

BOAT Name RATTLE AND RUM Sail Nr USA2604	GPH 606.5	HULL Length Overall 7.900m Maximum Beam 2.554m Displacement 1,142kg Draft 1.902m IMS Reg. Division Sportboat Dynamic Allowance 0.000% Fwd Accommodation No Hull Construction Cored Carbon Rudder Yes Crew Arm Extension
GENERAL Class GP 26 Designer DONOVAN Builder Mag Marin Istanbul Series 01/2011 Age 01/2015 Age Allowance 0.228% Offset File wracegp26.off - 27/04/2013 16:35:56 Measurement by - 18/10/2017		IMSL 7.885m VCGD -0.135m Sink 10.12kg/mm RL 8.085m VCGM -0.141m WS 12.92m² LSM0 7.635m Displacement/Length ratio 2.5659



ORC
Offshore Racing Congress
World leader in rating technology

2018
ORC International
Certificate

Rating Office

Offshore
Racing
Congress



**Invalid for
Racing**

ORC
World Leader In Rating Technology

SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	589.8			665.3		
Time on Time	1.0173			1.0146		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	685.1	542.9	470.4	878.6	674.2	575.5
Time on Time	0.9853	1.2433	1.4349	0.7683	1.0012	1.1729

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1017.0	826.8	759.1	742.6	737.8	725.3	725.3
52°	668.7	567.1	539.3	530.3	525.8	517.4	510.7
60°	632.3	552.6	521.5	508.7	501.9	493.4	481.7
75°	607.6	542.3	499.9	472.5	460.3	453.3	432.9
90°	596.4	537.6	500.5	454.8	424.4	410.5	396.7
110°	587.0	513.5	471.8	442.4	414.3	391.6	339.8
120°	600.4	520.0	459.8	422.4	394.5	368.3	325.4
135°	679.3	554.1	493.3	433.8	377.9	335.5	285.9
150°	807.4	639.1	553.5	498.2	443.6	391.7	288.3
Run VMG	932.3	738.0	639.4	575.3	512.3	452.4	332.9

Certificate

Number **US6003**
ORC Ref **USAX0161M7R**
Issued On **06/04/2018**
VPP Ver. **2018 1.00**
Valid until **31/12/2018**

Crew Weight

Default **468kg**
Maximum **450kg**
Minimum* **338kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Non Spin GPH	654.0	0.9174
Non Spin OSN	634.3	0.9459

Selected Courses							
Windward / Leeward	974.7	782.4	699.2	659.0	625.1	588.8	529.1
Circular Random	828.0	672.8	589.8	540.1	506.5	480.6	439.9
Coastal / Long Distance	970.4	738.4	632.5	569.0	525.0	483.0	415.8
Non Spinnaker	910.7	731.2	634.3	576.8	539.5	512.6	473.3

Sails Limitations

Headsails	Spinnakers
5	3

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	42.6°	41.2°	38.1°	37.6°	37.5°	37.1°	37.5°
Beat VMG	3.54	4.35	4.74	4.85	4.88	4.96	4.96
52°	5.38	6.35	6.68	6.79	6.85	6.96	7.05
60°	5.69	6.51	6.90	7.08	7.17	7.30	7.47
75°	5.92	6.64	7.20	7.62	7.82	7.94	8.32
90°	6.04	6.70	7.19	7.92	8.48	8.77	9.08
110°	6.13	7.01	7.63	8.14	8.69	9.19	10.59
120°	6.00	6.92	7.83	8.52	9.13	9.77	11.06
135°	5.30	6.50	7.30	8.30	9.53	10.73	12.59
150°	4.46	5.63	6.50	7.23	8.11	9.19	12.49
Run VMG	3.86	4.88	5.63	6.26	7.03	7.96	10.81
Gybe Angles	143.2°	146.6°	150.4°	148.5°	145.1°	144.2°	144.4°

Class Division Length

CDL = **7.986**

Storm Sails Areas

Heavy Weather Jib	11.78
Storm Jib (JL=6.07)	4.36
Storm Triesail	6.67

Owner

BOAT			
Name	RATTLE AND RUM	Sail Nr	USA2604
File	US6003	Data in	meters/kilograms

INCLINING TEST AND FREEBOARDS			
Inclining Test Current Inclining			
Flotation date		18/10/2017	SG 1.0110
FFM	0.929	FF	0.931
FAM	0.736	FA	0.737
SFFP	0.500	SAFP	7.895
W1	21.3	PD1	571.0
W2	21.3	PD2	568.0
W3	21.3	PD3	569.0
W4	21.3	PD4	568.0
WD	10.560	GSA	1.0
RSA	1.0	PLM	9000.0
LCF from stem on CL / on sheer		4.466 / 4.620	
Maximum beam station from stem		5.854	
RM Measured		31.1kg-m	
RM Default		33.2kg-m	
Limit of positive stability / Stab.Index		115.8° / 108.1	
Freeboard at mast at 3.092		0.860	

RIG			
Forestay Tension	Aft	Spreaders	1
Inner Stay	None Fitted	Runners	0
Carbon Mast	Yes	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	9.787	E	3.890
IG	9.338	J	2.862
ISP	11.238	SFJ	0.230
BAS	1.313	SPL	0.110
FSP	0.000	TPS	4.741
MDT1	0.073	MW	0.135
MDL1	0.135	GO	0.135
MDT2	0.065	BD	0.150
MDL2	0.110	MWT	49.00
TL	1.750	MCG	3.460



ORC
Offshore Racing Congress
World leader in rating technology

2018
IMS Measurement
Certificate

MIZZEN RIG AND SAILS			
N/A			

PROPELLER			
Type No Propeller			

Certificate			
Number US6003			
ORC Ref USAX0161M7R			
Issued On 06/04/2018			
VPP Ver. 2018 1.00			
Valid until 31/12/2018			

COMMENTS			

MOVABLE BALLAST			
N/A			



Invalid for Racing
ORC
World Leader In Rating Technology

BILGEBOARD			
BS		BT	BA
BF		BX	
BC		BY	

SAILS (Maximum Areas)									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	1.350	1.53	2.07	2.85	3.39	26.52	27.55	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		
	12.69	10.99	11.84	7.66	8.12	76.49	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
0.06	0.44	0.84	1.60	2.34	3.10	9.37	14.86		
Meas.Date Material Comment 2016 JIB1									

MEASUREMENT INVENTORY				
Measurer				
Date				
Comment				
Id	Item	Weight	Distance	VCG Description
a	Anchor	0.0	0.00	
Id	Item	Weight	Distance	VCG Description

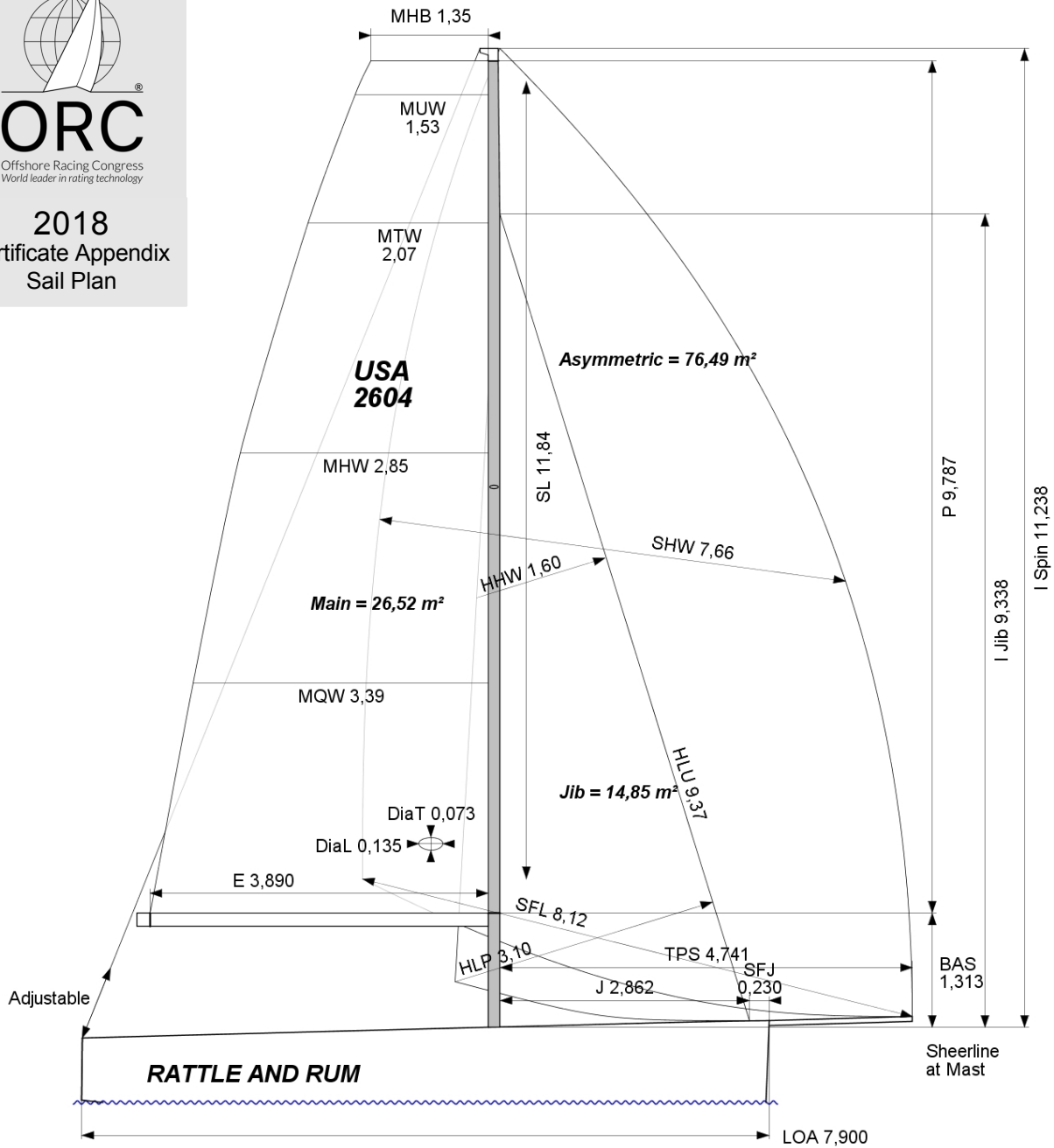
MEASUREMENT INVENTORY									
Id	Item	Tank	Use	Tank Type	Capcty	Dist.	VCG	Condtn	Description
	Tank					0.00	0.00	0-0	
Id	Item	Weight	Distance	VCG Description					



ORC

Offshore Racing Congress
World leader in rating technology

2018
Certificate Appendix
Sail Plan



SAILS INVENTORY

MAINSAIL (1)

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
1706933	1.35	1.53	2.07	2.85	3.39	26.53					

HEADSAILS (1)

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
1099171	0.06	0.44	0.84	1.60	2.34	3.10	9.37	108%	14.86							2016 JIB1

SYMMETRIC SPINNAKERS (0)

Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment
----	-----	-----	----	-----	-----	------	----------	-----------	-------------	----------	---------

ASYMMETRIC SPINNAKERS (1)

Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment
1706959	12.69	10.99	11.84	7.66	8.12	76.49	asym					