OFFSHORE OILFIELD PRODUCTION & MAINTENANCE

Team Information Sticker

1

EXPLORER CLASS SCORE SHEET

ROVs in Extreme Environments: Science and Industry in the Arctic

| Company CEO: | | | | | |
|---|-------------|--|--|--|--|
| Product demonstration station officials: | | | | | |
| Safety Check and Set-Up (up to 10 points total) 5 points – Company presents signed safety inspection sheet. 5 points – Vehicle and control system present no safety hazards. Examples: All power cords, power bars, pressurized cylinders, etc. are secured. No hazardous materials are leaking onto the pool deck. Vehicle is hand-launched by team members in a safe manner. | | | | | |
| Company is cleared for demonstration: (official's initials) total 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 safety inspector or competition coordinator. Check here if the company presented you with a JSA (Job Safety Analysis). | | | | | |
| Organizational and Operational Effectiveness (up to 10 points total) | | | | | |
| Up to 2 points – Organization Chain of command evident Roles clear and executed well Up to 3 points – Task Plan Task plan is well thought out to maximize score Alternate plans available All team members are aware of the plan Up to 2 points – Time Management Awareness of time Adjusting timeline to adapt to situations Up to 3 points – Team Cooperation Composure under pressure Supportive of each other Team communicates well with each other | | | | | |
| Total points (out of 10) | | | | | |

Penalty Points

Tether pulling: Issue a warning for the first infraction. Begin deducting points AFTER the first infraction.

Illegal communication: Company members at the side of the pool may not communicate visual evidence of the ROV status (location, need to turn, etc.).

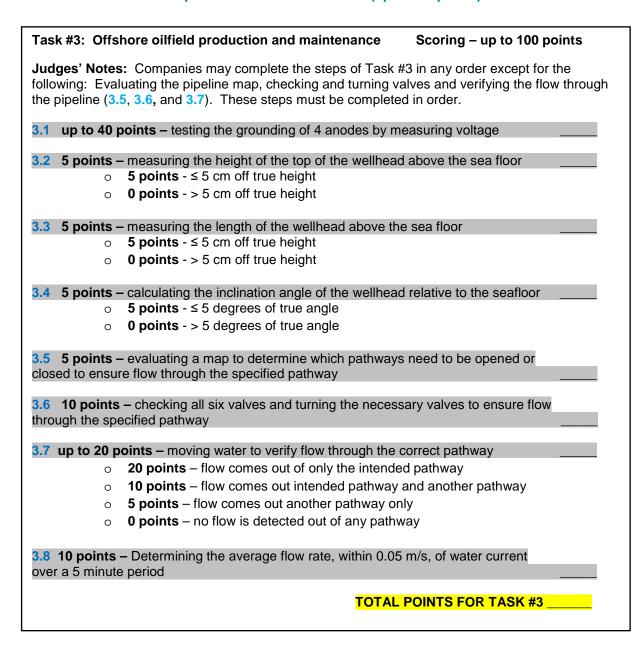
Debris: Companies that leave debris (e.g. parts of their ROV, including weights and flotation) in the pool such that a diver must retrieve the debris will also receive penalty points. Product demonstration props are NOT considered debris. A company constructed collection basket is considered debris. **Diver Assistance:** None is being provided for this mission.

Fuses

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

EXPLORER Product Demonstration Task Scoring Breakdown:

Task #3: Offshore oilfield production and maintenance (up to 100 points)



SCORING SUMMARY WORKSHEET

| The purpose of this sheet is to allow | you to verify and tall | v scores from the | previous pages. |
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|---|-----|---------|----|
| SAFETY CHECK & SET-UP | | | |
| Signed safety inspection sheet | 0 | | 5 |
| Vehicle and control system present no hazards | 0 | | 5 |
| ORGANIZATION | | | |
| Company is effectively organized to undertake the product demonstration | | 2 3 4 | |
| | 6 7 | 8 9 | 10 |
| Safety check, set-up, and organization point total: | | | |
| | | | |
| Task #3: Offshore oilfield production and maintenance (up to 100 points) | | | |
| Testing the grounding of anodes at four specified points | | 10 20 3 | |
| Measuring the height of the top of the wellhead from the seafloor | 0 | | 5 |
| Measuring the length of the wellhead pipe above the seafloor | 0 | | 5 |
| Calculating the inclination angle within 5 degrees of the true angle | 0 | | 5 |
| Evaluating a map to evaluate what valves need to opened or closed | 0 | | 5 |
| Checking all six valves and turning the necessary valves to ensure oil flow | 0 | | 10 |
| Moving water through the pipeline system to verify oil flow | | 5 10 | 20 |
| Determining the average flow rate within 0.05 m/s | 0 | | 10 |
| | | | |
| Task #3 point total: | | | |
| | | | |
| PENALTY POINT DEDUCTIONS | | | |
| *Illegally pulling tether infractions X - 5 | | | |
| *Illegal communication infractions X - 5 | | | |
| *** Leaving debris in the pool infractions X - 5 | | | |
| Exceeded 5-minute demobilization period minutes X - 1 = | | | |
| | | | |
| TIME BONUS | | | |
| 1 point for every minute and 0.01 point for every second under 15 minutes | | | |
| Duration of Product Demonstration: | | | |
| Minutes under 15 remaining: X 1 point = | | | |
| Seconds remaining: X 0.01 point = | | | |
| Time bonus | | | |
| | | | |
| | | | |
| TOTAL PRODUCT DEMONSTRATION SCORE | 1 | | |

| Official's initials: | Company CEO's initials: |
|----------------------|-------------------------|
| Official 3 liftual3. | Company CLC 3 initials. |