

BOAT Name TABASCO Sail Nr ECU-60	GPH 627,5	HULL Length Overall 12,326m Maximum Beam 3,700m Displacement 7.681kg Draft 1,963m IMS Reg. Division Cruiser/Racer Dynamic Allowance 0,118% Fwd Accommodation Yes Hull Construction Cored Carbon Rudder No Crew Arm Extension
GENERAL Class J40 Designer R. JOHNSTONE Builder T&P Series 01/1989 Age 01/1989 Age Allowance 0,487% Offset File US18746.BOF - 07/05/1987 03:03:54 Measurement by P. GUTIERREZ - 30/09/2017		IMSL 10,554m VCGD 0,021m Sink 22,22kg/mm RL 8,144m VCGM 0,036m WS 30,51m² LSMO 10,610m Displacement/Length ratio 6,4309



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ORC International
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Rating Office
Federación Ecuatoriana
de Vela
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SCORING OPTIONS	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
	Low	Medium	High	Low	Medium	High
Time On Distance	610,6			685,1		
Time On Time	0,9826			0,9852		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	726,6	553,9	490,3	949,0	692,3	589,5
Time on Time	0,9290	1,2187	1,3767	0,7113	0,9750	1,1451

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	1086,7	901,6	797,7	739,9	711,0	694,6	683,3
52°	697,2	584,5	520,6	496,0	485,9	480,7	476,3
60°	650,9	547,6	498,3	479,3	471,0	466,1	461,5
75°	611,9	519,6	483,1	465,4	453,1	444,8	436,8
90°	610,0	517,4	480,7	462,1	447,2	433,5	413,2
110°	649,7	531,6	481,2	457,1	438,8	428,1	410,0
120°	669,1	546,6	487,7	461,8	440,7	419,7	395,2
135°	739,9	598,4	515,7	477,7	455,9	435,6	395,2
150°	875,5	690,1	582,4	514,5	478,3	457,6	419,2
Run VMG	1010,9	796,9	672,2	587,6	531,1	490,0	447,8

Certificate
Number **FVEC05**
ORC Ref **ECU00005597**
Issued On **04/10/2017**
VPP Ver. **2017 1.00**
Valid until **31/03/2018**

Crew Weight
Declared **600kg**
Default* **749kg**
Non Manual Pwr **No**

Special Scoring
ToD ToT
Non Spin GPH **651,1 0,9215**
Non Spin OSN **633,9 0,9465**

Selected Courses	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Windward / Leeward	1048,8	849,3	734,9	663,8	621,1	592,3	565,5
Circular Random	870,5	700,2	608,4	554,7	521,6	500,3	474,6
Ocean for PCS	1073,8	825,9	685,5	599,3	543,4	504,8	452,9
Non Spinnaker	912,6	730,3	630,7	571,8	535,1	511,1	481,6

Sails Limitations
Headsails **1**
Spinnakers **3**

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	45,0°	43,7°	44,0°	42,7°	41,4°	40,4°	40,4°
Beat VMG	3,31	3,99	4,51	4,87	5,06	5,18	5,27
52°	5,16	6,16	6,91	7,26	7,41	7,49	7,56
60°	5,53	6,57	7,22	7,51	7,64	7,72	7,80
75°	5,88	6,93	7,45	7,74	7,94	8,09	8,24
90°	5,90	6,96	7,49	7,79	8,05	8,31	8,71
110°	5,54	6,77	7,48	7,87	8,20	8,41	8,78
120°	5,38	6,59	7,38	7,80	8,17	8,58	9,11
135°	4,87	6,02	6,98	7,54	7,90	8,26	9,11
150°	4,11	5,22	6,18	7,00	7,53	7,87	8,59
Run VMG	3,56	4,52	5,36	6,13	6,78	7,35	8,04
Gybe Angles	145,2°	149,7°	151,1°	155,0°	170,0°	180,0°	180,0°

Class Division Length
CDL = **9,350**

Storm Sails Areas
Heavy Weather Jib **32,25**
Storm Jib (JL=10,05) **11,94**
Storm Trysail **12,92**

Owner
GUSTAVO CORDOVEZ


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

Signature

BOAT	
Name TABASCO	Sail Nr ECU-60
File ECU60	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS			
Inclining Test Current Inclining			
Flotation date 30/09/2017		SG 1,0253	
FFM 1,266	FF 1,265	SFFP 0,661	
FAM 1,008	FA 1,011	SAFP 11,948	
W1 95,0	PD1 531,8	WD 11,490	
W2 95,0	PD2 527,8	GSA 1,0	
W3 95,0	PD3 529,7	RSA 1,0	
W4 95,0	PD4 531,4	PLM 9000,0	
LCF from stem on CL / on sheer		6,912 / 7,123	
Maximum beam station from stem		7,026	
RM Measured		162,1kg·m	
RM Default		166,7kg·m	
Limit of positive stability / Stab.Index		113,7° / 118,3	
Freeboard at mast at 4,505		1,113	

RIG			
Forestay Tension Aft	Spreaders 2		
Inner Stay None Fitted	Runners 1		
Carbon Mast No	Jumper Struts None		
Taper Hollows No	Jib Furler Yes		
Fiber Rigging No	Main Furler No		
Lenticular Rigging No	Without Backstay No		
Articulated Bowsprit No			
P 13,470	E 5,480	MDT1 0,120	MW 0,170
IG 15,455	J 4,505	MDL1 0,200	GO 0,170
ISP 15,425	SFJ 0,000	MDT2 0,120	BD 0,167
BAS 1,745	SPL 4,500	MDL2 0,163	MWT
FSP 0,074	TPS	TL 2,700	MCG




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IMS Measurement Certificate

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MIZZEN RIG AND SAILS	
N/A	

PROPELLER			
Installation Shaft exposed	PRD 0,476		
Type Folding 2 blades	PBW 0,118		
Twin Screw No	PIPA 0,0073		
PSA 14,100	PHL 0,154	ST3 0,112	ESL 1,883
PSD 0,032	ST1 0,032	ST4 0,071	
PHD 0,078	ST2 0,135	ST5 0,285	

COMMENTS	

MOVEABLE BALLAST	
N/A	

CENTERBOARD	
N/A	

SAILS (Maximum Areas)									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	0,150	1,14	2,00	3,50	4,59	43,57	44,71	P/8 · (E + 2·MQW+ 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
Symmetric	SLU	SLE	SL	SHW	SFL	102,64		SL · (SFL + 4·SHW) / 6	
	15,30	15,30	15,30	8,10	7,85				
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
0,06	0,76	1,50	2,99	4,73	6,50	15,42	48,35			09/03/2016	Kevlar	USADA
0,08	0,65	1,30	2,70	4,18	5,76	15,20	42,28			03/10/2017	Kevlar	AMARILLO

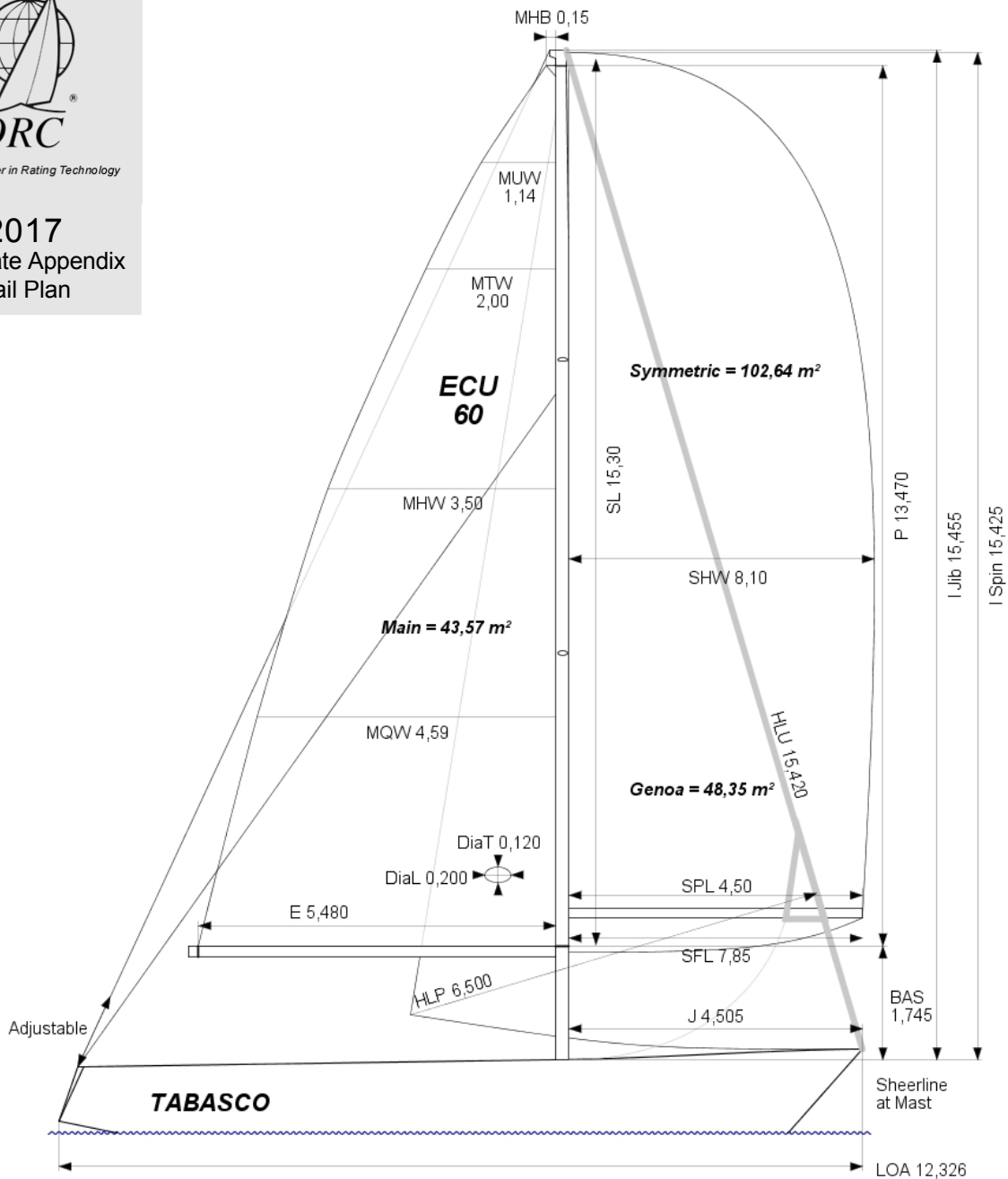
MEASUREMENT INVENTORY				
Measurer PATRICIO GUTIERREZ P G				
Date 30/09/2017				
Comment				
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>
<i>Id</i>	<i>Item</i>	<i>Maker</i>	<i>Model</i>	
C5	Engine	YANMAR	28.7 KW	
<i>Id</i>	<i>Item</i>	<i>Weight Description</i>		

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 Description</i>
E4	Tank	PETROLEO	ALUMINIO	110,0	8,70	0,00	27,0
E6	Tank	AGUA	PVC	100,0	6,70	0,00	0,0
B6	Tank	AGUA	PVC	100,0	6,70	0,00	0,0
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>			
B3	Battery	24,0	9,10	0,00 12 V - 110 AMP			
B3	Battery	16,0	9,10	0,00 12 V - 176 AMP			



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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					
MAIN	0,150	1,14	2,00	3,50	4,59	43,57	A V M	09/03/2016	NORTH	Kevlar	USADA					
HEADSAILS (2)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
G1	0,06	0,76	1,50	2,99	4,73	6,50	15,42	144%	48,35			A V M	09/03/2016	ELVSTROM	Kevlar	USADA
G2	0,08	0,65	1,30	2,70	4,18	5,76	15,20	128%	42,28			P	03/10/2017	ELSTROM	Kevlar	AMARILLO
SYMMETRIC SPINNAKERS (3)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
S1	15,30	15,30	15,30	8,10	7,85	102,64	A V M	01/06/2016		Nylon	NUEVA					
S2	15,18	15,18	15,18	8,05	7,80	101,20	A V M	09/03/2016	NORTH	Nylon	USADA					
S5	14,90	14,90	14,90	7,21	7,12	89,30	P GUTIERREZ	03/10/2017	ELVSTROM	Nylon	BL					
ASYMMETRIC SPINNAKERS (0)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				