

BOAT Name WASABI Sail Nr ECU-555	GPH 508,0	HULL Length Overall 14,470m Maximum Beam 4,206m Displacement 7.385kg Draft 2,966m IMS Reg. Division Performance Dynamic Allowance 0,000% Fwd Accommodation Hull Construction Solid Carbon Rudder Yes Crew Arm Extension
GENERAL Class ILC 46 Designer B. FARR Builder MAGRATHEA Series 01/1996 Age 01/1996 Age Allowance 0,487% Offset File WASABInk.off - 18/07/2017 01:22:06 Measurement by P. GUTIERREZ - 29/09/2017		IMSL 12,410m VCGD -0,745m Sink 25,88kg/mm RL 12,351m VCGM -0,584m WS 34,75m² LSMO 12,141m Displacement/Length ratio 4,1266



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Rating Office
Federación Ecuatoriana
de Vela
Patricio D. Gutiérrez - RO
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SCORING OPTIONS	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
	Low	Medium	High	Low	Medium	High
Time On Distance	495,2			559,7		
Time On Time	1,2116			1,2061		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	576,0	452,7	398,5	749,2	563,2	489,2
Time on Time	1,1719	1,4911	1,6937	0,9010	1,1985	1,3798

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	858,8	701,4	631,9	600,8	583,3	567,8	561,2
52°	558,4	463,6	435,4	424,3	417,4	410,7	400,8
60°	522,3	445,0	421,1	409,5	401,5	395,9	381,7
75°	491,0	432,4	405,6	386,1	375,2	368,2	356,5
90°	490,2	430,9	403,0	376,3	355,9	342,8	329,9
110°	497,7	425,9	396,9	378,2	361,0	345,7	304,5
120°	517,2	432,7	396,3	368,6	351,3	335,5	300,4
135°	579,3	465,0	420,2	388,3	357,0	324,7	277,2
150°	693,1	551,0	468,3	423,2	398,3	371,9	307,6
Run VMG	800,3	636,2	540,7	488,9	459,9	429,4	355,2

Certificate
Number **055503**
ORC Ref **ECU00005602**
Issued On **04/10/2017**
VPP Ver. **2017 1.00**
Valid until **31/03/2018**

Crew Weight
Declared **908kg**
Default* **908kg**
Non Manual Pwr

Special Scoring
ToD ToT
Non Spin GPH **542,2** **1,1066**
Non Spin OSN **530,4** **1,1312**

Selected Courses	829,5	668,8	586,3	544,9	521,6	498,6	458,2
Windward / Leeward	829,5	668,8	586,3	544,9	521,6	498,6	458,2
Circular Random	695,4	563,5	493,5	452,5	426,0	406,4	375,9
Ocean for PCS	857,0	663,2	554,6	487,9	443,1	409,7	358,7
Non Spinnaker	756,6	607,3	525,9	477,1	445,5	423,4	393,7

Sails Limitations
Headsails **7** | Spinnakers **5**

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	43,1°	42,5°	40,5°	38,7°	37,5°	36,6°	36,6°
Beat VMG	4,19	5,13	5,70	5,99	6,17	6,34	6,41
52°	6,45	7,76	8,27	8,48	8,62	8,77	8,98
60°	6,89	8,09	8,55	8,79	8,97	9,09	9,43
75°	7,33	8,33	8,87	9,32	9,59	9,78	10,10
90°	7,34	8,35	8,93	9,57	10,12	10,50	10,91
110°	7,23	8,45	9,07	9,52	9,97	10,41	11,82
120°	6,96	8,32	9,08	9,77	10,25	10,73	11,98
135°	6,21	7,74	8,57	9,27	10,08	11,09	12,99
150°	5,19	6,53	7,69	8,51	9,04	9,68	11,70
Run VMG	4,50	5,66	6,66	7,36	7,83	8,38	10,14
Gybe Angles	142,1°	143,3°	148,8°	152,4°	150,3°	148,1°	140,2°

Class Division Length
CDL = **12,382**

Storm Sails Areas
Heavy Weather Jib **43,99**
Storm Jib (JL=11,73) **16,29**
Storm Trysail **23,50**

Owner
OLAF DYCK
Miravalle 4, Calle L318
Quito


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

Signature

BOAT	
Name WASABI	Sail Nr ECU-555
File ECU555	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS		
Inclining Test Current Inclining		
Flotation date 29/09/2017	SG 1,0253	
FFM 1,500	FF 1,499	SFFP 0,381
FAM 1,256	FA 1,257	SAFP 13,489
W1 145,0	PD1 463,0	WD 11,810
W2 145,0	PD2 464,6	GSA 1,0
W3 145,0	PD3 463,1	RSA 1,0
W4 145,0	PD4 464,2	PLM 9000,0
LCF from stem on CL / on sheer		7,707 / 7,942
Maximum beam station from stem		8,894
RM Measured		290,8kg·m
RM Default		259,7kg·m
Limit of positive stability / Stab.Index		139,7° / 139,2
Freeboard at mast at 5,475		1,339

RIG			
Forestay Tension Aft	Spreaders 2		
Inner Stay None Fitted	Runners 2		
Carbon Mast Yes	Jumper Struts None		
Taper Hollows No	Jib Furler No		
Fiber Rigging No	Main Furler No		
Lenticular Rigging No	Without Backstay		
Articulated Bowsprit No			
P 19,005	E 7,065	MDT1 0,135	MW 0,188
IG 18,051	J 5,475	MDL1 0,267	GO 0,188
ISP 21,331	SFJ 0,000	MDT2 0,121	BD 0,325
BAS 2,101	SPL 0,000	MDL2 0,187	MWT
FSP 0,072	TPS 7,245	TL 2,730	MCG




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IMS Measurement Certificate

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MIZZEN RIG AND SAILS	
N/A	

PROPELLER		
Installation Strut	PRD 0,420	
Type Folding 2 blades	PBW 0,112	
Twin Screw	PIPA 0,0037	
ST1 0,043	ST3 0,180	ST5 0,242
ST2 0,181	ST4 0,112	EDL 1,050

COMMENTS	

MOVEABLE BALLAST	
N/A	

CENTERBOARD	
N/A	

SAILS (Maximum Areas)									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	0,230	1,48	2,64	4,54	5,89	79,54	81,32	P/8 · (E + 2·MQW + 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
Symmetric Not Available									
Asymmetric	SLU	SLE	SL	SHW	SFL			AS · (SFL + 4·SHW) / 6	
	23,80	19,89	21,84	11,20	11,15	203,70			

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
0,12	0,81	1,52	2,85	4,14	5,39	18,32	51,36	Y		03/10/2017	Kevlar	NUEVA
0,10	0,64	1,22	2,44	3,56	5,47	18,13	45,74	Y		26/09/2017	Carbon	NEGRA

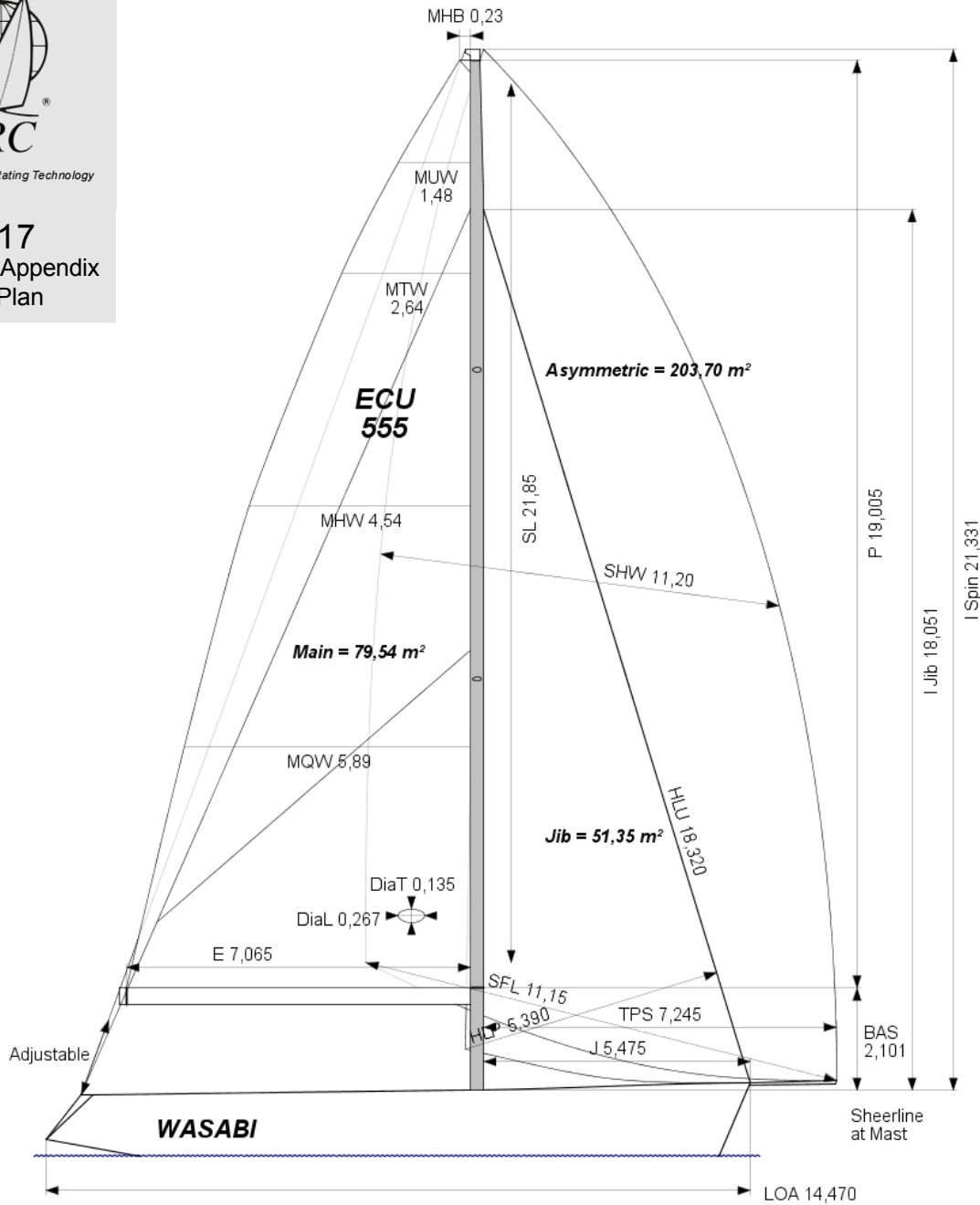
MEASUREMENT INVENTORY				
Measurer PATRICIO GUTIERREZ				
Date 29/09/2017				
Comment				
Id	Item	Weight	Distance	VCG Description
Id	Item	Maker	Model	
3A	Engine	YANMAR	28.5 HP	
Id	Item	Weight Description		

MEASUREMENT INVENTORY								
Id	Item	Tank Use	Tank Type	Capcty	Dist.	VCG	Condtn	Description
4A	Tank	DIESEL	ACERO	80,0	9,70	0,30	16,0	POPA MOTOR
4B	Tank	AGUA	ODRE	60,0	6,88		0,0	BABOR
4C	Tank	AGUA	ODRE	60,0	6,88		0,0	ESTRIBOR
4D	Tank	AGUA	ODRE	60,0	8,92		0,0	BABOR
4E	Tank	AGUA	ODRE	60,0	8,92		0,0	ESTRIBOR
Id	Item	Weight	Distance	VCG Description				
C2	Ballast	187,0	12,10	0,20 10 BARRAS DE PLOMO				
C6	Ballast	200,0	6,90	-0,30 BARRITAS DE PLOMO				
C6	Ballast	269,0	7,80	-0,30 06 BARRAS DE PLOMO				
2C	Battery	20,0	7,78	-0,15 BATERIA DE 12 PLACAS				
2B	Battery	40,0	9,18	-0,15 BATERIA DE 24 PLACAS				
2A	Battery	40,0	8,98	-0,15 BATERIA DE 24 PLACAS				
5B	Misc	4,0	5,80	0,80 COCINA				
5A	Misc	5,0	12,40	0,20 PILOTO AUTOMATICO				



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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					
M1	0,230	1,48	2,64	4,54	5,89	79,54	P GUTIERREZ	26/09/2017	UK	Carbon	REMEDICION					
HEADSAILS (2)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
G1 LM	0,12	0,81	1,52	2,85	4,14	5,39	18,32	98%	51,36	Y		DECLAR	03/10/2017	NORTH	Kevlar	NUEVA
G3	0,10	0,64	1,22	2,44	3,56	5,47	18,13	100%	45,74	Y		P	26/09/2017	UK	Carbon	NEGRA
SYMMETRIC SPINNAKERS (0)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
ASYMMETRIC SPINNAKERS (4)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				
A1	23,80	19,89	21,84	11,20	11,15	203,70	asym	P GUTIERREZ	26/09/2017	ULMAN SAIL	Nylon	AMARILLO				
A 1.5	23,33	20,25	21,79	11,12	11,36	202,79	asym	P GUTIERREZ	26/09/2017	ULMAN	Nylon	VERDE				
A1-2	23,47	20,07	21,77	10,90	10,89	197,71	asym	P GUTIERREZ	29/09/2017	UK	Nylon	BLANCO				
A 0	23,35	19,60	21,48	8,04	10,60	153,05	asym	P GUTIERREZ	04/10/2017	ULMAN	Technora	GRIS				