

## **SCOUT CLASS SCORE SHEET**

### **Ocean Observing Systems**

**SCHOOL NAME and # AS IT APPEARS ON THE OFFICIAL LIST:** \_\_\_\_\_

**Company CEO:** \_\_\_\_\_ **Mission attempt #:** \_\_\_\_\_

**Mission station officials:** \_\_\_\_\_

**Set-Up and Safety Check (up to 10 points total)**

- ☐ Company presents signed safety inspection sheet. (5 points)
- ☐ Vehicle and control system present no safety hazards. (up to 5 points)
  - All power cords are secured. Fuse and banana plugs are not in puddle of water.
  - Control box is closed and secured from the water.
  - Motors are waterproofed and are protected inside the ROV.
  - No sharp objects that could injure a diver.
  - All pneumatics and hydraulics are hand powered.
  - Vehicle is hand-launched by team members in a safe manner.

Mission official's notes: \_\_\_\_\_

**Company is safe and ready for the mission:** \_\_\_\_\_ (official's initials) \_\_\_\_\_ points (out of 10)

***Note: An official's decision to disqualify a company due to safety concerns is final. If there is a safety concern, please contact the lead official or competition coordinator.***

**Fuses**

If a vehicle blows the MATE power supply in-line fuse, the company is allowed two spares. If the vehicle blows the third MATE fuse, the mission performance period is over. The company will receive points for the mission tasks that they have completed up to that point but will not receive a time bonus score.

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**Mission Notes:**

This is a timed event. For mission task #1, companies must install the science interface assembly (SIA) into the backbone interface assembly (BIA) before inserting the cable termination assembly (CTA) into the bulkhead connector. The SIA and the four new scientific instruments will be located at the mission control shack. Companies may (but are not required to) attach them to the ROV during the set up period. The CTA and the four old scientific instruments are located on the pool bottom. Your company may alternate between the two mission tasks.

**Mission task scoring breakdown:**

**Task #1: Complete a primary node ( up to 60 points)**

- Transferring the SIA to the seafloor – 5 points
- Installing the SIA so that it rests comfortably within the BIA – 25 points
- Removing the CTA from the seafloor – 5 points
- Inserting the CTA into the bulkhead connector on the BIA – 25 points

**Task #2: Replace scientific instruments (up to 60 points)**

- Recover four scientific instruments – 5 points each (20 points total)
- Deploy four new scientific instruments – 10 points each (40 points total)

**(over)**

### Mission task #1: Complete a primary node (60 points)

- 5 points – transferring the SIA to the seafloor \_\_\_\_\_
- 25 points – installing the SIA so that it rests completely within the BIA \_\_\_\_\_
- 5 points – removing the CTA from the seafloor \_\_\_\_\_
- 25 points – inserting the CTA into the bulkhead connector on the BIA \_\_\_\_\_

**TOTAL POINTS FOR TASK #1** \_\_\_\_\_

### Mission task #2: Replace scientific instruments (60 points)

- 5 points each (20 points total) – recover four scientific instruments \_\_\_\_\_
- 10 points each (40 points total) – deploy four new scientific instrument \_\_\_\_\_

**TOTAL POINTS FOR TASK #2** \_\_\_\_\_

**Time Bonus:** If a company successfully completes all mission tasks (full points), returns the ROV to the surface under its own power, and physically touches the vehicle before mission times ends, the company will receive a time bonus. Companies will receive 1 point for every minute and 0.1 point for every second under the allotted time. For example, a company that finishes in 11 minutes and 32 seconds in a 15 minute mission. 15 minutes minus 11 minutes and 32 seconds is 3 minutes and 28 seconds. This team would receive 3.28 additional points.

Duration of complete mission: \_\_\_\_\_

Time bonus: \_\_\_\_\_

**Penalty Points:**

Pull on tether: - 5 points penalty per infraction \_\_\_\_\_

Diver assistance: - 5 points penalty per infraction \_\_\_\_\_

Three blown fuses: mission ends \_\_\_\_\_

**TOTAL MISSION SCORE** \_\_\_\_\_

**Mission official's initials:** \_\_\_\_\_ **Company CEO's initials:** \_\_\_\_\_