[](http://www.google.com/imgres?sa=X&tbm=isch&tbnid=03OZfDhRShs5RM:&imgrefurl=http://www.usi.edu/science/southwest-indiana-stem/student-outreach-events/seaperch-challenge/usicrane-state-seaperch-challenge&docid=S8QPsCqCzLWjQM&imgurl=http://www.usi.edu/media/1669661/seaperch.gif&w=300&h=111&ei=lxTPUtqWF-LM2AX24oCoBg&zoom=1&ved=0CHAQhBwwCg&iact=rc&dur=2487&page=1&start=0&ndsp=40)

January 13, 2014 Updated Newsletter

Today, posted online, <http://www.seaperch.org/challenge_blog?article_id=438>, we posed several clarification questions to Chris Hansen, the SeaPerch technical director, on the construction of the Heist Challenge. You can go online to see his responses. The Indiana SeaPerch Board of Directors decided today that we will deviate from the National Challenge structure to better fit our goals for our regional competitors. You will be provided in detail the differences between the national challenge and the Indiana challenge in this newsletter. The modifications that are being made better serve the teams, in our opinion, to be successful. The Indiana SeaPerch Board of Directors want to emphasize that the National SeaPerch rules will apply at the National SeaPerch Challenge. Those teams that advance should keep this in mind as they prepare for the National Challenge.

1. The timing of the Heist Challenge.

This may be similar for those who advance to nationals, but we have chosen to make the Heist Challenge ten minutes in duration. Chris Hansen commented, “No less than 10 min, no more than 15 min. in recent competitions 10 min was enough for teams to get as far as they could.” So we have decided to use 10 minutes for the challenge.

1. PVC Drop Box Location

Chris Hansen commented, that the PVC Drop Box location would be “Between the wall and the Vault door. Final location may vary based upon pool floor.” We have chosen to make the box sit in front of the Heist to the right. We have also decided to paint the PVC Drop Box a color that will be highly visible from the surface of the water. The diving wells that we will be using for our competition are 16 feet deep and we felt this would make the box easier to see.

1. Rubric (Attached to the email)

When we asked Chris Hansen about his scoring method for the national challenge, he commented that “Each box is one point, there is no difference in scoring for the different weights.” We feel that the heavier boxes should be weighted in points since the level of difficulty increases with increased mass. We will be fastening the washers to the boxes, so the weight will not shift throughout the challenge. We are going to be using the following point system for the boxes:

|  |  |  |  |
| --- | --- | --- | --- |
| Box # | # of washers | Weight | Point value in drop box |
| 1 | 2 | 130 g | 1 |
| 2 | 3 | 140 g | 2 |
| 3 | 4 | 150 g | 3 |
| 4 | 5 | 160 g | 4 |
| 5 | 6 | 170 g | 5 |
| 6 | 8 | 190 g | 6 |

To score any points, the box must be fully inside the PVC Drop Box and not on any portion of the PVC. We also intend to add a timing element to the rubric. We will be recording the time when the latch is released on the Heist as well as the timing of placing the boxes in the PVC Drop Box. These times could potentially be tie-breakers if several teams accomplish the challenge.

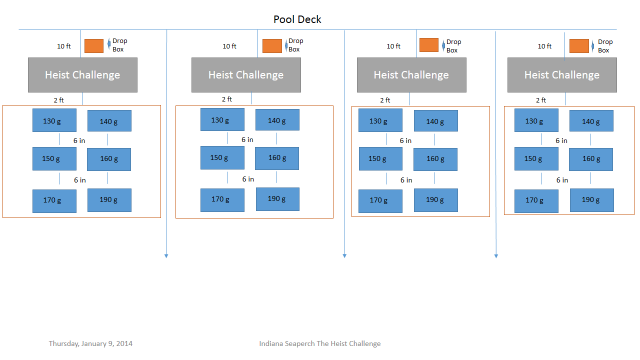
1. Box Labels

When we asked Chris Hansen about whether boxes would be labeled for the students to be able to distinguish between them, he responded, “The boxes are labeled only so that the divers and judges can ensure that the right weights are in each lane. Competitors will not be able to see weights.” At the USI/Crane State SeaPerch Challenge, the weight of each box will be clearly distinguishable by a color-coding system. These colors have not yet been decided, but we will inform you of the choices prior to the day of the Indiana State Challenge.

1. Box Arrangement at start of challenge

When we asked Chris Hansen about the arrangement of the boxes at the beginning of the challenge, we received the following answer, “They will be placed randomly within the pick-up area.” The Indiana SeaPerch Board of Directors has decided that we will be placing them in a consistent manner inside the approximately sized 24 inch by 24 inch pick-up area. The following will be the set-up for the Indiana State Challenge.



Official Heist Indiana State Challenge Set-up

As you can see, there are several things that have been changed, but again, we did so with team success in mind. Our goal is to give each team a chance to be successful in this event. Those who advance to the national challenge will have plenty of time to practice and adjust to the national standards before the national challenge in May. If you have any questions, feel free to forward them to us.