



ORC

Offshore Racing Congress
World leader in rating technology

**2020
ORC Club
Certificate**

Rating Office

EYU
Purje 8
11911, Tallinn
Estonia

Certificate

Number **Est742**
Issued On **4/22/2020**
ORC Ref **0358000HEN**
VPP Ver. **2020 1.01**
Valid until **31/12/2020**

Crew Weight

Default 515kg
Maximum **600kg**
Minimum* **450kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

ToD ToT
Non Spin GPH **687.4 0.8729**
Non Spin OSN **665.5 0.9016**

Sails Limitations

Headsails **1** Spinnakers **4**
Woven Polyester

Spinnaker configuration

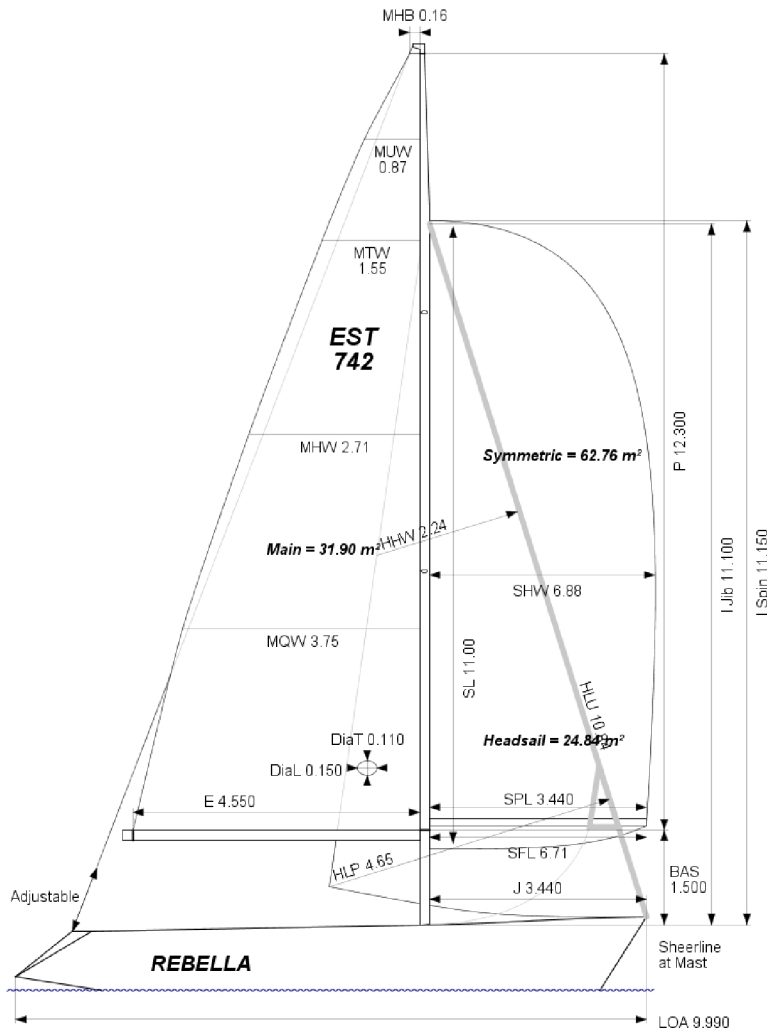
Symmetric: **Yes 62.76**
Asymmetric: **No**
Flying H/S: **No**
Spin. Pole: **Yes**

Class Division Length

CDL = 8.115

Stability (Estimated)

Limit Positive Stab.: **113.4°**
Stability Index: **110.3**



BOAT		GPH		HULL					
Name Rebella		660.1		Data File EST742	LOA 9.990m				
Sail Nr EST742				Offset File EST742_CL.off	MB 3.388m				
				Displacement 3,900kg	Draft 1.924m				
CLASS				IMS Division Performance	Dynamic All. 0.159%				
Class One Off 33				Plan Review	Construction Solid				
Designer Ron Holland				Fiber Rigging No	Aramid Core No				
Builder				Crew Arm Ex	Carbon Rudder No				
Series 01/1981				Light Stanchions No					
Age Date 01/1981				IMSL 8.342m	VCGD 0.050m	Sink 14.77kg/mm			
Age Allowance 0.487%				RL 7.887m	VCGM 0.028m	WS 20.07m²			
COMMENTS				LSM0 8.161m	Displacement/Length ratio				
Ex. FIN10568				Water Ballast	Trim Tab No				
PROPELLER				BLR Index 0.0000					
Installation Strut		PRD 0.405		CENTERBOARD					
Type Folding 3 blades		PIPA 0.0007		N/A					
SCORING OPTIONS									
	COASTAL / LONG DISTANCE					WINDWARD / LEEWARD			
Time on Distance	640.8					711.9			
Time on Time	0.9363					0.9482			
Triple Number	Low	Medium	High	Low	Medium	High			
Time on Distance	760.6	583.9	517.2	986.8	716.6	616.1			
Time on Time	0.8875	1.1560	1.3050	0.6840	0.9419	1.0956			

BOAT	
Name Rebella	Sail Nr EST742
File EST742	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS			
Inclining Test Club Estimated VCG			
Flotation date 01/04/2020		SG	
FFM	FF	1.143	SFFP 0.504
FAM	FA	0.871	SAFP 8.790
LCF from stem on CL / on sheer		5.370 / 5.598	
Maximum beam station from stem		5.900	
RM Measured		86.9kg·m	
RM Default		84.4kg·m	
Limit of positive stability / Stab.Index		113.4° / 110.3	
Freeboard at mast at 3.440		1.033	



2020
Measurements
Datasheet

RIG			
Forestay Tension	Aft	Spreaders	2
Inner Stay	None Fitted	Runners/Checkstays	0
Carbon Mast	No	Jib Furler	Yes
Fiber Rigging	No	Main Furler	No
Non-Circular Rigging	No		
Articulated Bowsprit			
P	12.300	E	4.550
IG	11.100	J	3.440
ISP	11.150	SFJ	
BAS	1.500	SPL	3.440
FSD	-3.000	TPS	
MDT1	0.110	MW	
MDL1	0.150	GO	
MDT2		BD	
MDL2		MWT	
TL	-2.000	MCG	

MIZZEN RIG AND SAILS	
N/A	

PROPELLER			
Installation	Strut	PRD	0.405
Type	Folding 3 blades	PBW	
Twin Screw	No	PIPA	0.0007
ST1	ST3	ST5	
ST2	ST4	EDL	

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COMMENTS	
Ex. FIN10568	

MOVABLE BALLAST	
N/A	

CENTERBOARD	
N/A	

SAILS INVENTORY																
MAINSAIL (1)																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
1	0.16	0.87	1.55	2.71	3.75	31.90	EST7	21/04/2020		Dacron						
HEADSAILS (1)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Flying	Measurer	Meas.Date	Manufacture	Material	Comment
1	0.07	0.57	1.12	2.24	3.44	4.65	10.84	135%	24.84	No	EST5	EST5	11/01/2019		Dacron	
SYMMETRIC SPINNAKERS (1)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
1	11.00	11.00	11.00	6.88	6.71	62.76	EST7	21/04/2020		Unknown						
ASYMMETRIC SPINNAKERS (0)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				



2020

ORC Club Certificate Appendix

BOAT			
Name	Rebella	Certificate Number	Est742
Sail Nr	EST742	Issued On	4/22/2020

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1113.6	927.1	817.4	751.9	724.8	715.3	716.9
52°	727.2	613.8	558.5	533.4	521.0	515.7	512.6
60°	686.6	584.7	542.7	521.5	507.8	500.2	494.9
75°	657.4	565.5	530.9	510.6	493.3	479.3	465.6
90°	664.0	560.9	520.3	496.8	482.2	470.4	443.6
110°	667.4	557.1	516.2	489.1	463.7	442.8	419.1
120°	690.7	571.7	523.2	495.2	468.8	444.8	403.5
135°	768.2	627.8	548.5	514.5	488.7	463.6	418.6
150°	921.0	729.5	614.0	545.8	514.6	490.4	445.1
Run VMG	1063.5	842.9	708.3	617.9	557.9	522.8	475.6
Selected Courses							
Windward / Leeward	1088.6	885.0	762.8	684.9	641.3	619.1	596.3
Circular Random	912.0	735.6	640.3	584.6	550.2	527.8	500.3
Coastal / Long Distance	1086.1	830.3	687.9	602.3	559.3	528.5	477.1
Non Spinnaker	959.9	769.8	666.2	605.0	566.9	542.3	513.4

Velocity Prediction in Knots for True Wind Speeds							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat Angles	42.8°	42.0°	41.3°	39.0°	37.9°	37.5°	38.3°
Beat VMG	3.23	3.88	4.40	4.79	4.97	5.03	5.02
52°	4.95	5.86	6.45	6.75	6.91	6.98	7.02
60°	5.24	6.16	6.63	6.90	7.09	7.20	7.27
75°	5.48	6.37	6.78	7.05	7.30	7.51	7.73
90°	5.42	6.42	6.92	7.25	7.47	7.65	8.11
110°	5.39	6.46	6.97	7.36	7.76	8.13	8.59
120°	5.21	6.30	6.88	7.27	7.68	8.09	8.92
135°	4.69	5.73	6.56	7.00	7.37	7.77	8.60
150°	3.91	4.94	5.86	6.60	7.00	7.34	8.09
Run VMG	3.38	4.27	5.08	5.83	6.45	6.89	7.57
Gybe Angles	146.0°	151.0°	151.0°	160.0°	180.0°	180.0°	180.0°