

Company CEO: _____

Company Name

Product demonstration station officials: _____

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"> o All power cords, power bars, etc. are secured. o No hazardous materials are leaking onto the pool deck. o Vehicle is hand-launched by team members in a safe manner. 		
Company is cleared for demonstration: _____ (official's initials)		
Total Safety Check and Set-Up (out of 10)		
		Total

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.

Bonus points for size	Points		
Size bonus (up to 10 points)	0	5	10
ROV is less than 48 cm – 10 bonus points			
ROV is within 48.1 cm and 60 cm – 5 bonus points			
ROV is greater than 60.1 cm – 0 bonus points			
	Judge initials: _____		
	CEO initials: _____		
			Total

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: Ensuring Public Safety - Dam Inspection and Repair (up to 50 points)	Points				
Judges' Notes: Companies must complete the three steps of repairing the damaged trash rack in order. Companies may insert grout into the voids before or after repairing the damaged trash rack					
1.1 up to 30 points – repairing the damaged trash rack					
10 points – removing the debris covering the trash rack	0				10
10 points – removing the damaged screen of the trash rack	0				10
10 points – installing a new screen	0				10
1.2 5 points each, 20 points total – inserting grout into four voids underneath the dam	0	5	10	15	20
Total Task # 1 (out of 50)					Total

Task # 2: Maintaining Healthy Waterways (up to 90 points)	Points			
Judges' Notes: Companies may complete the steps of this task in any order.				
2.1 up to 30 points – monitoring water quality				
10 points – temperature measurement is within 4 C of benchmark	0		10	
10 points - collecting a water sample from the bottom	0		10	
o using a water monitoring kit to				
5 points – measure the pH of the water sample	0		5	
5 points – measure the phosphate levels of the water sample	0		5	
2.2 up to 30 points – determining habitat diversity				
5 points – lifting a rock from the bottom	0		5	
10 points – returning rock with benthic species to surface	0		10	
5 points – using a handbook to determine the number and type of benthic species underneath the rock	0		5	
o up to 10 points - recording the temperature, pH, phosphate, and species diversity on a data sheet	0	5	10	
10 points – recording all four data points				
5 points – recording 2 or 3 data points				
0 points – recording 1 or fewer data points				
2.3 5 points each, 10 points total – transporting and releasing trout fry	0	5	10	
2.4 up to 20 points - restoring fish habitat				
5 points each, 10 points total – removing two degraded rubber tires	0	5	10	
5 points each, 10 points total – installing two new fish/reef balls	0	5	10	
				Total
Total Task # 2 (out of 90)				

Task # 3: Preserving History (up to 60 points)	Points					
Judges' Notes: Companies must calculate the volume of the cannon before attaching a lift bag and returning the cannon to the surface, side of the pool. Companies may skip the math calculations if they desire, but cannot receive points for calculations once they have attached the lift bag to the cannon. Identifying the location of metal cannon shells may be done before or after calculating the volume.						
3.1 up to 30 points – recovering a civil war era cannon						
10 points - calculating the volume of the cannon within 50 cm ³ of actual	0			10		
10 points – attaching a lift bag to the cannon and inflating the lift bag	0			10		
10 points – returning the cannon to the side of the pool	0			10		
3.2 up to 30 points – identifying the location of metal cannon shells						
5 points each, 20 points total - marking the four cannon shells/non-metal debris on a grid map	0	5	10	15	20	
10 points – placing markers at all the cannon shell locations	0			10		
						Total
Total Task # 3 (out of 60)						

Penalty Points (deduct 5 points for each infraction)	No. of Infractions	
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. Product demonstration props are NOT considered debris. A company constructed collection basket is considered debris if it is still in the water when product demonstration time ends.	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 a + b + c)	
Total Penalty Points	X	5 =
		Total

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

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

Company CEO's initials: _____