

BOAT Name SEVEN ELEVEN Sail Nr ECU-21554	GPH 614,1	HULL Length Overall 14,012m Maximum Beam 3,981m Displacement 10.502kg Draft 1,546m IMS Reg. Division Cruiser/Racer Dynamic Allowance 0,132% Fwd Accommodation Yes Hull Construction Solid Carbon Rudder No Crew Arm Extension
GENERAL Class LEGEND 45 Designer HUNTER Builder HUNTER Series 01/1986 Age 01/1986 Age Allowance 0,487% Offset File US19489.BOF - 24/12/1989 11:11:34 Measurement by P. GUTIERREZ - 02/10/2017		IMSL 12,307m VCGD -0,148m Sink 27,93kg/mm RL 8,062m VCGM -0,114m WS 37,92m² LSMO 12,379m Displacement/Length ratio 5,5362



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ORC International
Certificate

Rating Office
Federación Ecuatoriana
de Vela
Patricio D. Gutiérrez - RO
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SCORING OPTIONS	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
	Time On Distance	597,2			676,9	
Time On Time	1,0047			0,9971		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	721,8	539,3	472,1	950,8	685,0	577,3
Time on Time	0,9351	1,2517	1,4299	0,7099	0,9854	1,1692

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	1111,8	911,0	805,1	743,7	709,1	689,5	678,2
52°	700,0	580,0	512,0	480,2	466,7	460,3	455,1
60°	645,2	538,6	480,5	457,7	448,5	443,4	438,7
75°	601,7	504,5	460,6	441,6	429,9	422,5	415,0
90°	598,1	500,6	456,7	436,9	422,8	410,3	391,0
110°	640,4	518,1	458,0	432,7	415,5	402,9	384,9
120°	657,2	531,3	464,4	436,2	415,8	395,9	370,1
135°	727,6	580,5	495,1	452,3	430,0	410,5	369,9
150°	866,3	675,8	565,6	494,2	454,1	432,6	395,5
Run VMG	1000,3	780,4	653,1	568,4	513,2	471,0	425,5

Certificate
Number **FVEC15**
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Issued On **04/10/2017**
VPP Ver. **2017 1.00**
Valid until **31/03/2018**

Crew Weight
Declared **725kg**
Default* **933kg**
Non Manual Pwr **No**

Special Scoring
ToD ToT
Non Spin GPH **640,6 0,9366**
Non Spin OSN **623,8 0,9618**

Selected Courses	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Windward / Leeward	1056,1	845,7	729,1	656,1	611,2	580,2	551,8
Circular Random	862,1	689,0	594,7	539,2	504,7	482,4	456,3
Ocean for PCS	1069,1	816,4	672,4	583,6	525,6	485,4	431,4
Non Spinnaker	908,9	722,6	619,9	558,5	520,1	495,0	465,4

Sails Limitations	
Headsails	Spinnakers
6	4

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	47,2°	46,0°	46,0°	45,5°	44,5°	43,3°	42,9°
Beat VMG	3,24	3,95	4,47	4,84	5,08	5,22	5,31
52°	5,14	6,21	7,03	7,50	7,71	7,82	7,91
60°	5,58	6,68	7,49	7,86	8,03	8,12	8,21
75°	5,98	7,14	7,82	8,15	8,37	8,52	8,68
90°	6,02	7,19	7,88	8,24	8,51	8,77	9,21
110°	5,62	6,95	7,86	8,32	8,66	8,93	9,35
120°	5,48	6,78	7,75	8,25	8,66	9,09	9,73
135°	4,95	6,20	7,27	7,96	8,37	8,77	9,73
150°	4,16	5,33	6,36	7,29	7,93	8,32	9,10
Run VMG	3,60	4,61	5,51	6,33	7,01	7,64	8,46
Gybe Angles	144,4°	148,2°	149,7°	152,3°	159,4°	180,0°	180,0°

Class Division Length
CDL = **10,185**

Storm Sails Areas
Heavy Weather Jib **44,28**
Storm Jib (JL=11,77) **16,40**
Storm Trysail **14,09**

Owner
RAFAEL QUINTERO

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

Signature

BOAT	
Name SEVEN ELEVEN	Sail Nr ECU-21554
File ECU21554	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS			
Inclining Test Current Inclining			
Flotation date 02/10/2017		SG 1,0253	
FFM 1,406	FF 1,400	SFFP 0,853	
FAM 1,095	FA 1,102	SAFP 12,732	
W1 120,0	PD1 437,6	WD 12,140	
W2 120,0	PD2 436,2	GSA 1,0	
W3 120,0	PD3 434,8	RSA 1,0	
W4 120,0	PD4 438,6	PLM 9000,0	
LCF from stem on CL / on sheer		7,986 / 8,210	
Maximum beam station from stem		8,428	
RM Measured		262,6kg·m	
RM Default		234,9kg·m	
Limit of positive stability / Stab.Index		121,6° / 128,7	
Freeboard at mast at 5,685		1,217	



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IMS Measurement Certificate

RIG			
Forestay Tension Aft	Spreaders 2		
Inner Stay None Fitted	Runners 0		
Carbon Mast No	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 15,930	E 5,053	MDT1 0,150	MW 0,233
IG 18,000	J 5,370	MDL1 0,233	GO 0,266
ISP 18,010	SFJ 0,315	MDT2 0,150	BD 0,185
BAS 1,880	SPL 5,245	MDL2 0,233	MWT
FSP 0,250	TPS	TL 0,000	MCG

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MIZZEN RIG AND SAILS	
N/A	

PROPELLER			
Installation Shaft exposed	PRD 0,460		
Type Feathering 3 blades	PBW 0,158		
Twin Screw No	PIPA 0,0260		
PSA 14,600	PHL 0,135	ST3 0,132	ESL 2,935
PSD 0,132	ST1 0,020	ST4 0,056	
PHD 0,095	ST2 0,098	ST5 0,253	

COMMENTS	
NUEVA MEDICION DE ESTAB Y FB'S	

MOVEABLE BALLAST	
N/A	

CENTERBOARD	
N/A	

SAILS (Maximum Areas)									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	0,160	0,97	1,77	3,16	4,24	46,91	47,58	P/8 · (E + 2·MQW+ 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
Symmetric	SLU	SLE	SL	SHW	SFL				
	17,85	17,85	17,85	9,82	9,40	144,82		SL · (SFL + 4·SHW) / 6	
Asymmetric	SLU	SLE	SL	SHW	SFL				
	18,76	16,74	17,75	8,37	9,55	127,30		AS · (SFL + 4·SHW) / 6	

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
0,09	0,93	1,86	3,84	5,89	8,04	17,73	69,50			04/10/2017	Kevlar	NEGRO-NUEVO
		1,70	3,40	5,26	7,16	18,02	63,47			28/05/2009	Kevlar	

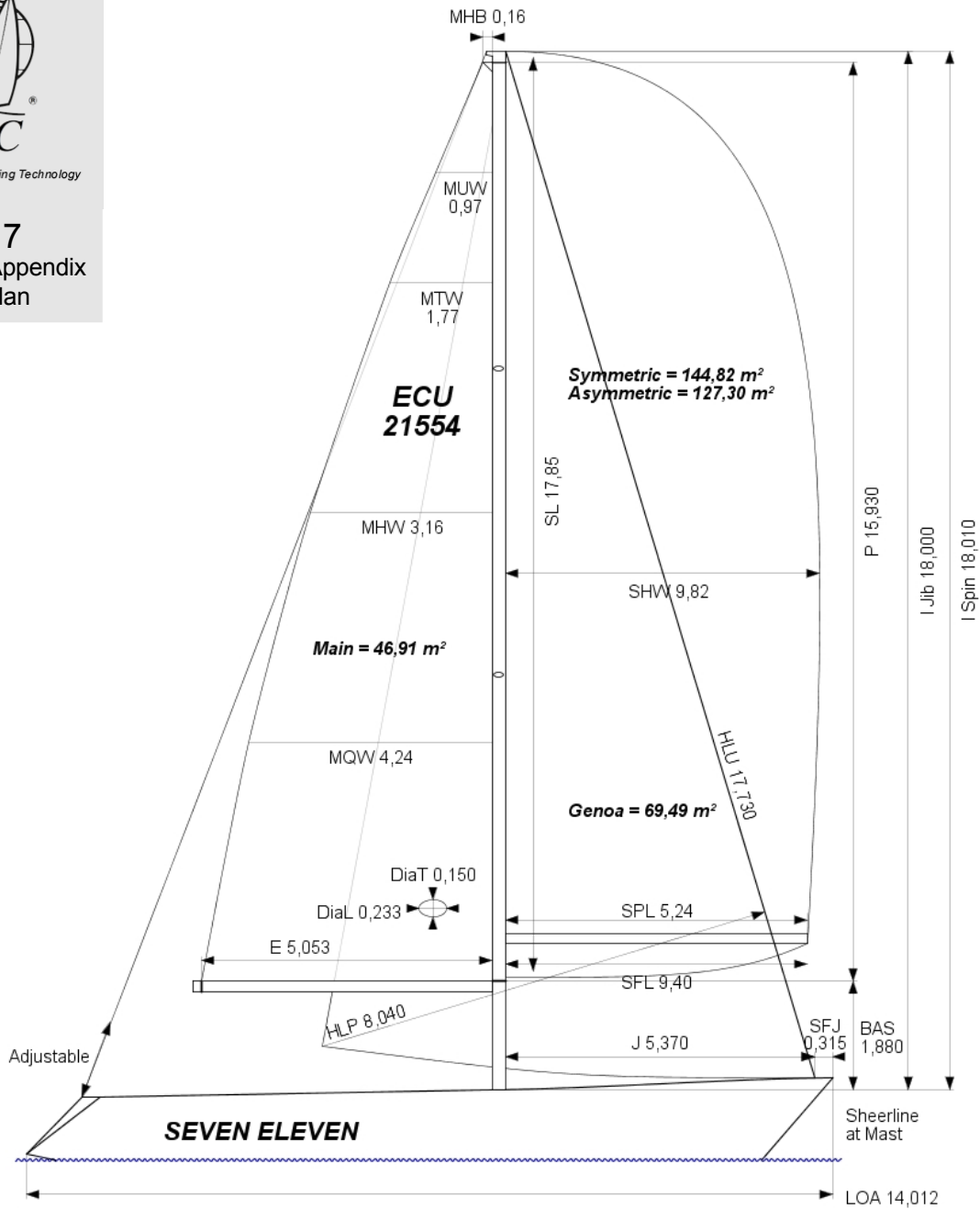
MEASUREMENT INVENTORY				
Measurer PATRICIO GUTIERREZ P G				
Date 02/10/2017				
Comment				
Id	Item	Weight	Distance	VCG Description
Id	Item	Maker	Model	
5	Engine	YANMAR	75 HP	
Id	Item	Weight Description		

MEASUREMENT INVENTORY						
Id	Item	Tank Use	Tank Type	Capcty	Dist.	VCG Condtn Description
6A	Tank	AGUA	ACERO	125,0	4,72	4-0 A PROA
6B	Tank	FUEL	ACERO	180,0	12,47	0,20 60-0 A POPA
Id	Item	Weight	Distance	VCG Description		
B3	Battery	45,0	10,87	4,00 4 BATERIAS		
B3	Misc		11,00	0,30 GENERADOR CUMMINS		



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Certificate Appendix
Sail Plan



SAILS INVENTORY

MAINSAIL (1)

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
M2	0,160	0,97	1,77	3,16	4,24	46,91	P GUTIERREZ	04/10/2017	ELVSTROM	Kevlar	NEGRO-NUEVO

HEADSAILS (2)

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
G1	0,09	0,93	1,86	3,84	5,89	8,04	17,73	150%	69,50			P	04/10/2017	ELVSTROM	Kevlar	NEGRO-NUEVO
G2			1,70	3,40	5,26	7,16	18,02	133%	63,47			JM	28/05/2009	HOOD	Kevlar	

SYMMETRIC SPINNAKERS (2)

Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment
S2	17,85	17,85	17,85	9,82	9,40	144,82	PG	22/09/2011		Nylon	0,6
S1	17,79	17,79	17,79	9,71	9,58	143,57	PG	22/09/2011	SOBSTAD	Nylon	0,75

ASYMMETRIC SPINNAKERS (1)

Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment
A1	18,76	16,74	17,75	8,37	9,55	127,30	asym	PG	22/09/2011	SOBSTAD	Nylon	