

BOAT	GPH	HULL
Name OLYMPIC Sail Nr EST 463	577,8	Length Overall 12,350m Maximum Beam 3,646m Displacement 6 868kg Draft 2,498m IMS Reg. Division Cruiser/Racer Dynamic Allowance 0,081% Fwd Accommodation Yes Hull Construction Cored Carbon Rudder No Crew Arm Extension
GENERAL		IMSL 11,122m VCGD -0,107m Sink 22,98kg/mm
Class X-410D Designer JEPPESEN Builder X YACHTS Series 01.2006 Age 06.2007 Age Allowance 0,325% Offset File X41.OFF - 15.03.2007 2:30:02 Measurement by Tetsmann - 28.06.2016		RL 10,112m VCGM -0,126m WS 30,69m²
		LSM0 11,025m Displacement/Length ratio 5,1250



2016
ORC International
Certificate

Rating Office
EYU Regati 1 11911 Estonia

	OFFSHORE COASTAL / LONG DISTANCE			INSHORE WINDWARD / LEEWARD		
	PLT	PLD		PLT	PLD	
Time On Distance	561,3			628,0		
Time On Time	1,0689			1,0748		
Performance Line	0,717	32,7		0,898	196,5	
Triple Number	Low 1,0104	Medium 1,3223	High 1,4985	Low 0,7771	Medium 1,0689	High 1,2462

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	991,5	816,2	711,4	664,0	642,9	631,5	615,4
52°	644,0	536,9	481,4	461,9	454,6	450,6	443,5
60°	604,0	508,3	466,5	448,9	441,1	436,6	430,1
75°	571,5	488,5	456,1	436,2	421,1	412,5	405,3
90°	574,5	490,2	457,0	437,5	418,5	400,1	379,2
110°	594,4	489,0	449,2	423,5	408,2	395,1	373,7
120°	610,9	499,8	455,2	428,3	400,6	380,7	356,8
135°	676,6	545,5	478,0	447,5	422,6	396,8	344,4
150°	804,6	638,7	538,2	478,6	449,4	426,4	379,4
Run VMG	929,1	737,6	621,4	547,2	499,3	463,1	417,4

Certificate
Number EST463 ORC Ref EST00001200 Issued On 3.07.2016 VPP Ver. 2016 1.01 Valid until 31.12.2016

Crew Weight
Declared 850kg Default* 791kg Non Manual Pwr No

Special Scoring
ToD ToT Double H.GPH 581,6 1,0317 Double H.OSN 566,3 1,0595 Non Spin GPH 610,0 0,9836 Non Spin OSN 593,0 1,0119 N/S Perf. Line 2,4 0,629

Selected Courses
Windward / Leeward 960,3 776,9 666,4 605,6 571,1 547,3 516,4
Circular Random 800,7 644,4 560,3 511,1 480,3 459,6 431,8
Ocean for PCS 983,4 757,1 629,2 550,8 499,8 464,1 414,4
Non Spinnaker 858,1 685,4 590,8 534,7 499,4 475,8 445,1

Sails Limitations
Headsails 7 Spinnakers 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	43,5°	42,3°	41,6°	39,5°	38,8°	38,2°	37,7°
Beat VMG	3,63	4,41	5,06	5,42	5,60	5,70	5,85
52°	5,59	6,71	7,48	7,79	7,92	7,99	8,12
60°	5,96	7,08	7,72	8,02	8,16	8,25	8,37
75°	6,30	7,37	7,89	8,25	8,55	8,73	8,88
90°	6,27	7,34	7,88	8,23	8,60	9,00	9,49
110°	6,06	7,36	8,01	8,50	8,82	9,11	9,63
120°	5,89	7,20	7,91	8,41	8,99	9,46	10,09
135°	5,32	6,60	7,53	8,05	8,52	9,07	10,45
150°	4,47	5,64	6,69	7,52	8,01	8,44	9,49
Run VMG	3,87	4,88	5,79	6,58	7,21	7,77	8,63
Gybe Angles	141,6°	147,7°	149,6°	155,3°	168,2°	180,0°	180,0°

Class Division Length
CDL = 10,618

Storm Sails Areas
Heavy Weather Jib 39,52 Storm Jib (JL=11,12) 14,64 Storm Trysail 14,06

BOAT			
Name	OLYMPIC	Sail Nr	EST 463
File	Est0463.dxt	Data in	meters/kilograms

RIG					
Forestay Tension	Aft			Spreaders	2
Inner Stay	None Fitted			Runners	0
Carbon Mast	Yes			Jumper Struts	None
Taper Hollows	No			Jib Furler	No
Fiber Rigging	No			Main Furler	No
Lenticular Rigging	No			Without Backstay	No
Articulated Bowsprit	No				
P	16,000	E	5,020	MDT1	0,132
IG	17,030	J	4,910	MDL1	0,250
ISP	17,070	SFJ	0,280	MDT2	0,123
BAS	1,885	SPL	5,160	MDL2	0,192
FSP	0,076	TPS		TL	0,780
				MW	0,250
				GO	0,273
				BD	0,270
				MWT	205,00
				MCG	5,730

MIZZEN RIG AND SAILS	
	N/A

COMMENTS	

INCLINING TEST AND FREEBOARDS					
Inclining Test Current Inclining					
Flotation date		28.06.2016		SG	1,0000
FFM	1,430	FF	1,440	SFFP	0,200
FAM	1,093	FA	1,099	SAFP	11,995
W1	78,500	PD1	176,0	WD	12,560
W2	78,500	PD2	174,0	GSA	12,6
W3	78,500	PD3	176,0	RSA	4298,7
W4	78,500	PD4	175,0	PLM	2005,0
LCF from stem on CL / on sheer				6,899 / 7,113	
Maximum beam station f rom stem				8,432	
RM Measured				196,8kg·m	
RM Default				198,3kg·m	
Limit of positive stability / Stab.Index				125,7° / 129,2	
Freeboard at mast at 5,190				1,209	

PROPELLER			
Installation	Strut	PRD	0,430
Type	Folding 2 blades	PBW	0,125
Twin Screw	No	PIPA	0,0032
ST1	0,060	ST3	ST5 0,325
ST2	ST4 0,092	EDL	1,540

MOVEABLE BALLAST
N/A

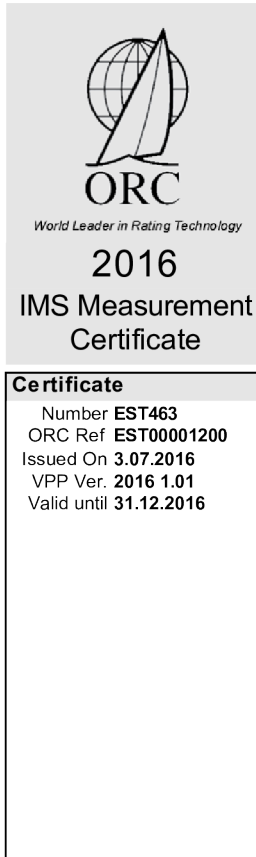
CENTERBOARD	
	N/A

SAILS (Maximum Areas)								
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula
	0,210	1,08	1,87	3,18	4,15	47,34	48,07	$P/8 \cdot (E + 2 \cdot MQW + 2 \cdot MHW + 1.5 \cdot MTW + MUW + 0.5 \cdot MHB)$
Symmetric	SLU	SLE	SL	SHW	SFL			
	16,85	16,85	16,85	9,26	8,82	128,79		$SL \cdot (SFL + 4 \cdot SHW) / 6$
Asymmetric								
Not Available								

HEADSAILS												
Area = 0.1125·HLU · (1.445·HLP + 2·HQW + 2·HHW + 1.5·HTW + HUW + 0.5·HHB)												
HHB	HUW	HTW	HHW	HQW	HLP	HLU	Area	Btn	Fly	Meas.Date	Material	Comment
0,11	0,74	1,41	2,71	3,98	5,20	16,90	45,26			28.06.2016	Carbon	Light
0,11	0,75	1,43	2,69	3,95	5,22	16,85	45,06			28.06.2016	Carbon	Medium
0,13	0,58	1,10	2,20	3,38	4,66	15,20	34,52			30.07.2015	Unknow	Heavy

MEASUREMENT INVENTORY				
Measurer A Tetsmann EST 1 Date 28.06.2016 Comment				
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>
<i>Id</i>	<i>Item</i>	<i>Maker</i>		<i>Model</i>
1	Engine	Volv o-Penta		D2
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Description</i>	

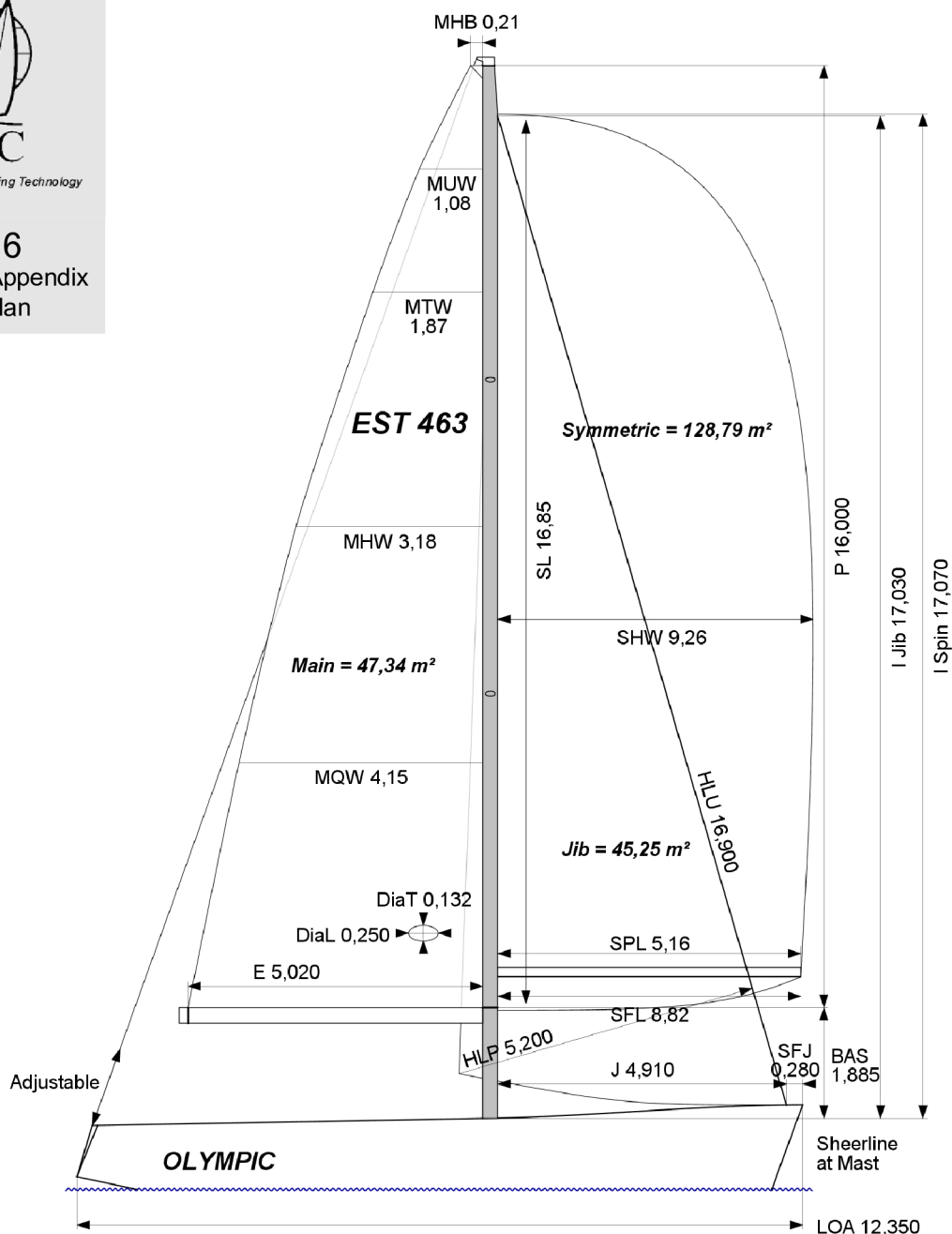
MEASUREMENT INVENTORY								
<i>Id</i>	<i>Item</i>	<i>Tank Use</i>	<i>Tank Type</i>	<i>Capcty</i>	<i>Dist.</i>	<i>VCG</i>	<i>Condtn</i>	<i>Description</i>
1	Tank	Fuel	metal	90,0	5,90		10,0	Stb.
2	Tank	Water	plastic	180,0	6,00		0,0	Ports.
3	Tank	Waste	metal	15,0	3,00		0,0	
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG</i>	<i>Description</i>			
1	Battery		5,20		Service batteries 2x115Ah			
2	Battery		8,00		Engine battery 60Ah			





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2016 Certificate Appendix Sail Plan



SAILS INVENTORY

MAINSAIL

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
7	0,210	1,08	1,87	3,18	4,15	47,34	EST 1	28.06.2016		Carbon	

HEADSAILS

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
4	0,11	0,74	1,41	2,71	3,98	5,20	16,90	106%	45,26			EST 1	28.06.2016		Carbon	Light
5	0,11	0,75	1,43	2,69	3,95	5,22	16,85	106%	45,06			EST 1	28.06.2016		Carbon	Medium
3	0,13	0,58	1,10	2,20	3,38	4,66	15,20	95%	34,52			EST 1	30.07.2015		Unknown	Heavy

SYMMETRIC SPINNAKERS

Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment
3	16,85	16,85	16,85	9,26	8,82	128,79	Hemamali	28.06.2016	North	Unknown	S4_2016
1	16,91	16,91	16,91	9,22	8,79	128,71	Hemamali	28.11.2014		Unknown	
8	16,91	16,91	16,91	9,22	8,73	128,54	D206			Unknown	2013
7	16,91	16,91	16,91	9,22	8,73	128,54	D206			Unknown	2013
2	16,80	16,80	16,80	9,25	8,65	127,82	EST 1	30.07.2015		Unknown	

ASYMMETRIC SPINNAKERS

Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment
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