

BOAT Name AFRICANA Sail Nr ROU-0528	GPH 546.2	HULL Length Overall 11.362m Maximum Beam 3.404m Displacement 4,131kg Draft 2.647m Plan Review IMS Reg. Division Performance Dynamic Allowance 0.000% Hull Construction Carbon Carbon Rudder Yes Crew Arm Extension
GENERAL Class X-TREME 37 MOD Designer Reichel/Pugh Builder G FORCE Series 01/2004 Age 01/2012 Age Allowance 0.487% Offset File XTRE37M2.OFF - 11/07/2018 14:25:26 Measurement by - 29/06/2018		IMSL 10.717m VCGD -0.593m Sink 17.89kg/mm RL 10.632m VCGM -0.535m WS 24.57m² LSM0 10.399m Displacement/Length ratio 3.6735



ORC
Offshore Racing Congress
World leader in rating technology

2020
ORC International
Certificate

Rating Office
Hellenic Sailing Federation
Offshore Committee
Επιτροπή
Ανοικτής Θαλάσσης
Ελληνικής
Ιστιοπλοϊκής Ομοσπονδίας



SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	532.8			600.9		
Time on Time	1.1261			1.1234		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	614.8	488.6	430.2	793.7	604.5	527.5
Time on Time	1.0980	1.3816	1.5692	0.8505	1.1167	1.2797

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	898.5	738.9	671.3	647.6	636.4	623.3	618.1
52°	591.9	500.0	472.4	462.8	457.7	453.5	444.9
60°	559.3	484.5	460.0	448.6	441.8	437.7	424.6
75°	533.5	474.6	447.6	426.4	413.8	406.2	396.3
90°	525.9	465.6	438.1	420.3	397.1	380.1	364.5
110°	536.3	464.9	432.1	399.8	372.0	352.8	325.3
120°	550.7	469.3	430.5	396.6	373.0	341.5	299.3
135°	621.4	497.3	453.1	415.3	376.9	339.0	288.4
150°	742.2	589.1	501.0	456.5	427.2	393.1	315.9
Run VMG	857.0	680.2	578.5	527.3	493.3	453.9	364.8

Certificate
Number **01302**
ORC Ref **03420000Q60**
Issued On **11/09/2020**
VPP Ver. **2020 1.02**
Valid until **28/02/2021**

Crew Weight
Default **728kg**
Maximum **730kg**
Minimum* **548kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring
ToD ToT
Non Spin GPH **586.9 1.0223**
Non Spin OSN **572.7 1.0477**

Selected Courses							
Windward / Leeward	877.7	709.6	624.9	587.5	564.9	538.6	491.5
Circular Random	743.4	604.4	530.9	487.9	459.7	438.6	406.0
Coastal / Long Distance	875.6	668.1	566.0	510.7	477.1	441.9	383.8
Non Spinnaker	815.8	655.9	569.3	518.0	485.1	462.1	430.4

Sails Limitations
Headsails **6** 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	42.0°	40.9°	38.6°	37.9°	37.1°	36.4°	36.8°
Beat VMG	4.01	4.87	5.36	5.56	5.66	5.78	5.82
52°	6.08	7.20	7.62	7.78	7.87	7.94	8.09
60°	6.44	7.43	7.83	8.02	8.15	8.23	8.48
75°	6.75	7.59	8.04	8.44	8.70	8.86	9.08
90°	6.84	7.73	8.22	8.57	9.07	9.47	9.88
110°	6.71	7.74	8.33	9.00	9.68	10.20	11.07
120°	6.54	7.67	8.36	9.08	9.65	10.54	12.03
135°	5.79	7.24	7.95	8.67	9.55	10.62	12.48
150°	4.85	6.11	7.19	7.89	8.43	9.16	11.40
Run VMG	4.20	5.29	6.22	6.83	7.30	7.93	9.87
Gybe Angles	142.0°	144.0°	149.5°	152.0°	148.5°	145.8°	143.0°

Class Division Length
CDL = **10.667**

Storm Sails Areas
Heavy Weather Jib **28.88**
Storm Jib (JL=9.51) **10.70**
Storm Trysail **14.15**

Owner

BOAT	
Name AFRICANA File RSA4339	Sail Nr ROU-0528 Data in meters/kilograms
RIG	
Forestay Tension Aft	Spreaders 2
Inner Stay None Fitted	Runners/Checkstays 0
Carbon Mast Yes	Jib Furler No
Fiber Rigging No	Main Furler No
Non-Circular Rigging No	
Articulated Bowsprit No	
P 15.105	E 5.350 MDT1 0.108 MW 0.202
IG 14.582	J 4.205 MDL1 0.202 GO 0.214
ISP 16.992	SFJ 0.200 MDT2 0.107 BD 0.251
BAS 1.702	SPL MDL2 0.153 MWT
FSD 0.033	TPS 5.025 TL 1.960 MCG

INCLINING TEST AND FREEBOARDS		
Inclining Test Boom Inclining	LCFD	
Flotation date 21/06/2018	SG 1.0260	
FFM 1.317	FF 1.317	SFFP 0.351
FAM 0.940	FA 0.941	SAFP 11.033
W1 93.9	PD1 290.0	WD 4.960
W2 93.9	PD2 294.9	GSA 1.0
W3 93.9	PD3 290.0	RSA 1.0
W4 93.9	PD4 291.7	PLM 9000.0
LCF from stem on CL / on sheer	6.255 / 6.470	
Maximum beam station from stem	7.758	
RM Measured	125.8kg-m	
RM Default	122.5kg-m	
Limit of positive stability / Stab.Index	141.0° / 139.0	
Freeboard at mast at 4.405	1.150	



ORC
Offshore Racing Congress
World leader in rating technology


2020
IMS Measurement
Certificate

MIZZEN RIG AND SAILS	
N/A	

PROPELLER		
Installation Strut	PRD 0.385	
Type Folding 2 blades	PBW 0.094	
Twin Screw No	PIPA 0.0037	
ST1 0.055	ST3 0.201	ST5 0.280
ST2 0.201	ST4 0.112	EDL 0.500

Certificate

Number **01302**
ORC Ref **03420000Q60**
Issued On **11/09/2020**
VPP Ver. **2020 1.02**
Valid until **28/02/2021**



COMMENTS	
ex "SILKY"	

MOVABLE BALLAST	
N/A	

CENTERBOARD	
N/A	

SAILS (Maximum Areas)									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	0.57	1.37	2.15	3.44	4.47	49.19	50.28	P/8 · (E + 2·MQW + 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
Symmetric Not Available									
Asymmetric on centerline	SLU	SLE	SL	SHW	SFL	Area	Formula		
	18.71	15.89	17.30	10.04	8.30	139.73	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	Flying	Meas.Date	Material	Comment
0.12	0.68	1.27	2.33	3.40	4.47	14.75	34.12	Y	No	19/06/2018	Carbon	
0.15	0.65	1.19	2.22	3.29	4.35	14.50	32.33	Y	No	19/06/2018	Carbon	
0.13	0.62	1.14	2.05	3.03	4.16	13.91	29.06	Y	No	19/06/2018	Carbon	
0.04	0.46	0.87	1.73	2.68	3.73	11.88	21.38	Y	No	19/06/2018	Carbon	
					2.85	12.37	17.95		Inner		Unknow	Staysail
0.10			1.43		3.07	6.95	10.74		No	19/06/2018	Dacron	ORANGE

MEASUREMENT INVENTORY				
Measurer GRE-21				
Date 21/06/2018				
Comment				
Internal Ballast total = 0.0				
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>
1	Engine	VETUS		M2.06 16HP
<i>Id</i>	<i>Item</i>	<i>Weight Description</i>		

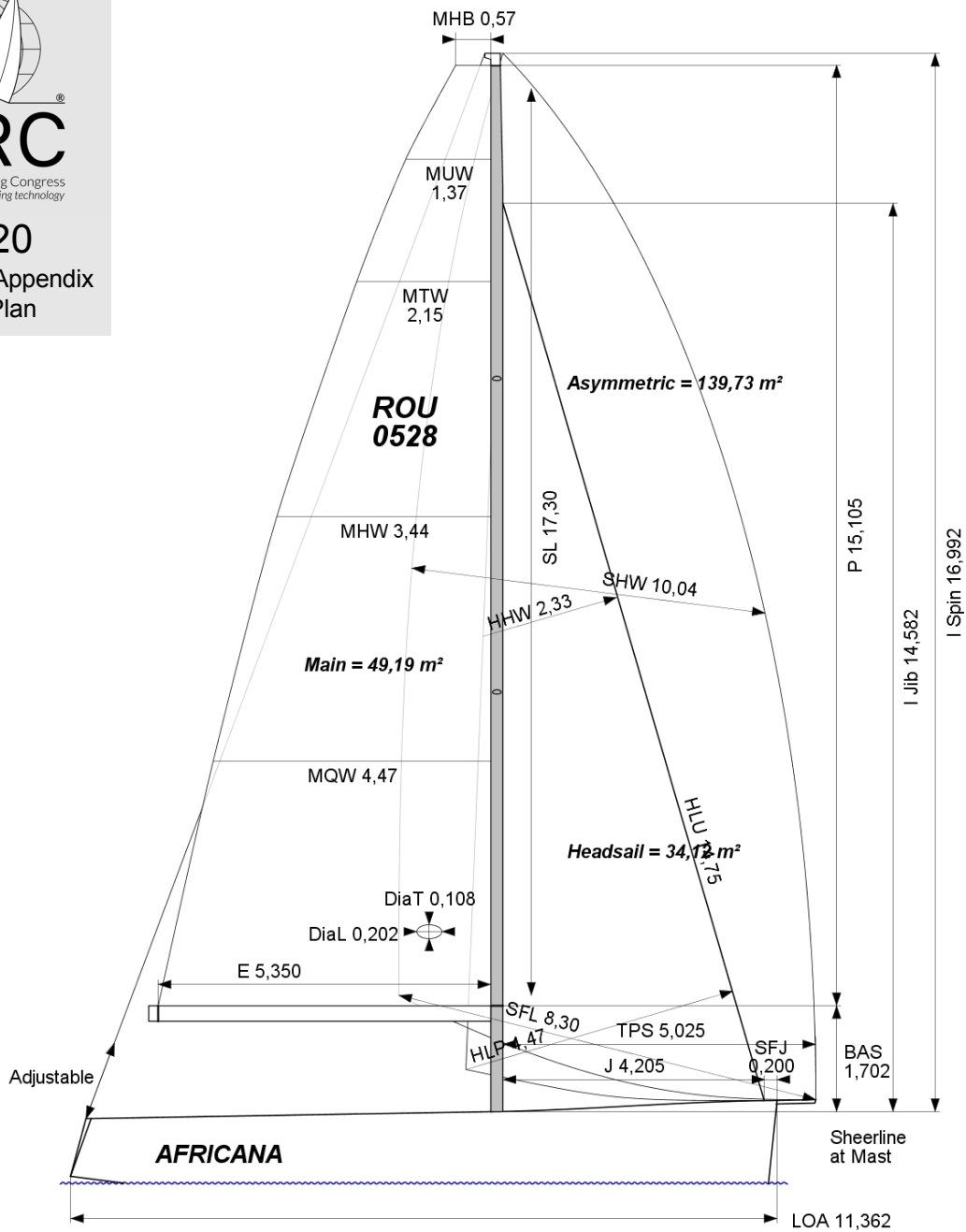
MEASUREMENT INVENTORY								
<i>Id</i>	<i>Item</i>	<i>Tank Use</i>	<i>Tank Type</i>	<i>Capcty</i>	<i>Dist.</i>	<i>VCG</i>	<i>Condtn</i>	<i>Description</i>
1	Tank	FUEL		30.0	7.20	0.30	45.0	
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>				
1	Battery		6.00	2 x 45 Ah (approx.)				
2	Battery		7.50	1 x 45 Ah (approx.)				



ORC

Offshore Racing Congress
World leader in rating technology

2020
Certificate Appendix
Sail Plan



SAILS INVENTORY

MAINSAIL (2)																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
M2	0.57	1.37	2.15	3.44	4.47	49.19		20/09/2018	NORTH	Unknown						
M1	0.59	1.28	2.08	3.38	4.35	48.16		19/06/2018	NORTH	Carbon						
HEADSAILS (6)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Flying	Measurer	Meas.Date	Manufacture	Material	Comment
J1	0.12	0.68	1.27	2.33	3.40	4.47	14.75	106%	34.12	Y	No		19/06/2018	NORTH	Carbon	
J2	0.15	0.65	1.19	2.22	3.29	4.35	14.50	103%	32.33	Y	No		19/06/2018	NORTH	Carbon	
J3	0.13	0.62	1.14	2.05	3.03	4.16	13.91	99%	29.06	Y	No		19/06/2018	NORTH	Carbon	
J4	0.04	0.46	0.87	1.73	2.68	3.73	11.88	89%	21.38	Y	No		19/06/2018	NORTH	Carbon	
S1						2.85	12.37	68%	17.95		Inner				Unknown	Staysail
SJ	0.10			1.43		3.07	6.95	73%	10.74		No		19/06/2018	NORTH	Dacron	ORANGE
SYMMETRIC SPINNAKERS (0)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
ASYMMETRIC SPINNAKERS (6)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				
A2	18.71	15.89	17.30	10.04	8.30	139.73	asym		19/06/2018	NORTH	Nylon					
1	18.80	16.36	17.58	9.34	9.68	137.83	asym		20/09/2018	NORTH	Unknown					
A4	18.82	16.06	17.44	9.46	8.95	136.01	asym		19/06/2018	NORTH	Nylon					
A3	17.51	17.32	17.42	8.47	9.73	126.58	asym		21/06/2018	NORTH	Nylon					
A5	16.41	15.62	16.02	7.62	8.83	104.93	asym		19/06/2018	NORTH	Nylon					