

BOAT Name WARRIOR WON Sail Nr USA 60564	GPH 429.0	HULL Length Overall 15.849m Maximum Beam 4.466m Displacement 7,079kg Draft 3.600m Plan Review IMS Reg. Division Performance Dynamic Allowance 0.000% Hull Construction Carbon, Aramid Carbon Rudder Yes Crew Arm Extension
GENERAL Class PAC 52 Designer J/V Builder COOKSON Series 01/2017 Age 02/2017 Age Allowance 0.098% Offset File PAC52-USA60564.OFF - 29/08/2020 Measurement by - 23/02/2019		IMSL 15.623m VCGD -1.205m Sink 32.69kg/mm RL 15.737m VCGM -1.206m WS 41.20m² LSM0 15.278m Displacement/Length ratio 1.9851



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SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	422.4			483.9		
Time on Time	1.4206			1.3948		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	485.5	385.0	330.1	638.8	492.1	415.3
Time on Time	1.3902	1.7531	2.0448	1.0567	1.3718	1.6252

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	696.6	595.4	553.5	532.3	518.4	507.6	502.8
52°	448.2	398.2	381.9	371.2	363.1	354.5	346.4
60°	418.2	381.4	364.7	351.4	341.2	334.9	323.4
75°	397.0	359.5	335.7	320.4	309.0	300.9	288.7
90°	395.6	352.4	317.7	300.4	286.8	277.4	264.9
110°	410.4	360.2	322.3	297.5	274.6	256.0	233.3
120°	429.7	372.0	327.2	292.9	268.2	250.7	224.9
135°	502.5	404.3	362.7	319.9	282.5	250.2	209.9
150°	611.7	482.2	411.2	367.7	331.3	292.2	231.0
Run VMG	706.3	556.8	474.8	427.9	382.6	337.3	266.7

Certificate
Number **US6393**
ORC Ref **0341000PIN**
Issued On **01/09/2020**
VPP Ver. **2020 1.02**
Valid until **31/12/2020**

Crew Weight
Default **1,260kg**
Maximum **1,137kg**
Minimum* **853kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring
ToD ToT
Non Spin GPH **470.4 1.2755**
Non Spin OSN **462.6 1.2971**

Selected Courses							
Windward / Leeward	701.4	576.1	514.1	480.1	450.5	422.5	384.8
Circular Random	584.6	476.4	417.7	381.6	356.7	337.9	310.6
Coastal / Long Distance	701.9	540.3	458.4	405.7	369.6	337.8	290.1
Non Spinnaker	656.7	527.6	456.7	413.2	384.0	362.6	332.0

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

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	44.3°	41.8°	39.8°	39.0°	37.9°	37.5°	37.5°
Beat VMG	5.17	6.05	6.50	6.76	6.94	7.09	7.16
52°	8.03	9.04	9.43	9.70	9.91	10.16	10.39
60°	8.61	9.44	9.87	10.25	10.55	10.75	11.13
75°	9.07	10.01	10.72	11.24	11.65	11.96	12.47
90°	9.10	10.21	11.33	11.99	12.55	12.98	13.59
110°	8.77	9.99	11.17	12.10	13.11	14.06	15.43
120°	8.38	9.68	11.00	12.29	13.42	14.36	16.01
135°	7.16	8.90	9.93	11.25	12.75	14.39	17.15
150°	5.89	7.47	8.76	9.79	10.87	12.32	15.58
Run VMG	5.10	6.47	7.58	8.41	9.41	10.67	13.50
Gybe Angles	137.5°	141.5°	147.0°	151.5°	144.0°	143.0°	144.8°

Class Division Length
CDL = **15.676**

Storm Sails Areas
Heavy Weather Jib **55.98**
Storm Jib (JL=13.24) **20.74**
Storm Trysail **25.86**

Owner

BOAT
Name WARRIOR WON Sail Nr USA 60564
File US6393 Data in meters/kilograms

RIG
Forestay Tension Aft Spreaders 3
Inner Stay None Fitted Runners/Checkstays 0
Carbon Mast Yes Jib Furler
Fiber Rigging Yes Main Furler
Non-Circular Rigging
Articulated Bowsprit
P 21.110 E 7.000 MDT1 0.135 MW 0.280
IG 20.308 J 6.310 MDL1 0.280 GO 0.297
ISP 23.028 SFJ 0.600 MDT2 0.095 BD 0.350
BAS 1.898 SPL 0.000 MDL2 0.125 MWT 253.50
FSD 0.035 TPS 9.110 TL 2.900 MCG 8.156

INCLINING TEST AND FREEBOARDS
Inclining Test Current Inclining
Flotation date 24/02/2019 SG 1.0250
FFM 1.477 FF 1.477 SFFP 0.600
FAM 1.227 FA 1.227 SAFF 15.850
W1 150.4 PD1 602.0 WD 19.730
W2 150.4 PD2 602.0 GSA 1.0
W3 150.4 PD3 602.0 RSA 1.0
W4 150.4 PD4 602.0 PLM 9000.0
LCF from stem on CL / on sheer 8.906 / 9.149
Maximum beam station from stem 13.235
RM Measured 388.2kg-m
RM Default 361.4kg-m
Limit of positive stability / Stab.Index 144.4° / 143.3
Freeboard at mast at 6.910 1.467



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MIZZEN RIG AND SAILS
N/A

PROPELLER
Installation Strut PRD 0.420
Type Folding 2 blades PBW 0.109
Twin Screw PIPA 0.0029
ST1 0.059 ST3 0.130 ST5 0.320
ST2 0.130 ST4 0.087 EDL 0.858

Certificate
Number US6393
ORC Ref 03410000PIN
Issued On 01/09/2020
VPP Ver. 2020 1.02
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COMMENTS

MOVABLE BALLAST
N/A

CENTERBOARD
N/A

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SAILS (Maximum Areas)									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	1.86	2.52	3.44	4.89	6.05	98.93	101.39	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			AS · (SFL + 4·SHW) / 6	
	25.92	21.98	23.95	13.64	13.88	273.19			

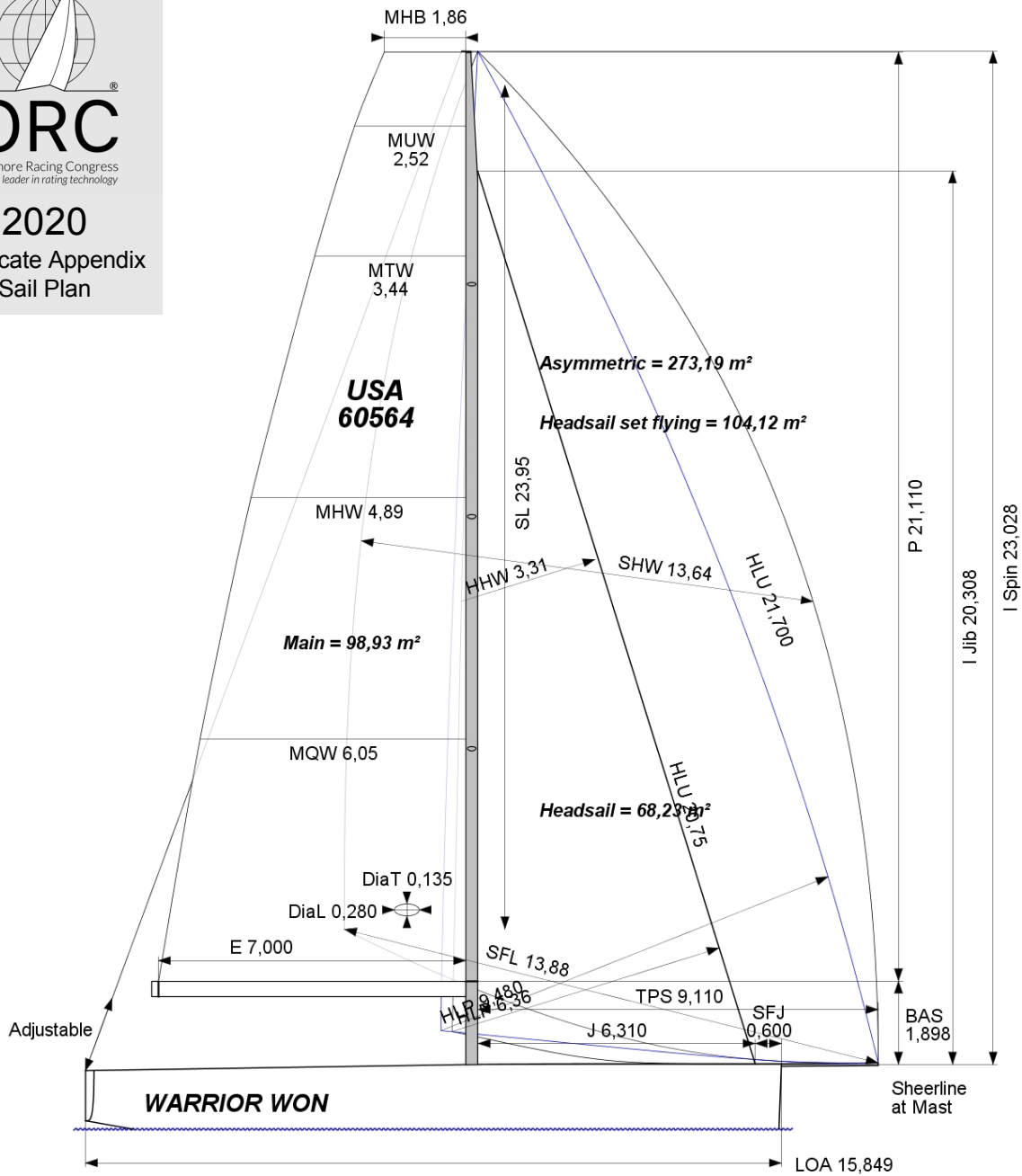
HEADSAILS												
Area = 0.1125·HLU · (1.445·HLP + 2·HQW + 2·HHW + 1.5·HTW + HUW + 0.5·HHB), HS flying rated area = 104.89												
HBB	HUW	HTW	HHW	HQW	HLP	HLU	Area	Btn	Flying	Meas.Date	Material	Comment
0.08	1.33	2.55	4.85	7.03	9.48	21.70	104.12		Yes		Unknow	
0.15	1.01	1.77	3.31	4.84	6.36	20.75	68.23	Y	No		Unknow	J 1-3



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Sail Plan



SAILS INVENTORY

MAINSAIL (1)

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
2020 MAIN	1.86	2.52	3.44	4.89	6.05	98.93			North Sails	Unknown	2020 Mainsail

HEADSAILS (2)

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Flying	Measurer	Meas.Date	Manufacture	Material	Comment
R2	0.08	1.33	2.55	4.85	7.03	9.48	21.70	150%	104.12		Yes			NORTH	Unknow	
OUS132	0.15	1.01	1.77	3.31	4.84	6.36	20.75	101%	68.23	Y	No				Unknow	J 1-3

SYMMETRIC SPINNAKERS (0)

Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment
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ASYMMETRIC SPINNAKERS (4)

Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment
OUS132137	25.92	21.98	23.95	13.64	13.88	273.19	asym			North Sails	Unknown	A 2-4
2020 A1	25.30	21.94	23.62	11.65	14.05	238.76	asy83		19/08/2020	doyle salem	Unknown	2020 A1
A3	24.25	21.43	22.84	10.18	13.48	206.33	asy76		19/08/2020	doyle salem	Unknown	2020 a3
2020 A0	24.22	22.44	23.33	8.16	10.87	169.19	asy76			Doyle Sails	Unknown	2020 A0