

Team University of Girona

euRathlon 2014 sea competition - 29 Sept - 4 Oct, La Spezia, Italy

Leak Localisation and Inspection						
Scenario Parameters			Vehicle Performance		Notes	
Performance Measures	Parameters for task	Value	Max Score	Parameter	Score	Parameter value
	Quality of the Map	0-100%	600	50%	300	The position and quality of the detection of the OPIs will be assessed by the judges based on the logs provided. Full points will be given to a map enabling the vehicle to navigate to the structure based on the detected OPIs. 3D models and images of the OPIs will help the judges. The overall quality of the map is less important than the ability to navigate to the structure.
	Ability to use map to find plume	0/1	400	0	0	
Structure Localisation and inspection	Structure found using plume tracking	0/1	500	0	0	Plume tracking must be demonstrated to judges by showing algorithm post mission
	Structure found using other approach	0/1	200	1	200	This could be vision for instance
	Time Bonus (m)	10	300	15.93333333	211	300 for time less than 10 minutes and linearly decreasing to 0 after that (up to 20 minutes)
	Full structure tracked and inspected	[0-100]	500	40%	200	Judges will assess full inspection based on visual data provided by teams
	Stopcock detected	0/1	250	0	0	Produce visual or acoustic imagery to validate detection
	Stopcock inspected	[0-100]	250	0%	0	Produce visual or acoustic imagery to validate detection
	Quality of map of a structure produced	[0-100]	1000	70%	700	This can be done in up to 2 hours after the vehicle has completed its mission. Quality will be assessed by the judges
	Quality of Overall Map	0-100%	500	80%	400	
AUV/USV Collaboration	Bonus	0/1	500	0	0	
Time	For Benchmarking wrt to Best time	60		90		Report time achieved by team
Subjective Measures	See Table below		1500		1205	
Total			6500		3216	

Subjective measures		
	Max Points	Team Performance
SAP Journal	200	180
SAP Video	100	0
Technical Merit	250	220
Craftmanship	250	205
Safety of design	250	200
Innovation	250	220
Discretionary points	200	180
Total	1500	1205

Team Avalon

euRathlon 2014 sea competition - 29 Sept - 4 Oct, La Spezia, Italy

Leak Localisation and Inspection						
Scenario Parameters			Vehicle Performance		Notes	
Performance Measures	Parameters for task	Value	Max Score	Parameter	Score	Parameter value
Path Finding	Quality of the Map	0-100%	600	50%	300	The position and quality of the detection of the OPIs will be assessed by the judges based on the logs provided. Full points will be given to a map enabling the vehicle to navigate to the structure based on the detected OPIs. 3D models and images of the OPIs will help the judges. The overall quality of the map is less important than the ability to navigate to the structure.
	Ability to use map to find plume	0/1	400	0	0	
Structure Localisation and inspection	Structure found using plume tracking	0/1	500	0	0	Plume tracking must be demonstrated to judges by showing algorithm post mission
	Structure found using other approach	0/1	200	1	200	This could be vision for instance
	Time Bonus (m)	10	300	7.883333333	300	300 for time less than 10 minutes and linearly decreasing to 0 after that (up to 20 minutes)
	Full structure tracked and inspected	[0-100]	500	40%	200	Judges will assess full inspection based on visual data provided by teams
	Stopcock detected	0/1	250	0	0	Produce visual or acoustic imagery to validate detection
	Stopcock inspected	[0-100]	250	0%	0	Produce visual or acoustic imagery to validate detection
	Quality of map of a structure produced	[0-100]	1000	80%	800	This can be done in up to 2 hours after the vehicle has completed its mission. Quality will be assessed by the judges
Quality of Overall Map	0-100%	500	40%	200		
AUV/USV Collaboration	Bonus	0/1	500	0	0	
Time	For Benchmarking wrt to Best time	60		20		Report time achieved by team
Subjective Measures	See Table below		1500		1030	
Total			6500		3030	

Subjective measures		
	Max Points	Team Performance
SAP Journal	200	100
SAP Video	100	
Technical Merit	250	200
Craftmanship	250	200
Safety of design	250	200
Innovation	250	150
Discretionary points	200	180
Total	1500	1030

Team SAUC'ISSE

euRathlon 2014 sea competition - 29 Sept - 4 Oct, La Spezia, Italy

Leak Localisation and Inspection						
Scenario Parameters				Vehicle Performance		Notes
Performance Measures	Parameters for task	Value	Max Score	Parameter	Score	Parameter value
Path Finding	Quality of the Map	0-100%	600	30%	180	The position and quality of the detection of the OPis will be assessed by the judges based on the logs provided. Full points will be given to a map enabling the vehicle to navigate to the structure based on the detected OPis. 3D models and images of the OPis will help the judges. The overall quality of the map is less important than the ability to navigate to the structure.
	Ability to use map to find plume	0/1	400	0	0	
Structure Localisation and inspection	Structure found using plume tracking	0/1	500	0	0	Plume tracking must be demonstrated to judges by showing algorithm post mission
	Structure found using other approach	0/1	200	0	0	This could be vision for instance
	Time Bonus (m)	10	300	30	0	300 for time less than 10 minutes and linearly decreasing to 0 after that (up to 20 minutes)
	Full structure tracked and inspected	[0-100]	500	0%	0	Judges will assess full inspection based on visual data provided by teams
	Stopcock detected	0/1	250	0	0	Produce visual or acoustic imagery to validate detection
	Stopcock inspected	[0-100]	250	0%	0	Produce visual or acoustic imagery to validate detection
	Quality of map of a structure produced	[0-100]	1000	0%	0	This can be done in up to 2 hours after the vehicle has completed its mission. Quality will be assessed by the judges
Quality of Overall Map	0-100%	500	25%	125		
AUV/USV Collaboration	Bonus	0/1	500	1	500	
Time	For Benchmarking wrt to Best time	60		50		Report time achieved by team
Subjective Measures	See Table below		1500		885	
Total			6500		1690	

Subjective measures		
	Max Points	Team Performance
SAP Journal	200	180
SAP Video	100	0
Technical Merit	250	120
Craftmanship	250	150
Safety of design	250	180
Innovation	250	130
Discretionary points	200	125
Total	1500	885

Team CISSAU

euRathlon 2014 sea competition - 29 Sept - 4 Oct, La Spezia, Italy

Leak Localisation and Inspection						
Scenario Parameters			Vehicle Performance		Notes	
Performance Measures	Parameters for task	Value	Max Score	Parameter	Score	Parameter value
Path Finding	Quality of the Map	0-100%	600	10%	60	The position and quality of the detection of the OPis will be assessed by the judges based on the logs provided. Full points will be given to a map enabling the vehicle to navigate to the structure based on the detected OPis. 3D models and images of the OPis will help the judges. The overall quality of the map is less important than the ability to navigate to the structure.
	Ability to use map to find plume	0/1	400	0	0	
Structure Localisation and inspection	Structure found using plume tracking	0/1	500	0	0	Plume tracking must be demonstrated to judges by showing algorithm post mission
	Structure found using other approach	0/1	200	1	200	This could be vision for instance
	Time Bonus (m)	10	300	15	225	300 for time less than 10 minutes and linearly decreasing to 0 after that (up to 20 minutes)
	Full structure tracked and inspected	[0-100]	500	10%	50	Judges will assess full inspection based on visual data provided by teams
	Stopcock detected	0/1	250	0	0	Produce visual or acoustic imagery to validate detection
	Stopcock inspected	[0-100]	250	0%	0	Produce visual or acoustic imagery to validate detection
	Quality of map of a structure produced	[0-100]	1000	0%	0	This can be done in up to 2 hours after the vehicle has completed its mission. Quality will be assessed by the judges
Quality of Overall Map	0-100%	500	30%	150		
AUV/USV Collaboration	Bonus	0/1	500	0	0	
Time	For Benchmarking wrt to Best time	60		15		Report time achieved by team
Subjective Measures	See Table below		1500		650	
Total			6500		1335	

Subjective measures		
	Max Points	Team Performance
SAP Journal	200	120
SAP Video	100	0
Technical Merit	250	80
Craftmanship	250	150
Safety of design	250	100
Innovation	250	100
Discretionary points	200	100
Total	1500	650