

## Transport/Mule – repeated shuttling between two camps

	<b>Robotics Inventions</b>	<b>AVRORA</b>	<b>Dromader</b>	<b>Marek</b>	<b>MULE</b>
<i>Mode of operation</i>	<i>semi-auton.</i>	<i>withdrawn</i>	<i>aborted</i>	<i>tele-op.</i>	<i>tele-op.</i>
Vehicle left start position P1	200			100	100
Turning point P2 (i.e. end of teach-in) reached	200			100	100
Target points (P1/P2) reached (during shuttling)	-			150	150
Live position and images transmitted to control station	100			-	-
Penalty for n manual interventions	-200			-300	-400
Penalty for manual intervention duration t	-850			-420	-100
Bonus: Human-guided teach-in	600			-	-
Bonus: New route found after change of environment	n.a.			n.a.	n.a.
Bonus: Heavy payload carried	200			300	300
<b>Overall result</b>	<b>250</b>			<b>-70</b>	<b>150</b>
<b>Rank</b>	<b>1.</b>			<b>3.</b>	<b>2.</b>

## Search and retrieval of casualties in outdoor environments (MedEvac)

	ELP	AVRORA	University of Oulu	Fraunhofer FKIE	Cobham	MED-ENG	Dromader	Marek	PIAP
<i>Mode of operation</i>	<i>tele-op.</i>	<i>tele-op.</i>	<i>tele-op.</i>	<i>tele-op.</i>	<i>tele-op.</i>	<i>tele-op.</i>	<i>withdrawn</i>	<i>withdrawn</i>	<i>tele-op.</i>
Vehicle left start position	100	100	100	100	100	100			100
Vehicle reached imitated body	200	-	-	200	200	100			200
Picture of imitated body acquired	200	-	-	200	200	-			-
GPS position of imitated body acquired	200	-	-	200	200	-			-
Imitated body moved (score per body)	1700	-	-	2000	1700	500			1700
Live position and images transmitted to control station	100	-	100	100	100	100			100
Mission completed in time	750	-	-	1000	500	-			500
Penalty for n manual interventions	-	-	-	-200	-	-			-
Penalty for manual intervention duration t	-	-	-	-20	-	-			-
<b>Overall result</b>	<b>3250</b>	<i>No official ranking (no WebDAV access)</i>	<i>No official ranking (2nd run, no WebDAV access)</i>	<b>3580</b>	<b>3000</b>	<i>No official ranking (no WebDAV access)</i>			<i>No official ranking (2nd run, no WebDAV access)</i>
<b>Rank</b>	<b>2.</b>			<b>1.</b>	<b>3.</b>				

## Reconnaissance and surveillance in non-urban environments (RSTA)

	<b>ELP</b>	<b>Robotics Inventions</b>	<b>Cobham</b>	<b>Dromader</b>	<b>Marek</b>	<b>MULE</b>
<i>Mode of operation</i>	<i>tele-op.</i>	<i>semi-auton.</i>	<i>tele-op.</i>	<i>tele-op.</i>	<i>tele-op.</i>	<i>tele-op.</i>
Vehicle left start position	100	200	100	100	100	100
Intermediate waypoints reached	300	-	500	-	100	500
Detection of OPI (i.e. position entry in the map)	-	-	400	100	-	200
Image of OPI produced	-	-	200	-	-	-
Image of OPI transmitted online to control station	-	-	400	100	-	-
Vehicle trajectory drawn in map	100	100	100	-	-	-
Live position and images transmitted to control station	100	100	100	-	-	-
Mission completed in time	500	-	500	-	-	500
Penalty for n manual interventions	-	-	-	-	-300	-300
Penalty for manual intervention duration t	-	-	-	-	-340	-55
<b>Overall result</b>	<b>1100</b>	<b>400</b>	<b>2300</b>	<b>300</b>	<b>-440</b>	<b>945</b>
<b>Rank</b>	<b>2.</b>	<b>4.</b>	<b>1.</b>	<b>5.</b>	<b>6.</b>	<b>3.</b>

## Reconnoitring of urban building structures (MAUT)

	ELP	AVRORA	Cobham	PIAP	bebot-team
<i>Mode of operation</i>	<i>tele-op.</i>	<i>withdrawn</i>	<i>tele-op.</i>	<i>tele-op.</i>	<i>tele-op.</i>
Vehicle left start position	100		100	100	100
Vehicle entered building	300		300	300	200
Map of area produced	125		-	-	-
Detection of OPI (i.e. position entry in the map)	0		-	-	-
Image of OPI produced	350		450	300	-
Image of OPI transmitted online to control station	700		900	700	-
% x of correct OPIs	50		50	20	-
Vehicle trajectory drawn in map	100		-	100	-
Live position and images transmitted to control station	100		100	100	100
Mission completed in time	500		750	-	-
Penalty for n manual interventions	-		-	-	-
Penalty for manual intervention duration t	-		-	-	-
<i>Bonus: 2<sup>nd</sup> floor reached – via ramp / via stairs</i>	1000		1000	1500	-
<b>Overall result</b>	<b>3325</b>		<b>3650</b>	<b>3120</b>	<b>400</b>
<b>Rank</b>	<b>2.</b>		<b>1.</b>	<b>3.</b>	<b>4.</b>