



**ORC**

Offshore Racing Congress  
World leader in rating technology

**2020  
ORC Club  
Certificate**

**Rating Office**

EYU  
Purje 8  
11911, Tallinn  
Estonia

**Certificate**

Number **Est326**  
Issued On **4/27/2020**  
ORC Ref **03580000HFV**  
VPP Ver. **2020 1.01**  
Valid until **31/12/2020**

**Crew Weight**

Default 402kg  
Maximum **365kg**  
Minimum\* **274kg**  
*\*when applied by the NoR and SI*  
Non Manual Pwr **No**

**Special Scoring**

	ToD	ToT
Non Spin GPH	<b>764.2</b>	<b>0.7851</b>
Non Spin OSN	<b>737.6</b>	<b>0.8135</b>

**Sails Limitations**

Headsails **5** Spinnakers **4**  
Woven Polyester

**Spinnaker configuration**

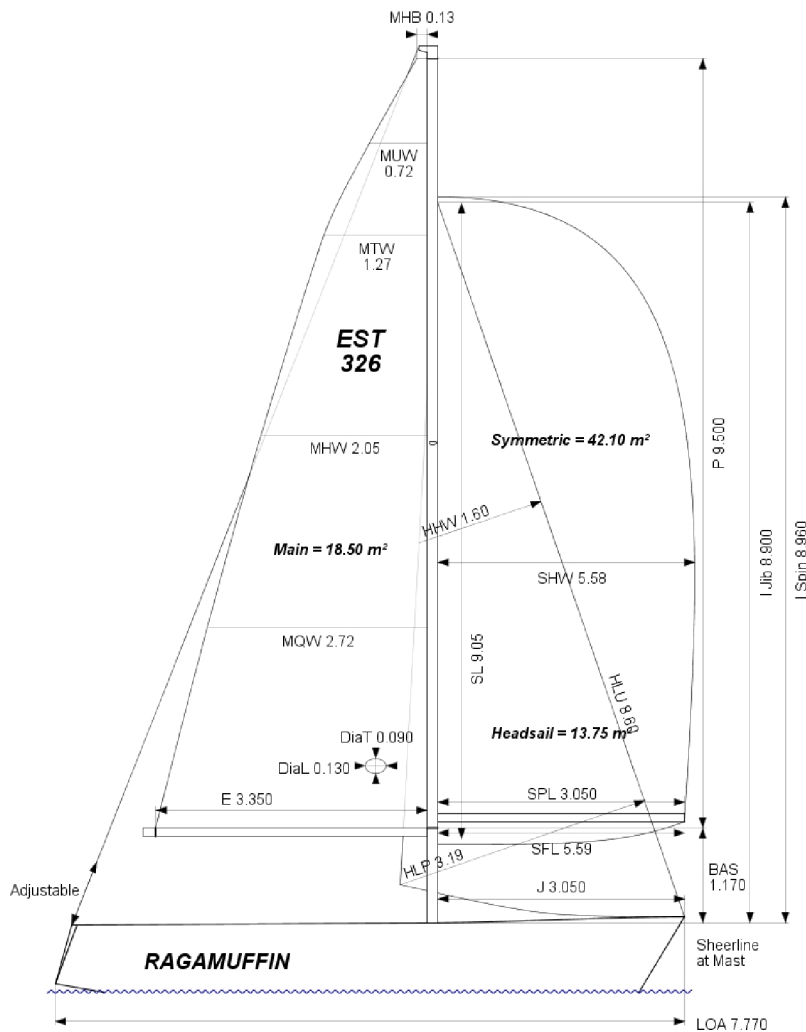
Symmetric: **Yes** **42.10**  
Asymmetric: **No**  
Flying H/S: **No**  
Spin. Pole: **Yes**

**Class Division Length**

CDL = **6.560**

**Stability (Estimated)**

Limit Positive Stab.: **121.5°**  
Stability Index: **118.6**



BOAT	GPH	HULL
Name <b>Ragamuffin</b> Sail Nr <b>EST326</b>	<b>728.4</b>	Data File <b>Est0326</b> LOA <b>7.770m</b> Offset File <b>L0016.bof</b> MB <b>2.524m</b> Displacement <b>1,900kg</b> Draft <b>1.445m</b>
<b>CLASS</b> Class <b>ALBIN EXPRESS</b> Designer <b>PETER NORLIN</b> Builder <b>Albin Marin</b> Series <b>01/1978</b> Age Date <b>01/1979</b> Age Allowance <b>0.487%</b>		IMS Division <b>Sportboat</b> Dynamic All. <b>0.209%</b> Plan Review Construction <b>Solid</b> Fiber Rigging <b>No</b> Aramid Core <b>No</b> Crew Arm Ex Carbon Rudder <b>No</b> Light Stanchions <b>No</b>
<b>COMMENTS</b> Kaal koos p�aramootoriga ahtril 27,5 kg		IMSL <b>6.925m</b> VCGD <b>-0.106m</b> Sink <b>9.28kg/mm</b> RL <b>6.193m</b> VCGM <b>-0.086m</b> WS <b>12.76m²</b> LSM0 <b>6.858m</b> Displacement/Length ratio <b>5.8906</b>
<b>PROPELLER</b> Type <b>No Propeller</b>		Water Ballast <b>0</b> Trim Tab <b>No</b> BLR Index <b>0.0000</b>
		<b>CENTERBOARD</b>  N/A
<b>SCORING OPTIONS</b>		
	<b>COASTAL / LONG DISTANCE</b>	<b>WINDWARD / LEEWARD</b>
Time on Distance	<b>707.3</b>	<b>785.8</b>
Time on Time	<b>0.8483</b>	<b>0.8590</b>
Triple Number	Low Medium High	Low Medium High
Time on Distance	<b>832.6</b> <b>645.9</b> <b>576.9</b>	<b>1077.1</b> <b>788.4</b> <b>688.9</b>
Time on Time	<b>0.8107</b> <b>1.0450</b> <b>1.1701</b>	<b>0.6267</b> <b>0.8562</b> <b>0.9798</b>

<b>BOAT</b>	
Name <b>Ragamuffin</b>	Sail Nr <b>EST326</b>
File <b>Est0326</b>	Data in <b>meters/kilograms</b>

<b>INCLINING TEST AND FREEBOARDS</b>			
Inclining Test <b>Club Estimated VCG</b>			
Flotation date <b>14/10/2019</b>		SG	
FFM	FF <b>0.924</b>	SFFP	<b>0.426</b>
FAM	FA <b>0.824</b>	SAFP	<b>7.503</b>
LCF from stem on CL / on sheer		<b>4.227 / 4.380</b>	
Maximum beam station from stem		<b>4.626</b>	
RM Measured		<b>32.8kg·m</b>	
RM Default		<b>31.9kg·m</b>	
Limit of positive stability / Stab.Index		<b>121.5° / 118.6</b>	
Freeboard at mast at 3.050		<b>0.853</b>	



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**Measurements**  
**Datasheet**

<b>RIG</b>					
Forestay Tension	<b>Aft</b>	Spreaders		<b>1</b>	
Inner Stay	<b>None Fitted</b>	Runners/Checkstays		<b>0</b>	
Carbon Mast	<b>No</b>	Jib Furler		<b>No</b>	
Fiber Rigging	<b>No</b>	Main Furler		<b>No</b>	
Non-Circular Rigging	<b>No</b>				
Articulated Bowsprit					
P	<b>9.500</b>	E	<b>3.350</b>	MDT1	<b>0.090</b>
IG	<b>8.900</b>	J	<b>3.050</b>	MDL1	<b>0.130</b>
ISP	<b>8.960</b>	SFJ		MDT2	<b>0.090</b>
BAS	<b>1.170</b>	SPL	<b>3.050</b>	MDL2	<b>0.130</b>
FSD		TPS		TL	<b>0.000</b>
				MW	<b>0.130</b>
				GO	<b>0.130</b>
				BD	<b>0.100</b>
				MWT	
				MCG	

<b>MIZZEN RIG AND SAILS</b>	
N/A	

<b>PROPELLER</b>	
Type <b>No Propeller</b>	

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<b>COMMENTS</b>	
Kaal koos p�aramootoriga ahtril 27,5 kg	

<b>MOVABLE BALLAST</b>	
N/A	

<b>CENTERBOARD</b>	
N/A	

<b>SAILS INVENTORY</b>																
<b>MAINSAIL (1)</b>																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
1	0.13	0.72	1.27	2.05	2.72	18.51										
<b>HEADSAILS (1)</b>																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Flying	Measurer	Meas.Date	Manufacture	Material	Comment
1	0.06	0.41	0.80	1.60	2.38	3.19	8.60	105%	13.75		No					
<b>SYMMETRIC SPINNAKERS (1)</b>																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
1	9.05	9.05	9.05	5.58	5.59	42.10										
<b>ASYMMETRIC SPINNAKERS (0)</b>																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				



# 2020

## ORC Club Certificate Appendix

<b>BOAT</b>			
Name	Ragamuffin	Certificate Number	Est326
Sail Nr	EST326	Issued On	4/27/2020

<b>TIME ALLOWANCES</b>							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1250.8	1042.5	920.9	848.5	822.8	817.1	825.0
52°	817.4	688.9	627.9	599.8	586.4	581.7	581.9
60°	773.1	655.9	609.8	586.4	571.5	563.9	561.8
75°	742.6	635.6	596.3	574.0	554.7	538.8	525.1
90°	719.5	613.6	574.8	553.0	541.9	527.4	496.0
110°	714.0	607.2	568.0	535.9	507.3	488.1	466.2
120°	737.6	618.5	574.3	542.1	510.0	481.6	441.4
135°	818.7	673.6	596.9	563.5	532.1	501.1	442.2
150°	971.6	773.2	654.0	592.7	562.3	533.0	477.1
Run VMG	1121.9	892.8	751.8	657.6	600.8	569.3	513.8
<b>Selected Courses</b>							
Windward / Leeward	1186.4	967.6	836.3	753.1	711.8	693.2	669.4
Circular Random	1000.2	809.2	706.9	647.6	611.3	587.9	558.8
Coastal / Long Distance	1179.9	907.2	756.0	666.7	622.1	588.5	531.6
Non Spinnaker	1064.9	854.6	740.6	673.9	633.0	607.1	576.3

<b>Velocity Prediction in Knots for True Wind Speeds</b>							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat Angles	43.5°	42.2°	41.3°	39.0°	38.3°	38.6°	39.8°
Beat VMG	2.88	3.45	3.91	4.24	4.38	4.41	4.36
52°	4.40	5.23	5.73	6.00	6.14	6.19	6.19
60°	4.66	5.49	5.90	6.14	6.30	6.38	6.41
75°	4.85	5.66	6.04	6.27	6.49	6.68	6.86
90°	5.00	5.87	6.26	6.51	6.64	6.83	7.26
110°	5.04	5.93	6.34	6.72	7.10	7.38	7.72
120°	4.88	5.82	6.27	6.64	7.06	7.47	8.15
135°	4.40	5.34	6.03	6.39	6.77	7.18	8.14
150°	3.71	4.66	5.50	6.07	6.40	6.75	7.55
Run VMG	3.21	4.03	4.79	5.47	5.99	6.32	7.01
Gybe Angles	148.0°	152.0°	152.5°	168.0°	180.0°	180.0°	180.0°