisters may be retrieved in any order but may only be retrieved and transported one at a time.
  - ii. Canisters remain in play until they are placed on the Staging Station. If a canister is dropped, dragged, or pushed into an adjacent pool lane (another team's mission field) it is out of play and may not be retrieved.

f. Task 4 – ROV Recovery

  i. *Task Requirement:* The stranded ROV sections must be moved from the recovery area and placed on the Vault platform.

  ii. *Scoring:* Points are awarded for ROV recovery when the mission is complete (when ROV returns to the pool wall and the timer is stopped).

       i. Points will not be awarded for stranded ROV sections that fall or are knocked off of the Vault platform. The stranded ROV section must be fully on the Vault platform, no part of the stranded ROV section may be hanging off of the Vault platform.

  iii. *Other Notes:*

       i. The stranded ROV sections may only be recovered one at a time.

       ii. The mission ROV does not have to pass through the Vault hoop when placing the stranded ROV on the Vault platform.

3. Obstacle Course Rules

a. Teams will be given a 10-minute period for the obstacle course event and will be given two attempts during the 10-minute period.

b. Teams may start their second run immediately after completing their first run but must wait for the judge to reset the stopwatch and give the start signal. Teams must move quickly since there is no extra time during the 10-minute period.

c. Any run taking over 5 minutes will be aborted.

d. **Course Navigation**:

  i. *Start of run*: The ROV must be surfaced and touching the wall under its own power (team members may not be touching the ROV).

  ii. The ROV is required to pass through each of the five obstacle course hoops in order starting at the hoop closest to the pool wall. The ROV must surface after clearing the last hoop (the hoop furthest from the pool wall). Surfacing is considered complete when any part of the ROV breaks the water surface. The ROV must re-submerge and pass through each of the 5 hoops in order heading back to the pool wall.

  iii. *End of Run:* The run is complete when the ROV touches the pool wall while surfaced (any part of the ROV breaks the water surface).