



ORC
Offshore Racing Congress
World leader in rating technology

**2019
ORC Club
Certificate**

Rating Office

**EYU
Purje 8
11911, Tallinn
Estonia**

Certificate

Number **EST157**
Issued On **7/4/2019**
ORC Ref **EST00000745**
VPP Ver. **2019 1.01**
Valid until **12/31/2019**

Crew Weight

Default 311kg
Maximum **365kg**
Minimum* **274kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Double H.GPH	720.9	0.8323
Double H.OSN	704.5	0.8517
Non Spin GPH	732.6	0.8190
Non Spin OSN	711.0	0.8438

Sails Limitations

Headsails **5** Spinnakers **3**

Spinnaker configuration

Symmetric: **Yes** **33.01**
Asymmetric: **No**
Flying H/S: **No**
Spin. Pole: **Yes**

Class Division Length

CDL = **6.418**

Stability (Estimated)

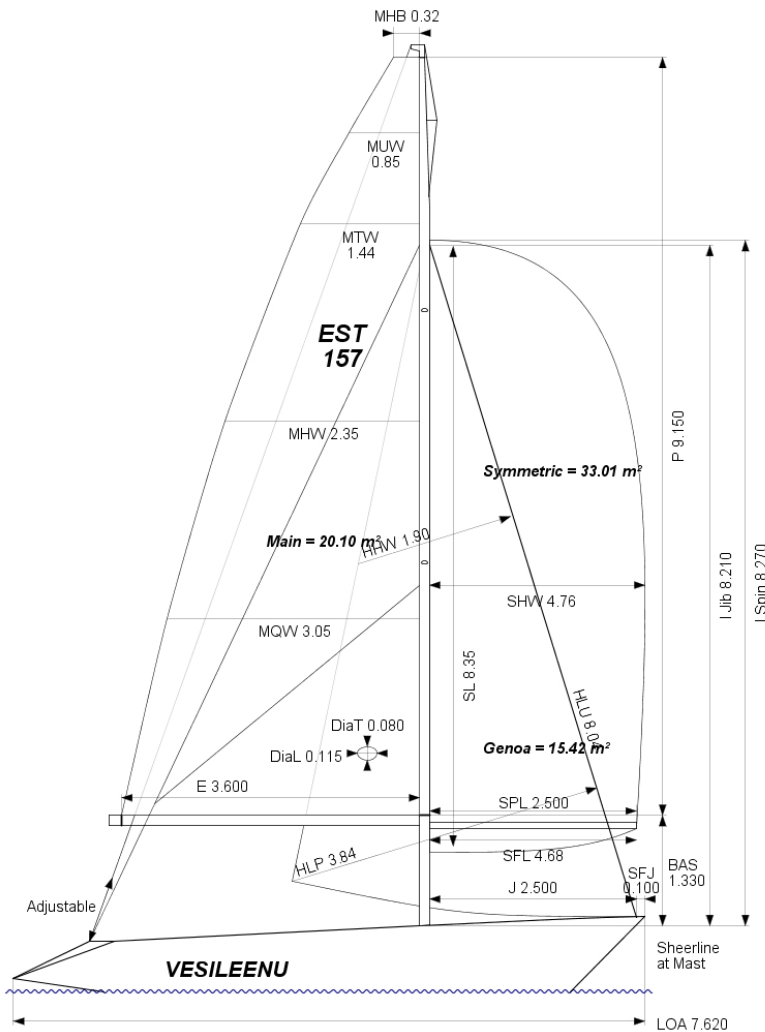
Limit Positive Stab.: **116.0°**
Stability Index: **108.2**

Owner

**Kristo Timberg
Kollane 4/6-21
Tallinn, Estonia
JK Noblessner**

I certify that I understand my responsibilities under ORC Rules and Regulations

Signature



BOAT		GPH		HULL		
Name	VESILEENU			Data File	Est0157	
Sail Nr	EST 157			Offset File	Polari17.off	
				Displacement	1,630kg	
				LOA	7.620m	
				MB	2.692m	
				Draft	1.720m	
CLASS				IMS Division Performance		
Class	POLARIS			Dynamic All.	0.006%	
Designer	SET			Fwd Accom.	Yes	
Builder	SET			Fiber Rigging	No	
Series	06/1984			Crew Arm Ex	No	
Age Date	01/1991			Construction Solid		
Age Allowance	0.487%			Aramid Core No		
				Carbon Rudder No		
				Light Stanchions		
				IMSL	6.064m	
				RL	6.771m	
				VCGD	-0.086m	
				Sink	8.25kg/mm	
				WS	10.68m²	
				LSM0	5.732m	
				Displacement/Length ratio	8.6550	
COMMENTS				Water Ballast 0		
Jahi kaal deklareeritud 13.05.15				Trim Tab No		
				BLR Index 0.0000		
PROPELLER				CENTERBOARD		
Type No Propeller				N/A		
SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	692.6			764.8		
Time on Time	0.8663			0.8826		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	797.0	635.6	575.8	1019.0	765.4	682.7
Time on Time	0.8469	1.0620	1.1722	0.6624	0.8819	0.9887

BOAT	
Name VESILEENU	Sail Nr EST 157
File Est0157	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS			
Inclining Test Club Estimated VCG			
Flotation date 01/09/2014		SG 1.0050	
FFM	FF 0.885	SFFP	0.394
FAM	FA 0.603	SAFP	6.402
LCF from stem on CL / on sheer		4.039 / 4.245	
Maximum beam station from stem		4.141	
RM Measured		30.7kg·m	
RM Default		29.8kg·m	
Limit of positive stability / Stab.Index		116.0° / 108.2	
Freeboard at mast at 2.600		0.797	



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2019
Measurements
Datasheet

RIG				
Forestay Tension Aft	Spreaders 2			
Inner Stay None Fitted	Runners 2			
Carbon Mast No	Jumper Struts Yes			
Taper Hollows No	Jib Furler No			
Fiber Rigging No	Main Furler No			
Lenticular Rigging No	Without Backstay No			
Articulated Bowsprit No				
P 9.150	E 3.600	MDT1 0.080	MW 0.000	
IG 8.210	J 2.500	MDL1 0.115	GO 0.000	
ISP 8.270	SFJ 0.100	MDT2 0.000	BD	
BAS 1.330	SPL 2.500	MDL2 0.000	MWT 41.00	
FSP 0.088	TPS	TL -2.000	MCG 3.280	

MIZZEN RIG AND SAILS	
N/A	

PROPELLER	
Type No Propeller	

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COMMENTS	
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MOVABLE BALLAST	
N/A	

CENTERBOARD	
N/A	

SAILS INVENTORY																
MAINSAIL (2)																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
3	0.32	0.85	1.44	2.35	3.05	20.10	EST7	03/07/2019	North sails	Unknown						
2	0.14	0.71	1.28	2.25	2.99	19.20				Unknown						
HEADSAILS (3)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
5	0.11	0.51	0.97	1.90	2.84	3.84	8.04	154%	15.42			EST7	03/07/2019	North Sails	Unknow	G1
3	0.05	0.45	0.88	1.81	2.82	3.83	8.15	153%	15.21						Unknow	
4	0.07	0.38	0.71	1.53	2.29	3.22	7.95	129%	12.32			EST7	03/07/2019	North Sails	Unknow	G2
SYMMETRIC SPINNAKERS (2)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
3	8.35	8.35	8.35	4.76	4.68	33.02	Hemamail	18/01/2018	North Sails	Unknown	S-2					
2	8.35	8.35	8.35	4.75	4.58	32.82				Unknown						
ASYMMETRIC SPINNAKERS (0)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				

2009

ORC Club Certificate Appendix

BOAT			
Name	VESILEENU	Certificate Number	EST157
Sail Nr	EST 157	Issued On	7/4/2019

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1115.7	939.2	845.2	811.5	801.1	797.9	804.4
52°	742.3	645.7	610.1	592.7	584.9	580.7	580.0
60°	707.1	628.9	598.6	579.2	567.5	561.4	557.6
75°	685.5	617.9	588.4	564.5	545.6	533.5	524.3
90°	692.8	615.0	577.8	549.9	533.5	517.7	494.8
110°	713.4	616.3	576.5	542.9	514.9	491.9	465.5
120°	741.7	629.2	585.6	551.5	521.5	495.4	448.7
135°	826.9	680.4	610.0	575.0	543.2	515.4	465.4
150°	974.6	776.4	660.2	604.6	572.4	542.6	492.7
Run VMG	1125.4	896.0	757.1	662.5	609.0	576.8	522.0
Selected Courses							
Windward / Leeward	1120.6	917.6	801.1	737.0	705.0	687.3	663.2
Circular Random	961.2	784.4	691.3	638.3	606.2	585.4	559.0
Coastal / Long Distance	1121.0	866.5	731.8	658.1	619.5	587.7	532.4
Non Spinnaker	998.5	810.9	711.4	654.3	619.7	597.3	569.2

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	41.1°	40.5°	37.9°	36.7°	36.3°	36.4°	37.2°
Beat VMG	3.23	3.83	4.26	4.44	4.49	4.51	4.48
52°	4.85	5.58	5.90	6.07	6.16	6.20	6.21
60°	5.09	5.72	6.01	6.22	6.34	6.41	6.46
75°	5.25	5.83	6.12	6.38	6.60	6.75	6.87
90°	5.20	5.85	6.23	6.55	6.75	6.95	7.28
110°	5.05	5.84	6.25	6.63	6.99	7.32	7.73
120°	4.85	5.72	6.15	6.53	6.90	7.27	8.02
135°	4.35	5.29	5.90	6.26	6.63	6.98	7.73
150°	3.69	4.64	5.45	5.95	6.29	6.63	7.31
Run VMG	3.20	4.02	4.76	5.43	5.91	6.24	6.90
Gybe Angles	148.3°	152.3°	155.4°	180.0°	180.0°	180.0°	180.0°