



Challenge Competition Scoresheet

Judge Name: _____ Date: _____

Team: _____

A team's score will be totaled for the BEST COMBINED SCORE for all challenges completed within the allotted time.

For Example:

- LPV successfully leaves dock and completes Challenge #1
- LPV returns to dock (autonomously or with intervention)
- LPV has team intervention at the dock to modify code or equipment.
- LPV is deployed to complete another challenge of their choosing (Challenge #3)
- LPV completed a challenge (Challenge #3)
- LPV returns to dock (autonomously or with intervention)
- All Challenges successfully completed will be combined for total score.

1 hour will be provided to each team to attempt to complete as many challenges as possible. Teams will not be penalized for prior team's delaying the beginning of their time slot. Judges will have the final determination on "stopping the clock" during a run to make any modifications to the course that will not penalize a team.

Teams are permitted to return to the dock to modify their device or code during the competition run for no penalty.

Completion of Challenge #1 is required to record a score to competition.

If 20 minutes is attempted to complete a Challenge #1 without success, teams are permitted to continue to other tasks for an exhibition run. This exhibition run will not result in a competition score but allow teams to attempt the other challenges.

Any human intervention of remote-control intervention to complete challenge tasks may result in a deduction of points.



Water Line Validation: Is water line within or above the “Orange Band” on the LPV prior to competition run

No_____(-30 pts)

1 Gate		Yes	No	
	Successfully Left Dock Untethered	<input type="checkbox"/>	<input type="checkbox"/>	
	Successfully Entered Gate	<input type="checkbox"/>	<input type="checkbox"/>	
	Successfully Exited Gate	<input type="checkbox"/>	<input type="checkbox"/>	
	Contact with buoy(s) #	<input type="text"/>		
		Yes	No	
	Task completed Autonomously	<input type="checkbox"/>	<input type="checkbox"/>	
	GPS Agnostic	<input type="checkbox"/>	<input type="checkbox"/>	
	IR/Radar Guidance	<input type="checkbox"/>	<input type="checkbox"/>	
	Autonomous Navigation between Challenges	<input type="checkbox"/>	<input type="checkbox"/>	
2 Dodge		Yes	No	
	Correct Buoy Navigation (right or left)	1 <input type="checkbox"/>	<input type="checkbox"/>	
		2 <input type="checkbox"/>	<input type="checkbox"/>	
		3 <input type="checkbox"/>	<input type="checkbox"/>	
		4 <input type="checkbox"/>	<input type="checkbox"/>	
	Contact with buoy(s) #	<input type="text"/>		
	<u>Time Bonus</u>			
	Gate A-B			
	Time			
Record	Start Time "Entry"			
	Exit Time	Yes	No	
	Fastest Time	<input type="text"/>	<input type="text"/>	
		Yes	No	
	Task completed Autonomously	<input type="checkbox"/>	<input type="checkbox"/>	
	GPS Agnostic	<input type="checkbox"/>	<input type="checkbox"/>	
	IR/Radar Guidance	<input type="checkbox"/>	<input type="checkbox"/>	
	Autonomous Navigation between Challenges	<input type="checkbox"/>	<input type="checkbox"/>	
3 Evade		Yes	No	
	LiDAR Sensor Evaded	1 <input type="checkbox"/>	<input type="checkbox"/>	
		2 <input type="checkbox"/>	<input type="checkbox"/>	
	<u>Time Bonus</u>			
	Gate C-D			
	Time			
Record	Start Time "Entry"			
	Exit Time	Yes	No	
	Fastest Time	<input type="text"/>	<input type="text"/>	
		Yes	No	
	Task completed Autonomously	<input type="checkbox"/>	<input type="checkbox"/>	
	GPS Agnostic	<input type="checkbox"/>	<input type="checkbox"/>	
	IR/Radar Guidance	<input type="checkbox"/>	<input type="checkbox"/>	
	Autonomous Navigation between Challenges	<input type="checkbox"/>	<input type="checkbox"/>	
4 Identify		<u>Correct</u>		
	Color Specified X	Yes	No	
	Purple	<input type="checkbox"/>	<input type="checkbox"/>	
	Orange	<input type="checkbox"/>	<input type="checkbox"/>	
	Yellow	<input type="checkbox"/>	<input type="checkbox"/>	
	Blue	<input type="checkbox"/>	<input type="checkbox"/>	
	Random Selection Bonus	<input type="checkbox"/>	Yes	
	Successful	<input type="checkbox"/>		
		Yes	No	
	Task completed Autonomously	<input type="checkbox"/>	<input type="checkbox"/>	
	GPS Agnostic	<input type="checkbox"/>	<input type="checkbox"/>	
	IR/Radar Guidance	<input type="checkbox"/>	<input type="checkbox"/>	
	Autonomous Navigation between Challenges	<input type="checkbox"/>	<input type="checkbox"/>	
5 Deploy		Yes	No	
	Sensor Successfully Deployed	<input type="checkbox"/>	<input type="checkbox"/>	
		Yes	No	
	Task completed Autonomously	<input type="checkbox"/>	<input type="checkbox"/>	
	GPS Agnostic	<input type="checkbox"/>	<input type="checkbox"/>	
	IR/Radar Guidance	<input type="checkbox"/>	<input type="checkbox"/>	
	Autonomous Navigation between Challenges	<input type="checkbox"/>	<input type="checkbox"/>	

6 Launch		Yes	No	
	Object Deployed	<input type="checkbox"/>	<input type="checkbox"/>	
	Object launched approximately greater than 10' from target	<input type="checkbox"/>	<input type="checkbox"/>	
		Yes	No	
	Object Reached Target	<input type="checkbox"/>	<input type="checkbox"/>	
	Object Landed in Center Section	<input type="checkbox"/>	<input type="checkbox"/>	
	Object Landed on Rim	<input type="checkbox"/>	<input type="checkbox"/>	
	Object remained on target following landing	<input type="checkbox"/>	<input type="checkbox"/>	
		Yes	No	
	Task completed Autonomously	<input type="checkbox"/>	<input type="checkbox"/>	
	GPS Agnostic	<input type="checkbox"/>	<input type="checkbox"/>	
	IR/Radar Guidance	<input type="checkbox"/>	<input type="checkbox"/>	
	Autonomous Navigation between Challenges	<input type="checkbox"/>	<input type="checkbox"/>	
7 Recover		Yes	No	
	Object Identified & Contacted	<input type="checkbox"/>	<input type="checkbox"/>	
	Object Tethered to LPV	<input type="checkbox"/>	<input type="checkbox"/>	
	Object Removed from Water	<input type="checkbox"/>	<input type="checkbox"/>	
	Object delivered to Dock	<input type="checkbox"/>	<input type="checkbox"/>	
		Yes	No	
	Task completed Autonomously	<input type="checkbox"/>	<input type="checkbox"/>	
	GPS Agnostic	<input type="checkbox"/>	<input type="checkbox"/>	
	IR/Radar Guidance	<input type="checkbox"/>	<input type="checkbox"/>	
	Autonomous Navigation between Challenges	<input type="checkbox"/>	<input type="checkbox"/>	
8 Receive		Yes	No	
	Sensor Communicates with Base	<input type="checkbox"/>	<input type="checkbox"/>	
	Data Provided to Judges	<input type="checkbox"/>	<input type="checkbox"/>	
9 Return		Yes	No	
	LPV returned to base	<input type="checkbox"/>	<input type="checkbox"/>	
Total Time Bonus		Yes		
	Complete a minimum of 4 challenges	<input type="checkbox"/>		
	Total Scoring Run Time			
	Number of Challenges Completed	%	<input type="text"/>	
	Average Per-Task Time			
	Fastest Time	Yes		
		<input type="checkbox"/>		
	Fastest Time	No		
		<input type="checkbox"/>		
	$\frac{\text{Fastest Time}}{\text{Your Time}} \times 60 = \text{Bonus}$			
	<input type="text"/>	$\times 60 =$	<input type="text"/>	
	<input type="text"/>	$\times 60 =$	<input type="text"/>	
	Task 6-9 & Time Bonus Total			
	Task 1-5 Total			
	Human Remote Intervention	# <input type="text"/>	\times <input type="text"/>	(-)5 pts
	Total			