

Company CEO: _____

Company Name

Product demonstration station officials: _____

Safety**Check here if the company has their PASSED safety inspection card**

Companies without their safety inspection PASSED card cannot participate in the product demonstration.

Fuses: ROV systems are allowed one replacement fuse during the product demonstration. In the event that the ROV system blows the second fuse during the demonstration, time will stop, the demonstration run will be over, and no additional points will be earned. Companies should have adequate replacement fuses on hand, MATE will not provide replacements.

Task # 1: Shipwrecks, Spotter Buoys and Flying Fish (up to 100 points)		Points	
1.1 up to 35 points – Shipwrecks			
up to 35 points – determine the identity of an unknown shipwreck			
10 points – recover a dinner platter to determine the build date		0	10
10 points – recover a bottle to determine the home port		0	10
10 points – recover a cargo container to determine the cargo carried		0	10
5 points – identify the shipwreck		0	5
1.2 up to 30 points – Smart Buoys			
up to 20 points – replace a damaged thermistor on the subsurface Smart buoy			
10 points – remove the damaged thermistor		0	10
10 points – install the new thermistor		0	10
10 points – Install a pCO2 sensor to the subsurface Smart buoy		0	10
1.3 up to 35 points – Lake Acidification and Invasive Carp			
5 points – collect a water sample		0	5
5 points – determine the pH of the water sample		0	10
5 points – measure the dissolved CO2 levels of the water sample		0	10
10 points – determine if the unknown sequences include invasive carp		0	10
Total Task # 1 (out of 100)		Total	

Task # 2: Marine Renewable Energy (up to 90 points)		Points		
2.1 up to 45 points – Produce Power				
5 points – retrieve the power connector		0	5	
up to 15 points – install the power connector into the hub				
5 points – remove the cover from the connection port		0	5	
10 points – install the connector		0	10	
up to 15 points – replace a sacrificial anode				
5 points – disconnect the old sacrificial anode		0	5	
10 points – connect the new sacrificial anode		0	10	
10 points – apply an underwater epoxy patch to the corroded area		0	10	
2.2 up to 45 points – Monitor Environmental Impact				
up to 10 points – collect polyp stage jellies attached to the solar panel array				
10 points – collect 4 or more polyps		0	5	10
5 points – collect 1 to 3 polyps				
15 points – collect the medusa jelly		0		15
up to 10 points – collect fish species aggregated underneath the solar panel array				
10 points – collect 4 or more fish species		0	5	10
5 points – collect 1 to 3 fish species				
10 points – place the hydrophone in the designated area		0		10
Total Task # 2 (out of 100)				Total

Task # 3: MATE Floats! 2025 (up to 60 points)		Points		
3.1 up to 60 points – Design and construct an operational vertical profiling float				
5 points – prior to the competition, building an operational vertical profiling float with a temperature sensor		0	5	
up to 30 points – float completes a vertical profile				
30 points – autonomously		0	10	30
10 points – manually				
up to 20 points – float collects temperature from four points				
5 points – temperature in air within 4 degrees C		0	5	
5 points – surface temperature within 4 degrees C		0	5	
5 points – mid-water temperature within 4 degrees C		0	5	
5 points – bottom temperature within 4 degrees C		0	5	
5 points – graph temperature versus depth		0	5	
NOTE: If a company does not design and construct a float or the float does not contain a functioning temperature sensor, companies may graph MATE-provided data. The following replaces all temperature measurements and graphing points above.				
10 points – MATE-provided data is used to graph depth over time		0	10	
Total Task # 3 (out of 60)				Total

Penalty Points (deduct 5 points for each infraction)	No. of Infractions
Safety: Product demonstration officials may deduct points for safety violations. Minor violations are a 5 point penalty. Major violations may be 10 or more points. Product demonstration officials may also disqualify a company for extreme safety violations. 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.	
Tether Pulling: Company members cannot pull on the tether to assist in moving or turning the vehicle. Judges should issue a warning for the first infraction and begin deducting points AFTER the first infraction.	a
Debris: Companies that leave debris (e.g. parts of their ROV, including weights and flotation) in the pool at the end of the product demonstration time, or leave debris that a diver must retrieve will receive penalty points. Mission props deployed into the pool ARE NOT considered debris. Unless otherwise noted, mission items to be recovered or replaced ARE considered debris.	b
Diver Assistance: Any diver assistance (if available) must be requested by the company and will result in a 5 point penalty. The clock does not stop during diver assistance.	c
Total Penalty Points	(total a + b + c) plus safety violations
	Total
	X 5 =

TIME BONUS (1 point for every minute and 0.01 point for every second under 10 minutes)
Duration of Product Demonstration: _____
Minutes under 15 remaining: _____ X 1 point = _____
Seconds remaining: _____ X 0.01 point = _____
Time bonus
Total

TOTAL PRODUCT DEMONSTRATION SCORE	Grand Total
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Official's initials: _____

Company CEO's initials: _____