

Company CEO: \_\_\_\_\_

Company Name

Product demonstration station officials: \_\_\_\_\_

### Check here if the company presented you with a JSA (Job Safety Analysis)

Safety Check and Set-Up (up to 10 points)	Points	
Company presents safety card or signed safety inspection sheet.	0	5
Vehicle and control system present no safety hazards.	0	5
Examples: <ul style="list-style-type: none"> <li>o All power cords, power bars, pressurized cylinders, etc. are secured.</li> <li>o No hazardous materials are leaking onto the pool deck.</li> <li>o Vehicle is hand-launched by team members in a safe manner.</li> </ul>		
Company is cleared for demonstration: _____ (official's initials)		
<b>Total Safety Check and Set-Up (out of 10)</b>		<b>Total</b>
<i>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.</i>		

Organizational and Operational Effectiveness (up to 10 points)	Points	
<b>Up to 2 points – Organization</b>		
Chain of command evident	0	1
Roles clear and executed well	0	1
<b>Up to 2 points – Task Plan</b>		
Task plan is well thought out to maximize score	0	1
Alternate plans available and all team members are aware of the plan	0	1
<b>Up to 2 points – Time Management</b>		
Awareness of time	0	1
Adjusting timeline to adapt to situations	0	1
<b>Up to 2 points – Team Cooperation</b>		
Composure under pressure	0	1
Supportive of each other and communicate well with each other	0	1
<b>Up to 2 points – ROV Deployment and Control</b>		
ROV deployed by the end of the 5-minute set-up period	0	1
ROV is under control of pilot and prepared to perform tasks	0	1
<b>Total Organizational and Operational Effectiveness (out of 10)</b>		<b>Total</b>

Bonus points for size and weight	Points	
<b>Size bonus (up to 10 points)</b>		
ROV is less than 64 cm – 10 bonus points	0	5
ROV is within 64.1 cm and 75 cm – 5 bonus points		10
ROV is within 75.1 cm and 92 cm – 0 bonus points		
Vehicles larger than 92 cm may not compete		
		<b>Judge initials:</b> _____
		<b>CEO initials:</b> _____
		<b>Total</b>
<b>Weight bonus (up to 10 points)</b>		
ROV is less than 17 kg – 10 bonus points	0	5
ROV is between 17.01 kg and 25 kg – 5 bonus points		10
ROV is between 25.01 kg and 35 kg – 0 bonus points		
Vehicles heavier than 35 kg may not compete		
		<b>Judge initials:</b> _____
		<b>CEO initials:</b> _____
		<b>Total</b>

**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.

Task # 1: Aircraft (up to 100 points)	Points				
<b>Judges' Notes:</b> Companies must complete the steps of this task in order and cannot skip any steps. <b>Companies that cannot accurately complete step 1.1 only get 1/2 points for the remainder of the Aircraft tasks.</b>					
<b>1.1 10 points</b> – using flight data to determine the search zone for the wreckage	0	10			
<b>1.2 20 points</b> – identifying the aircraft using the tail section	0	20			
<b>1.3 up to 45 points</b> – removing debris from the engine using a lift bag					
o <b>5 points</b> – attaching the lift bag to the debris	0	5			
o <b>5 points</b> – inflating the lift bag to raise the debris	0	5			
o <b>5 points</b> – moving the debris from the wreck area	0	5			
o <b>up to 30 points</b> – releasing the lift bag from the debris	0	5	10	20	30
o <b>5 points</b> – a manual release					
o <b>10 points</b> – a magnetic / reed switch release					
o <b>20 points</b> – a WiFi or Bluetooth release					
o <b>30 points</b> – a frequency-selective acoustic release					
<b>1.4 up to 20 points</b> – returning the engine to the surface side of the pool using a lift bag					
o <b>10 points</b> – attaching the lift bag to the engine and inflating	0	10			
o <b>10 points</b> – returning the engine to the surface, side of the pool	0	10			
<b>Note: Companies dragged to the surface by the engine lift bag will be penalized 5 points</b>			-5		
<b>1.5 5 points</b> – returning all lift bags to the surface, side of the pool	0	5			
<b>Total Task # 1 (out of 100)</b>					<b>Total</b>

Task # 2: Earthquakes (up to 80 points)	Points				
<b>Judges' Notes:</b> Companies must power the OBS before attempting to level it. Companies unable to power the OBS <b>MAY NOT</b> come back at a later time to complete this step if other steps of Task 2 have been completed.					
Companies must level the OBS before seismograph data is displayed. Companies unable to level the OBS <b>WILL NOT</b> receive seismograph data.					
<b>2.1 up to 25 points</b> – powering the seismometer via inductive coupling					
<b>5 points</b> – inserting the power connector into the port on the OBS	0	5			
<b>20 points</b> – lighting the power indicator LED	0	20			
<b>2.2 up to 25 points</b> – leveling the OBS using data transmitted by the following:	0	5	25		
o <b>25 points</b> – WiFi data transmitted by the OBS					
o <b>5 points</b> – the bubble level					
<b>2.3 up to 30 points</b> – receiving and accurately displaying seismograph data transmitted by the OBS via WiFi					
<b>10 points</b> – receiving seismograph data via WiFi	0	10			
<b>10 points</b> – displaying the seismograph on a video monitor	0	10			
<b>10 points</b> – seismograph display is accurate	0	10			
<b>Total Task # 2 (out of 80)</b>					<b>Total</b>



<b>TIME BONUS (1 point for every minute and 0.01 point for every second under 15 minutes)</b>	
Duration of Product Demonstration: _____	
Minutes under 15 remaining: _____ X 1 point = _____	
Seconds remaining: _____ X 0.01 point = _____	
<b>Time bonus</b>	<b>Total</b>

	<b>Grand Total</b>
<b>TOTAL PRODUCT DEMONSTRATION SCORE</b>	