

BOAT
Name SUN SOFIA Sail Nr EST 555

GPH
575,5

HULL	Length Overall	13,698 m
	Maximum Beam	3,860 m
	Displacement	10 360 kg
	Draft	2,420 m
	IMS Reg. Division	Cruiser/Racer
	Dynamic Allowance	0,820%
	Fwd Accommodation	Yes
	Hull Construction	Cored
	Carbon Rudder	No
	Trim Tab	No
	IMS L	12,786
	VCGD	-0,129
	VCGM	-0,078
	Sink	28,28 kg/mm
	Wetted Area	38,75 m²



2009
ORC International
Certificate

GENERAL
Class DEHLER 44 MOD.
Designer SIMONIS & VOOGD
Builder DEHLER
Series 10.2006
Age 06.2007
Age Allowance 0,195%
Offset File DEH44DC.OFF - 13.06.2007 10:51:32
Measurement by Tetsmann - 06.07.2009

SCORING OPTIONS	OFFSHORE			INSHORE		
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time On Distance	575,5			649,5		
Time On Time	1,0426			1,0393		
Performance Line	PLT	PLD		PLT	PLD	
	0,851	65,8		0,954	217,3	
Triple Number	Low	Medium	High	Low	Medium	High
	0,9993	1,3345	1,5293	0,7448	1,0487	1,2524

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

TIME ALLOWANCES	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1029,2	832,2	724,1	672,7	643,5	625,3	608,5
52°	642,8	524,4	479,6	452,1	438,6	430,7	423,3
60°	579,7	483,5	447,1	428,9	419,4	414,2	408,2
75°	522,5	452,1	420,5	407,7	399,5	393,3	384,1
90°	511,7	449,8	419,4	401,8	385,5	374,4	362,6
110°	563,2	474,0	432,4	408,7	388,2	369,5	351,2
120°	603,4	496,2	447,4	418,5	398,9	377,5	338,7
135°	711,3	562,5	484,7	443,6	418,1	400,3	361,9
150°	859,2	668,1	557,2	488,8	449,0	422,5	387,7
Run VMG	992,2	771,5	643,4	560,7	503,3	462,7	413,6

Certificate
Number EST555
ORC Ref EST00000447
Issued On 6.07.2009
VPP Ver. 1.11
Valid until 31.12.2009

Crew Weight
Declared 700 kg
Default* 924 kg

Special Scoring
ToD ToT
Double 576,6 1,0406
Non Spinnaker 622,6 0,9637

Selected Courses	1027,8	813,7	694,6	624,7	580,2	550,2	516,5
Windward / Leeward	1027,8	813,7	694,6	624,7	580,2	550,2	516,5
Circular Random	807,3	645,5	557,5	505,5	472,9	451,3	424,1
Ocean for PCS	866,6	677,0	570,2	504,4	460,9	430,1	387,5
Non Spinnaker	896,2	706,7	601,7	538,5	498,5	472,1	439,6

Sails Limitations		
Genoa's 0	Jibs 5	Spinnakers 4
Spinnaker configuration Symmetric + Code 0		

Storm Sails Areas
Heavy Weather Jib 39,71
Storm Jib (JL=11,15) 14,71
Storm Trysail 18,72

Velocity Prediction in Knots for True Wind Speeds	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat Angles	47,6°	46,6°	42,7°	40,9°	39,6°	38,8°	38,2°
Beat VMG	3,50	4,33	4,97	5,35	5,59	5,76	5,92
52°	5,60	6,86	7,51	7,96	8,21	8,36	8,50
60°	6,21	7,45	8,05	8,39	8,58	8,69	8,82
75°	6,89	7,96	8,56	8,83	9,01	9,15	9,37
90°	7,04	8,00	8,58	8,96	9,34	9,61	9,93
110°	6,39	7,59	8,32	8,81	9,27	9,74	10,25
120°	5,97	7,26	8,05	8,60	9,02	9,54	10,63
135°	5,06	6,40	7,43	8,11	8,61	8,99	9,95
150°	4,19	5,39	6,46	7,37	8,02	8,52	9,29
Run VMG	3,63	4,67	5,60	6,42	7,15	7,78	8,70
Gybe Angles	141,0°	144,6°	148,4°	155,9°	166,6°	173,4°	177,9°

Owner
PROSAILING OÜ
Merivälja tee 5
Tallinn, Estonia
ESS Kalev JK
I certify that I understand my responsibilities under ORC Rules and Regulations
Signature

BOAT		
Name	SUN SOFIA	Sail Nr EST 555
File	Est0555.dxt	Data in meters/kilograms

RIG			
Forestay Tension	Aft	Spreaders	2
Inner Forestay	None Fitted	Runners	0
Carbon Mast	No	Jumpers	None
Taper Hollows	No	w/o Backstay	No
P	17,390	E	6,150
IG	17,060	J	5,050
ISP	17,100	SFJ	
SPS		SPL	5,410
BAS	1,640	TPS	
BAL		FSP	0,076
MDT1	0,140	TL	3,200
MDL1	0,265	MWT	303,00
MDT2	0,190	MCG	6,560
MDL2	0,135	CPW	
MW	0,250	BD	
GO	0,277	BWT	

HEAVY ITEMS			
Bow Thruster	No	Generator	No
Windlass	No	Jib Furler	No
Heavy Deck	No	Main Furler	No
Headliners	No	Water Heater	No
Air Condition	No	Desalinator	No
Anchor Weight	70,0	Heavy Items Adjustment	0,0030
Anchor LCG	0,90	Total Gyradius Adjustment	0,0419

MIZZEN RIG AND SAILS	
N/A	

COMMENTS

INCLINING TEST AND FREEBOARDS			
Inclining Test Current Inclining			
Flotation date	09.08.2007	SG 1,0020	
FFM	1,510	FF	1,520
FAM	1,170	FA	1,178
SFFP	0,490	SAFP	13,230
W1	62,000	PD1	256,4
W2	62,000	PD2	261,0
W3	62,000	PD3	257,8
W4	62,000	PD4	264,5
WD	13,200	GSA	1,0
		RSA	1,0
		PLM	9000,
Maximum beam station from stem			9,140
RM Measured / Default			248,0 / 259,1
Limit of positive stability			126,5°
Stability Index			134,5
Freeboard at mast at 5,050			1,368

PROPELLER			
Installation	Strut Drive	PRD	0,440
Type	Folding	PBW	0,116
Twin Screw	No	PIPA	0,0039
ST1	0,060	ST3	0,180
ST2	0,178	ST4	0,109
		ST5	0,293
		EDL	3,050

WATER BALLAST	
N/A	

CENTERBOARD
N/A



2009
IMS Measurement
Certificate

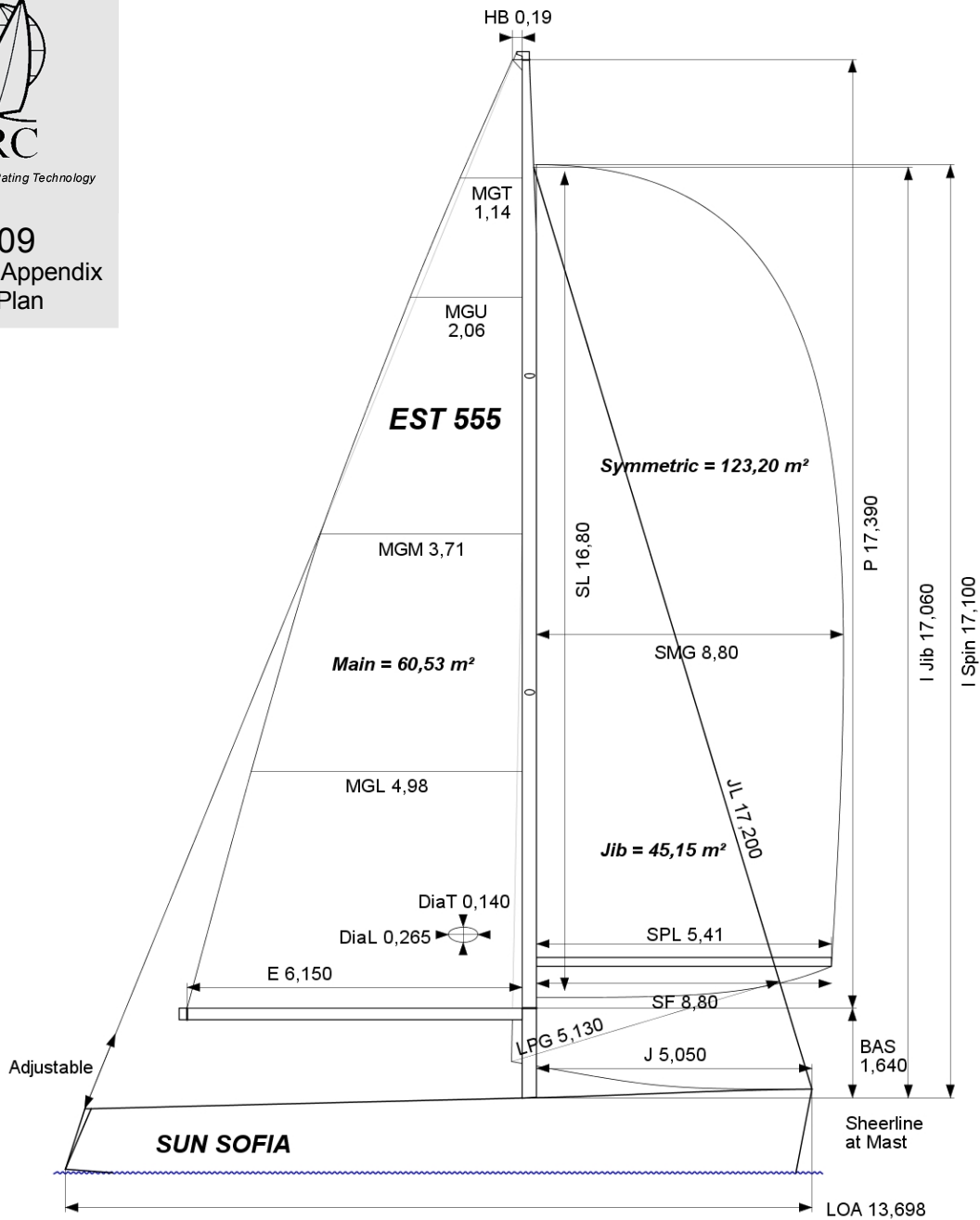
Certificate	
Number	EST555
ORC Ref	EST00000447
Issued On	6.07.2009
VPP Ver.	1.11
Valid until	31.12.2009

SAILS (Maximum Areas)									
Mainsail	HB	MGT	MGU	MGM	MGL	MSW	Area	Formula	
	0,185	1,14	2,06	3,71	4,98	35,00	60,54	P/8 · (E + 2·MGL+ 2·MGM + 1.5·MGU + MGT + 0.5·HB)	
Jib/Genoa	JH	JGT	JGU	JGM	JGL	JL	LPG		
	0,10	0,75	1,43	2,65	3,84	17,20	5,13	0.1125·JL·(1.445·LPG+2·JGL+2·JGM+1.5·JGU+JGT+0.5·JH)	
Symmetric	SL	SMG	SF						
	16,80	8,80	8,80				123,20	SL · (SF + 4·SMG) / 6	
Code Zero	SLU	SLE	ASL	AMG	ASF				
	16,80	15,50	16,15	5,77	8,80	85,81 ASL · (ASF + 4·AMG) / 6			



World Leader in Rating Technology

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Certificate Appendix
Sail Plan



SAILS INVENTORY														
MAINSAIL														
Id	HB	MGT	MGU	MGM	MGL	MSW	Area	Measur	Meas.Dat	Manufacturer	Material	Comment		
1	0,185	1,14	2,06	3,71	4,98	35,00	60,53				Unknown			
JIBS / GENOAS														
Id	JH	JGT	JGU	JGM	JGL	LPG	JL	Ovrlp	Area	Measure	Meas.Dat	Manufacturer	Material	Comment
1	0,00	0,00	0,00	0,00	0,00	4,49	16,20	89%	36,37		06.06.2007		Unknown	
2	0,10	0,78	1,38	2,59	3,80	4,75	16,20	94%	41,09				Unknown	
3	0,10	0,75	1,43	2,65	3,84	5,13	17,20	102%	45,16				Unknown	
SYMMETRIC SPINNAKERS														
Id	SL	SMG	SF	Area	Measur	Meas.Dat	Manufacturer	Material	Comment					
1	16,80	8,80	8,80	123,20				Unknown						
ASYMMETRIC SPINNAKERS														
Id	SLU	SLE	ASL	AMG	ASF	Area	Kind	Measur	Meas.Dat	Manufacturer	Material	Comment		
1	16,80	15,50	16,15	5,77	8,80	85,81	code0				Unknown			