

BOAT	GPH	HULL
Name CARINA Sail Nr USA 42937	607.6	Length Overall 11.384m Maximum Beam 3.786m Displacement 6,687kg Draft 2.201m IMS Reg. Division Performance Dynamic Allowance 0.016% Fwd Accommodation Yes Hull Construction Carbon Rudder No Crew Arm Extension 0.00
GENERAL		IMSL 10.043m VCGD -0.019m Sink 20.57kg/mm
Class J-37 Designer JOHNSTONE Builder TILLOTSON-PEARSON Series 10/1986, CIN 43 Age 04/1991 Age Allowance 0.487% Offset File US18945.OFF - 12/05/1993 08:47:28 Measurement by - 15/09/2015		RL 9.283m VCGM -0.032m WS 27.67m²
		LSM0 10.152m Displacement/Length ratio 6.3911



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SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	591.8			656.1		
Time on Time	1.0139			1.0288		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	685.0	541.3	488.4	878.2	660.1	577.3
Time on Time	0.9854	1.2470	1.3822	0.7686	1.0226	1.1693

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	958.1	803.8	725.6	693.0	677.5	668.7	660.2
52°	637.5	542.1	507.2	494.7	488.7	485.4	483.4
60°	607.1	524.4	496.4	483.7	477.3	473.4	470.0
75°	585.5	513.9	488.0	473.1	461.9	454.5	447.1
90°	593.9	517.0	488.3	470.7	456.0	442.7	424.1
110°	635.9	527.3	486.8	464.7	445.3	432.7	414.6
120°	652.9	538.9	492.0	467.4	445.0	424.3	397.9
135°	717.4	585.4	514.1	483.1	460.9	438.1	395.7
150°	843.4	673.0	571.8	512.0	483.5	462.7	420.9
Run VMG	973.8	777.2	659.5	582.4	528.8	493.8	452.0
Selected Courses							
Windward / Leeward	966.0	790.5	692.5	637.7	603.1	581.2	556.1
Circular Random	826.3	671.6	590.1	543.6	515.4	496.9	473.1
Coastal / Long Distance	966.8	745.1	628.0	561.8	526.4	498.5	455.1
Non Spinnaker	865.0	699.3	610.9	559.7	528.3	507.7	481.0

Certificate

Number **US6265**
ORC Ref **USAX016IVW9**
Issued On **12/04/2018**
VPP Ver. **2018 1.00**
Valid until **31/12/2018**

Crew Weight

Default 703kg
Maximum **665kg**
Minimum* **499kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

ToD ToT
Non Spin GPH **629.5 0.9531**
Non Spin OSN **613.3 0.9783**

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	41.9°	41.0°	40.0°	38.4°	37.5°	37.1°	36.8°
Beat VMG	3.76	4.48	4.96	5.19	5.31	5.38	5.45
52°	5.65	6.64	7.10	7.28	7.37	7.42	7.45
60°	5.93	6.86	7.25	7.44	7.54	7.60	7.66
75°	6.15	7.01	7.38	7.61	7.79	7.92	8.05
90°	6.06	6.96	7.37	7.65	7.89	8.13	8.49
110°	5.66	6.83	7.40	7.75	8.08	8.32	8.68
120°	5.51	6.68	7.32	7.70	8.09	8.48	9.05
135°	5.02	6.15	7.00	7.45	7.81	8.22	9.10
150°	4.27	5.35	6.30	7.03	7.45	7.78	8.55
Run VMG	3.70	4.63	5.46	6.18	6.81	7.29	7.96
Gybe Angles	145.4°	149.9°	151.4°	157.1°	180.0°	180.0°	180.0°

Class Division Length

CDL = 9.664

Storm Sails Areas

Heavy Weather Jib **33.57**
Storm Jib (JL=10.25) **12.44**
Storm Trysail **12.11**

Owner

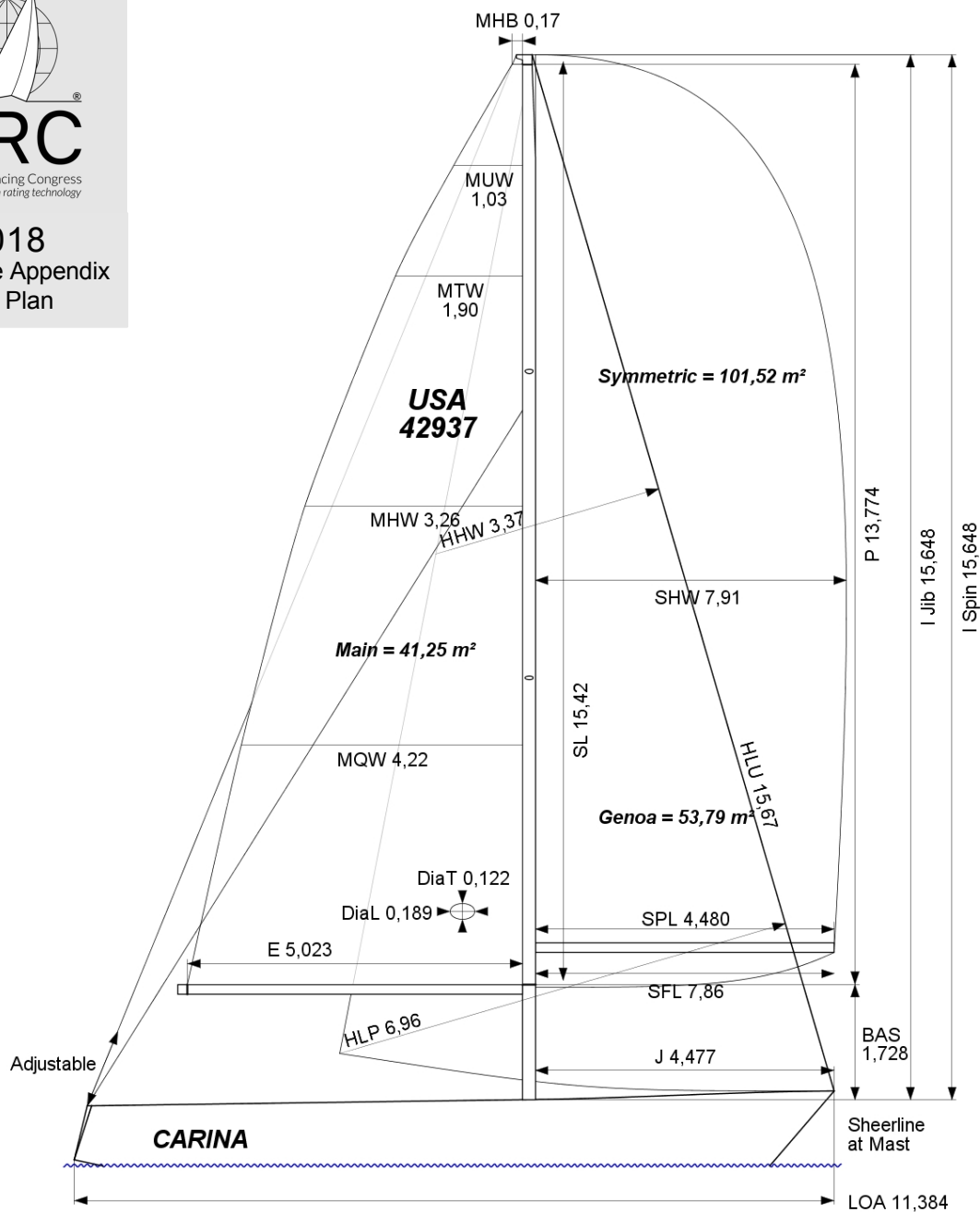
BOAT Name CARINA Sail Nr USA 42937 File US6265 Data in meters/kilograms		INCLINING TEST AND FREEBOARDS Inclining Test Current Inclining Flotation date 15/09/2015 SG 1.0040		 ORC Offshore Racing Congress World leader in rating technology 2018 IMS Measurement Certificate																																
RIG Forestay Tension Aft Spreaders 2 Inner Stay None Fitted Runners 1 Carbon Mast No Jumper Struts None Taper Hollows No Jib Furler No Fiber Rigging No Main Furler No Lenticular Rigging No Without Backstay No Articulated Bowsprit No		FFM 1.102 FF 1.113 SFFP 0.640 FAM 0.902 FA 0.909 SAFF 11.125 W1 84.3 PD1 566.1 WD 12.670 W2 84.3 PD2 566.1 GSA 1.0 W3 84.3 PD3 566.1 RSA 1.0 W4 84.3 PD4 566.1 PLM 9000.0																																		
P 13.774 E 5.023 MDT1 0.122 MW 0.140 IG 15.648 J 4.477 MDL1 0.189 GO 0.174 ISP 15.648 SFJ 0.000 MDT2 0.110 BD 0.151 BAS 1.728 SPL 4.480 MDL2 0.140 MWT 186.20 FSP 0.073 TPS 0.000 TL 1.410 MCG 5.033		LCF from stem on CL / on sheer 6.545 / 6.777 Maximum beam station from stem 7.500 RM Measured 148.6kg-m RM Default 145.7kg-m Limit of positive stability / Stab.Index 113.9° / 115.5 Freeboard at mast at 4.477 0.987																																		
MIZZEN RIG AND SAILS N/A		PROPELLER Installation Shaft exposed PRD 0.430 Type Feathering 2 blades PBW 0.137 Twin Screw No PIPA 0.0031 PSA 20.000 PHL 0.122 ST3 0.088 ESL 0.792 PSD 0.024 ST1 0.018 ST4 0.049 PHD 0.046 ST2 0.085 ST5 0.183																																		
COMMENTS N/A		MOVABLE BALLAST N/A		Certificate Number US6265 ORC Ref USAX016IVW9 Issued On 12/04/2018 VPP Ver. 2018 1.00 Valid until 31/12/2018																																
		CENTERBOARD N/A																																		
SAILS (Maximum Areas)																																				
Mainsail MHB MUW MTW MHW MQW 0.165 1.03 1.91 3.26 4.22						Area Area (r) 41.25 42.17		Formula $P/8 \cdot (E + 2 \cdot MQW + 2 \cdot MHW + 1.5 \cdot MTW + MUW + 0.5 \cdot MHB)$																												
Symmetric SLU SLE SL SHW SFL 15.42 15.42 15.42 7.91 7.86						101.52		$SL \cdot (SFL + 4 \cdot SHW) / 6$																												
Asymmetric Not Available																																				
HEADSAILS Area = $0.1125 \cdot HLU \cdot (1.445 \cdot HLP + 2 \cdot HQW + 2 \cdot HHW + 1.5 \cdot HTW + HUW + 0.5 \cdot HHB)$ <table border="1"> <thead> <tr> <th>HHB</th> <th>HUW</th> <th>HTW</th> <th>HHW</th> <th>HQW</th> <th>HLP</th> <th>HLU</th> <th>Area</th> <th>Btn</th> <th>Fly</th> <th>Meas.Date</th> <th>Material</th> <th>Comment</th> </tr> </thead> <tbody> <tr> <td>0.05</td> <td>0.85</td> <td>1.67</td> <td>3.37</td> <td>5.17</td> <td>6.96</td> <td>15.67</td> <td>53.80</td> <td></td> <td></td> <td></td> <td></td> <td>#1 3DL MEASURED BY JEFF TODD 2016</td> </tr> </tbody> </table>										HHB	HUW	HTW	HHW	HQW	HLP	HLU	Area	Btn	Fly	Meas.Date	Material	Comment	0.05	0.85	1.67	3.37	5.17	6.96	15.67	53.80					#1 3DL MEASURED BY JEFF TODD 2016	
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Sail Plan



SAILS INVENTORY

MAINSAIL (1)

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
1426965	0.17	1.03	1.91	3.26	4.22	41.26					STANDARD

HEADSAILS (1)

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
164721	0.05	0.85	1.67	3.37	5.17	6.96	15.67	155%	53.80							#1 3DL MEASURED

SYMMETRIC SPINNAKERS (1)

Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment
164719	15.42	15.42	15.42	7.91	7.86	101.52					S2 650 AIRX 2016

ASYMMETRIC SPINNAKERS (0)

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