

BOAT Name SONRISA Sail Nr USA 1416	GPH 551.0	HULL Length Overall 13.305m Maximum Beam 4.054m Displacement 9,698kg Draft 2.349m IMS Reg. Division Cruiser/Racer Dynamic Allowance 0.070% Fwd Accommodation Yes Hull Construction Cored Carbon Rudder No Crew Arm Extension
GENERAL Class XP 44 SD Designer X YACHTS Builder X YACHTS Series 05/2011 Age 06/2016 Age Allowance 0.228% Offset File xp44sd.off - 10/05/2017 17:47:24 Measurement by - 19/04/2017		IMSL 12.379m VCGD -0.099m Sink 27.75kg/mm RL 10.757m VCGM -0.087m WS 37.26m² LSM0 12.184m Displacement/Length ratio 5.3618



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SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	536.0			603.2		
Time on Time	1.1195			1.1191		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	628.4	488.0	439.1	813.6	603.5	533.0
Time on Time	1.0741	1.3833	1.5372	0.8296	1.1185	1.2665

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	940.4	771.2	681.6	643.8	626.6	618.1	600.9
52°	614.2	511.7	464.2	447.2	440.5	437.1	430.0
60°	580.3	488.1	450.5	435.3	428.5	424.7	419.2
75°	555.2	473.0	441.1	424.7	413.2	405.8	399.0
90°	558.4	466.9	440.9	422.5	407.5	393.6	373.6
110°	546.2	456.4	424.4	408.3	395.8	384.1	362.1
120°	559.0	462.1	426.8	403.3	382.8	368.9	344.1
135°	626.0	499.9	444.4	418.2	394.0	369.1	319.3
150°	742.8	593.5	499.4	447.9	426.7	409.0	368.0
Run VMG	857.7	685.4	576.7	516.8	490.7	461.7	416.8

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Number **US6166**
ORC Ref **USAX019B8T3**
Issued On **16/05/2018**
VPP Ver. **2018 1.00**
Valid until **31/12/2018**

Crew Weight

Default 912kg
Maximum **912kg**
Minimum* **684kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

ToD	ToT
Non Spin GPH 590.5	1.0161
Non Spin OSN 574.7	1.0441

Selected Courses							
Windward / Leeward	899.1	728.3	629.1	580.3	558.6	539.9	508.9
Circular Random	756.5	611.1	534.3	490.8	464.4	446.7	421.1
Coastal / Long Distance	895.0	683.2	567.9	505.9	474.9	448.9	404.1
Non Spinnaker	829.1	662.6	571.9	518.4	485.1	462.9	434.1

Sails Limitations

Headsails	Spinnakers
6	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	43.3°	41.9°	41.0°	39.7°	39.1°	38.6°	38.3°
Beat VMG	3.83	4.67	5.28	5.59	5.75	5.82	5.99
52°	5.86	7.04	7.75	8.05	8.17	8.24	8.37
60°	6.20	7.38	7.99	8.27	8.40	8.48	8.59
75°	6.48	7.61	8.16	8.48	8.71	8.87	9.02
90°	6.45	7.71	8.16	8.52	8.83	9.15	9.64
110°	6.59	7.89	8.48	8.82	9.10	9.37	9.94
120°	6.44	7.79	8.43	8.93	9.40	9.76	10.46
135°	5.75	7.20	8.10	8.61	9.14	9.75	11.28
150°	4.85	6.07	7.21	8.04	8.44	8.80	9.78
Run VMG	4.20	5.25	6.24	6.97	7.34	7.80	8.64
Gybe Angles	143.2°	146.0°	147.4°	151.2°	152.2°	175.3°	177.4°

Class Division Length

CDL = **11.569**

Storm Sails Areas

Heavy Weather Jib **44.94**
Storm Jib (JL=11.86) **16.65**
Storm Trysail **18.64**

Owner

BOAT	
Name SONRISA	Sail Nr USA 1416
File US6166	Data in meters/kilograms

RIG	
Forestay Tension Aft	Spreaders 2
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 17.885	E 5.955 MDT1 0.132 MW 0.260
IG 18.189	J 4.970 MDL1 0.260 GO 0.275
ISP 19.852	SFJ 0.285 MDT2 0.118 BD 0.301
BAS 1.772	SPL 0.000 MDL2 0.191 MWT
FSP 0.074	TPS 6.340 TL 1.600 MCG

INCLINING TEST AND FREEBOARDS		
Inclining Test Current Inclining		
Flotation date 19/04/2017	SG 1.0150	
FFM 1.469	FF 1.498	SFFP 0.744
FAM 1.213	FA 1.201	SAFP 13.259
W1 101.0	PD1 445.0	WD 14.530
W2 101.0	PD2 448.0	GSA 1.0
W3 101.0	PD3 449.0	RSA 1.0
W4 101.0	PD4 447.0	PLM 9000.0
LCF from stem on CL / on sheer	7.449 / 7.707	
Maximum beam station from stem	9.119	
RM Measured	258.4kg-m	
RM Default	268.0kg-m	
Limit of positive stability / Stab.Index	125.6° / 130.9	
Freeboard at mast at 5.255	1.333	



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MIZZEN RIG AND SAILS	
N/A	

PROPELLER		
Installation Strut	PRD 0.460	
Type Folding 2 blades	PBW 0.130	
Twin Screw No	PIPA 0.0040	
ST1 0.050	ST3 0.180	ST5 0.320
ST2 0.180	ST4 0.112	EDL 2.650

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Issued On 16/05/2018	
VPP Ver. 2018 1.00	
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COMMENTS	

MOVABLE BALLAST	
N/A	

BILGEBOARD		
BS	BT	BA
BF	BX	
BC	BY	



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SAILS (Maximum Areas)						
Mainsail	MHB	MUW	MTW	MHW	MQW	Area Area (r) Formula
	0.150	1.37	2.34	3.85	4.96	63.78 65.04 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
	22.04	18.90	20.47	11.55	11.83	197.98 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	Meas.Date	Material	Comment
0.55	0.77	1.47	2.75	4.03	5.30	18.17	50.02					

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

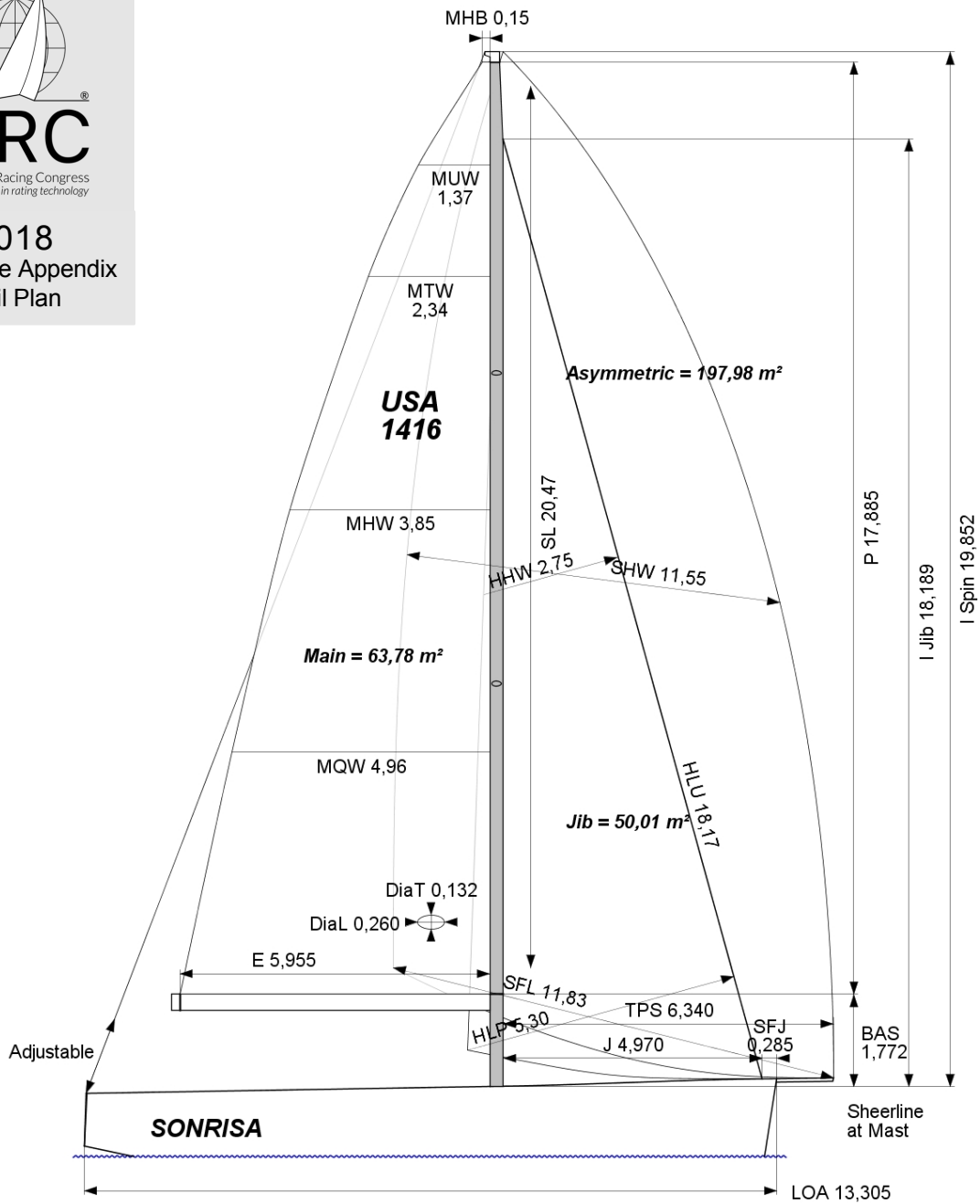
MEASUREMENT INVENTORY									
Id	Item	Tank	Use	Tank Type	Capcty	Dist.	VCG	Condtn	Description
		Tank				0.00	-0.20	100.0	
Id	Item	Weight	Distance	VCG	Description				



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Sail Plan



SAILS INVENTORY

MAINSAIL (1)																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
1579356	0.15	1.37	2.34	3.85	4.96	63.79										
HEADSAILS (1)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
1579363	0.55	0.77	1.47	2.75	4.03	5.30	18.17	107%	50.02							
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				
1579372	22.04	18.90	20.47	11.55	11.83	197.98	asym									