

BOAT
Name VESILENNUK
Sail Nr EST 94

GPH
727,1

HULL
Length Overall 7,620 m
Maximum Beam 2,709 m
Displacement 1 802 kg
Draft 1,617 m
IMS Reg. Division Racing
Dynamic Allowance 0,259%
Fwd Accommodation No
Hull Construction Solid
Carbon Rudder No
Trim Tab No
IMS L 6,293 VCGD 0,122 VCGM 0,110
Sink 8,52 kg/mm Wetted Area 11,39 m²



2009
ORC International
Certificate

GENERAL
Class POLARIS
Designer SET
Builder SET
Series 01.1992
Age 01.1992
Age Allowance 1,105%
Offset File POLARI90.OFF - 29.05.1990 1:51:30
Measurement by A.Tetsmann - 06.07.2008

SCORING OPTIONS		
	OFFSHORE	INSHORE
	COASTAL / LONG DISTANCE	WINDWARD / LEEWARD
Time On Distance	727,1	798,2
Time On Time	0,8252	0,8457
Performance Line	PLT 0,752 PLD 122,8	PLT 0,964 PLD 368,3
Triple Number	Low 0,8196 Medium 1,0410 High 1,1768	Low 0,6335 Medium 0,8549 High 0,9842

Rating Office
Estonian Yachting Union
Veiko Rosme
Regati 1, 11911, Tallinn
Estonia

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1177,2	966,6	883,4	836,5	808,6	790,9	775,8
52°	759,0	666,9	620,0	590,3	577,4	569,0	559,9
60°	721,0	645,4	603,1	574,4	557,1	547,0	535,3
75°	698,6	626,6	582,3	550,2	533,6	513,6	501,8
90°	686,6	613,6	573,9	538,8	509,1	498,6	479,8
110°	710,1	632,2	587,4	554,2	519,7	493,6	448,7
120°	748,5	653,3	601,2	566,9	532,9	504,6	453,5
135°	871,3	704,3	635,1	592,1	560,7	528,1	479,7
150°	1028,9	805,8	688,2	628,0	588,9	558,9	503,0
Run VMG	1188,0	930,4	774,3	688,5	632,5	594,3	536,2

Certificate
Number EST094
ORC Ref EST00000110
Issued On 4.05.2009
VPP Ver. 1.11
Valid until 31.12.2009

Crew Weight
Declared 430 kg
Default* 333 kg

Special Scoring
ToD ToT
Double 731,8 0,8199
Non Spinnaker 760,7 0,7887

Selected Courses							
Windward / Leeward	1204,6	965,9	842,0	772,3	729,0	700,1	661,8
Circular Random	992,5	806,1	706,6	648,1	610,9	585,2	550,1
Ocean for PCS	1058,2	841,3	721,0	647,3	597,9	562,1	510,3
Non Spinnaker	1052,7	848,2	738,1	673,2	632,2	604,3	566,9

Sails Limitations
Genoas 2 Jibs 2 Spinnakers 3
Spinnaker configuration Symmetric

Storm Sails Areas
Heavy Weather Jib 8,34
Storm Jib (JL=5,11) 3,09
Storm Trysail 6,12

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	43,3°	40,4°	38,2°	37,6°	36,7°	35,9°	35,5°
Beat VMG	3,06	3,72	4,08	4,30	4,45	4,55	4,64
52°	4,74	5,40	5,81	6,10	6,23	6,33	6,43
60°	4,99	5,58	5,97	6,27	6,46	6,58	6,73
75°	5,15	5,75	6,18	6,54	6,75	7,01	7,17
90°	5,24	5,87	6,27	6,68	7,07	7,22	7,50
110°	5,07	5,69	6,13	6,50	6,93	7,29	8,02
120°	4,81	5,51	5,99	6,35	6,76	7,13	7,94
135°	4,13	5,11	5,67	6,08	6,42	6,82	7,51
150°	3,50	4,47	5,23	5,73	6,11	6,44	7,16
Run VMG	3,03	3,87	4,65	5,23	5,69	6,06	6,71
Gybe Angles	146,3°	147,3°	162,4°	171,5°	174,1°	175,7°	174,5°

Owner
MTÜ MAA OHK VESI
Niine 11
Tallinn, Estonia
ESS Kalev JK
I certify that I understand my responsibilities under ORC Rules and Regulations
Signature

BOAT	
Name VESILENNUK	Sail Nr EST 94
File Est0094.dxt	Data in meters/kilograms

RIG			
Forestay Tension Aft	Spreaders 2		
Inner Forestay None Fitted	Runners 2		
Carbon Mast No	Jumpers None		
Taper Hollows No	w/o Backstay No		
P 9,450	E 3,700	MDT1 0,072	TL 2,200
IG 8,220	J 2,500	MDL1 0,115	MWT
ISP 8,270	SFJ 0,120	MDT2 0,068	MCG
SPS 2,420	SPL 2,500	MDL2 0,072	CPW 1,450
BAS 1,140	TPS	MW 0,115	BD
BAL	FSP 0,056	GO 0,000	BWT

HEAVY ITEMS	
N/A	
Total Gyradius Adjustment 0,0200	

MIZZEN RIG AND SAILS	
N/A	

COMMENTS
Ex. Lennuk

INCLINING TEST AND FREEBOARDS		
Inclining Test Current Inclining		
Flotation date 06.07.2008		SG 1,0020
FFM 0,825	FF 0,831	SFFP 0,394
FAM 0,600	FA 0,604	SAFP 6,402
W1 24,500	PD1 232,0	WD 7,400
W2 24,500	PD2 233,0	GSA 12,6
W3 24,500	PD3 235,0	RSA 4298,7
W4 24,500	PD4 233,0	PLM 2005,
Maximum beam station from stem		4,614
RM Measured / Default		27,2 / 31,3
Limit of positive stability		103,1°
Stability Index		95,8
Freeboard at mast at 2,620		0,763

PROPELLER	
Type No Propeller	

WATER BALLAST	
N/A	

CENTERBOARD	
N/A	



2009
IMS Measurement
Certificate

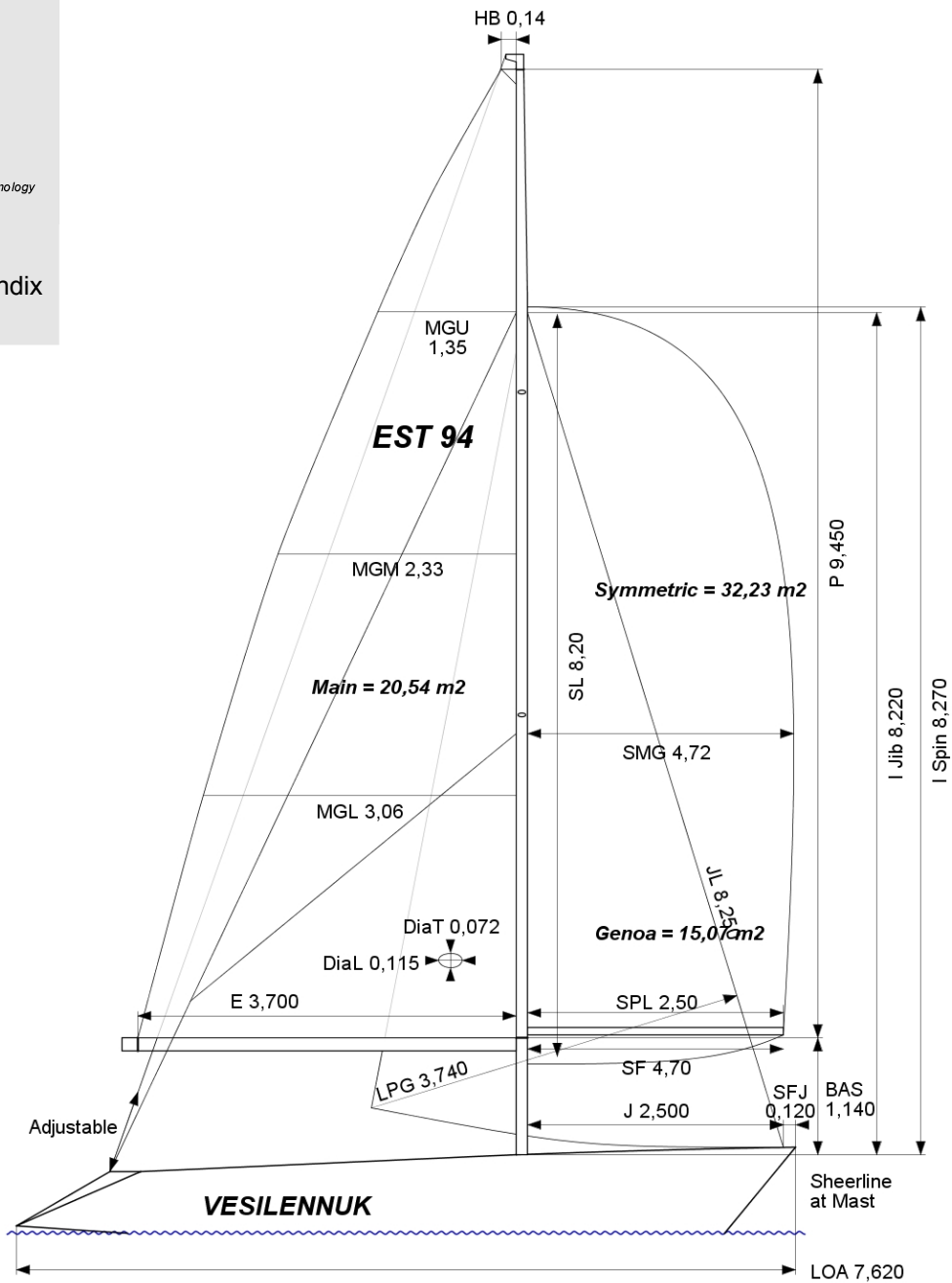
Certificate	
Number	EST094
ORC Ref	EST00000110
Issued On	4.05.2009
VPP Ver.	1.11
Valid until	31.12.2009

SAILS (Maximum Areas)										
Mainsail	HB	MGT	MGU	MGM	MGL	MSW	Area	Area (r)	Formula	
	0,140	0,00	1,35	2,33	3,06	0,00	19,58	20,54	P/8 · (E + 2·MGL + 2·MGM + 1.5·MGU + MGT + 0.5·HB)	
Jib/Genoa	JH	JGT	JGU	JGM	JGL	JL	LPG			
	0,06	0,47	0,89	1,78	2,72	8,25	3,74	15,07	0.1125·JL·(1.445·LPG+2·JGL+2·JGM+1.5·JGU+JGT+0.5·JH)	
Symmetric	SL	SMG	SF							
	8,20	4,72	4,70				32,23		SL · (SF + 4·SMG) / 6	



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Certificate Appendix
Sail Plan



SAILS INVENTORY

MAINSAIL

Id	HB	MGT	MGU	MGM	MGL	MSW	Area	Measurer	Meas.Dat	Manufacturer	Material	Comment
ORC	0,140	0,00	1,35	2,33	3,06	0,00	20,54					* Copied from legacy *

JIBS / GENOAS

Id	JH	JGT	JGU	JGM	JGL	LPG	JL	Ovrlp	Area	Measure	Meas.Dat	Manufacturer	Material	Comment
1	0,06	0,47	0,89	1,78	2,72	3,74	8,25	150%	15,07				Unknown	
2	0,06	0,34	0,66	1,26	1,91	2,56	8,23	102%	10,55				Unknown	

SYMMETRIC SPINNAKERS

Id	SL	SMG	SF	Area	Measurer	Meas.Dat	Manufacturer	Material	Comment
1	8,20	4,72	4,70	32,23	AT			Unknown	

ASYMMETRIC SPINNAKERS

Id	SLU	SLE	ASL	AMG	ASF	Area	Kind	Measurer	Meas.Dat	Manufacturer	Material	Comment
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