

BOAT Name Short Bus Sail Nr 71221	GPH 572.9	HULL Length Overall 9.388m Maximum Beam 2.993m Displacement 1,827kg Draft 2.126m IMS Reg. Division Performance Dynamic Allowance 0.001% Fwd Accommodation No Hull Construction Cored Carbon Rudder Yes Crew Arm Extension
GENERAL Class Henderson 30 Designer Glenn Henderson Builder SOCA Series 01/1996 Age 06/1996 Age Allowance 0.487% Offset File HEN30.OFF - 07/10/2007 20:32:34 Measurement by Dobbs Davis - 25/03/2017		IMSL 8.629m VCGD 0.032m Sink 11.70kg/mm RL 8.938m VCGM 0.079m WS 14.98m² LSM0 8.161m Displacement/Length ratio 3.3613



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SCORING OPTIONS	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
	Time On Distance	562.3			634.5	
Time On Time	1.0670			1.0638		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	634.5	517.5	454.0	817.8	644.0	554.6
Time on Time	1.0638	1.3044	1.4868	0.8254	1.0481	1.2170

TIME ALLOWANCES	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	919.3	779.6	730.4	706.3	698.9	688.3	688.7
52°	596.0	531.7	514.0	504.2	498.4	492.7	484.9
60°	561.8	513.6	495.8	484.1	476.0	471.1	457.9
75°	538.7	493.8	465.7	450.1	439.9	433.1	416.6
90°	535.9	490.4	447.4	421.6	407.0	397.7	388.5
110°	550.8	488.8	455.8	428.9	400.3	365.5	341.0
120°	563.8	494.2	445.4	417.4	390.4	361.3	324.2
135°	635.9	524.8	472.7	422.0	370.9	338.8	295.9
150°	757.8	603.8	524.4	477.9	433.8	385.3	291.2
Run VMG	875.1	697.2	606.8	551.8	500.9	444.9	336.3

Certificate

Number **US6112**
ORC Ref **USA00000914**
Issued On **13/04/2017**
VPP Ver. **2017 1.00**
Valid until **28/02/2018**

Crew Weight

Declared **507kg**
Default* **515kg**
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Non Spin GPH	603.2	0.9947
Non Spin OSN	592.5	1.0127

Selected Courses	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Windward / Leeward	897.2	738.4	668.6	629.1	599.9	566.6	512.5
Circular Random	768.3	630.8	558.2	515.0	485.6	463.2	428.8
Ocean for PCS	947.0	742.3	627.5	555.5	505.1	465.9	405.1
Non Spinnaker	818.8	667.6	586.7	538.7	507.3	484.8	452.4

Sails Limitations

Headsails	Spinnakers
5	3

Velocity Prediction in Knots for True Wind Speeds	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat Angles	43.3°	41.0°	39.0°	37.7°	37.4°	37.0°	37.6°
Beat VMG	3.92	4.62	4.93	5.10	5.15	5.23	5.23
52°	6.04	6.77	7.00	7.14	7.22	7.31	7.42
60°	6.41	7.01	7.26	7.44	7.56	7.64	7.86
75°	6.68	7.29	7.73	8.00	8.18	8.31	8.64
90°	6.72	7.34	8.05	8.54	8.85	9.05	9.27
110°	6.54	7.37	7.90	8.39	8.99	9.85	10.56
120°	6.38	7.28	8.08	8.62	9.22	9.96	11.10
135°	5.66	6.86	7.62	8.53	9.71	10.63	12.17
150°	4.75	5.96	6.87	7.53	8.30	9.34	12.36
Run VMG	4.11	5.16	5.93	6.52	7.19	8.09	10.71
Gybe Angles	142.9°	146.2°	151.9°	149.8°	146.7°	143.7°	145.2°

Class Division Length

CDL = **8.784**

Storm Sails Areas

Heavy Weather Jib **16.96**
Storm Jib (JL=7.29) **6.28**
Storm Trysail **9.03**

Owner

BOAT	
Name Short Bus	Sail Nr 71221
File US6112	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS			
Inclining Test Current Inclining			
Flotation date 25/03/2017		SG 1.0130	
FFM 0.962	FF 0.965	SFFP 0.489	
FAM 0.806	FA 0.807	SAFP 8.876	
W1 19.6	PD1 430.0	WD 11.085	
W2 19.6	PD2 430.0	GSA 1.0	
W3 19.6	PD3 430.0	RSA 1.0	
W4 19.6	PD4 430.0	PLM 9000.0	
LCF from stem on CL / on sheer		5.264 / 5.395	
Maximum beam station from stem		6.501	
RM Measured		39.8kg·m	
RM Default		51.7kg·m	
Limit of positive stability / Stab.Index		106.9° / 100.2	
Freeboard at mast at 3.460		0.866	

RIG			
Forestay Tension Aft	Spreaders 2		
Inner Stay None Fitted	Runners 1		
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 11.773	E 4.385	MDT1 0.088	MW 0.143
IG 11.188	J 3.350	MDL1 0.145	GO 0.149
ISP 12.877	SFJ 0.110	MDT2 0.067	BD 0.125
BAS 1.260	SPL 0.000	MDL2 0.109	MWT 64.00
FSP 0.052	TPS 5.290	TL 1.845	MCG 4.511

MIZZEN RIG AND SAILS	
N/A	

PROPELLER	
Type No Propeller	

COMMENTS	
UPGRADED TO ORCI 2017	

MOVEABLE BALLAST	
N/A	

CENTERBOARD	
N/A	



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IMS Measurement Certificate

Certificate	
Number US6112	
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Invalid for Racing

ORC

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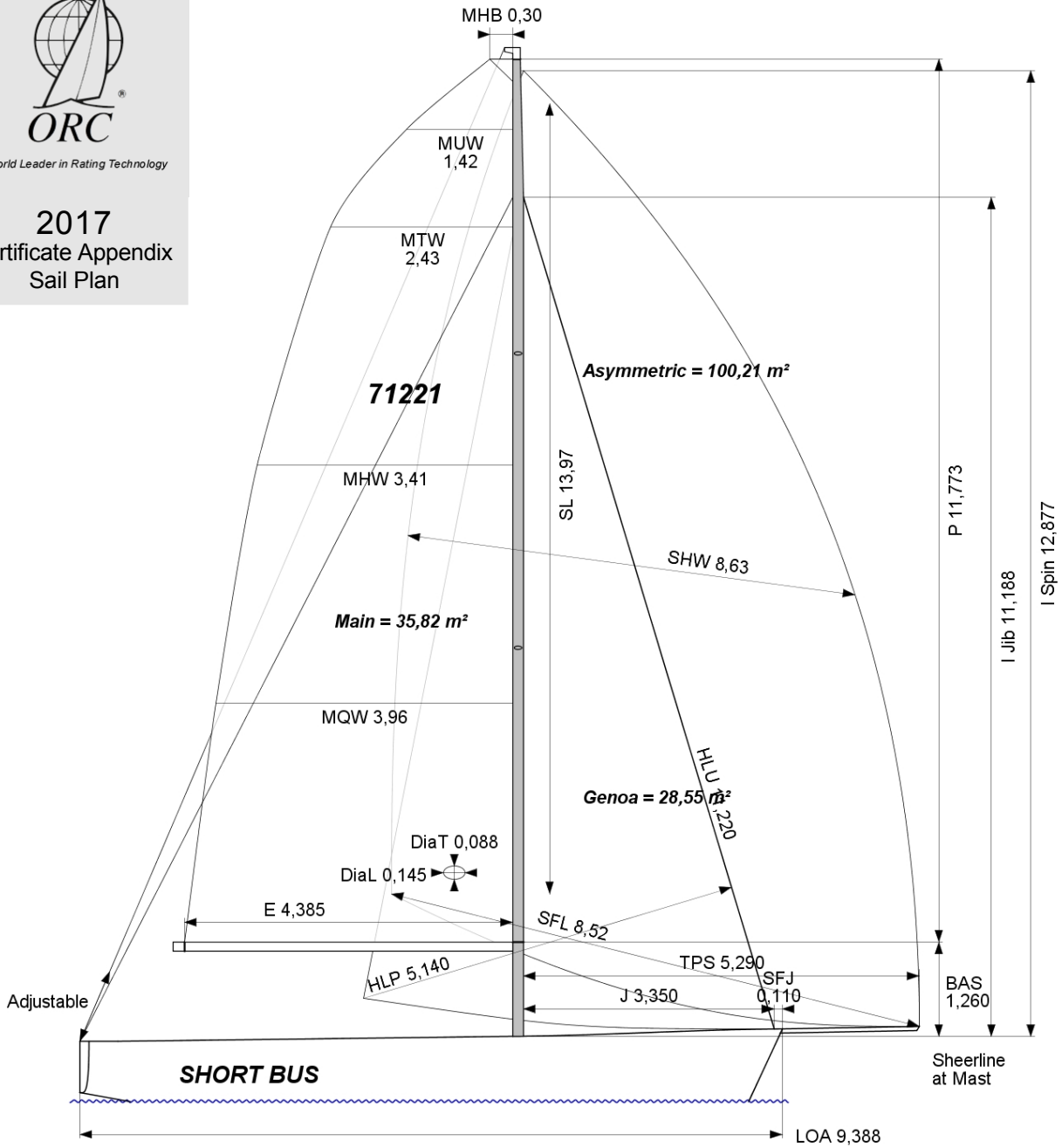
SAILS (Maximum Areas)									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	0.300	1.42	2.43	3.41	3.96	35.82	37.56	P/8 · (E + 2·MQW + 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
Symmetric									
Not Available									
Asymmetric	SLU	SLE	SL	SHW	SFL	Area	Formula		
	14.85	13.09	13.97	8.63	8.52	100.21	AS · (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
0.06	0.65	1.25	2.51	3.81	5.14	11.22	28.55	N		29/03/2017		



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Certificate Appendix
Sail Plan



SAILS INVENTORY																
MAINSAIL (1)																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
1	0.300	1.42	2.43	3.41	3.96	35.82	McKinney	29/03/2017	Quantum							
HEADSAILS (1)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
1	0.06	0.65	1.25	2.51	3.81	5.14	11.22	153%	28.55	N		McKinney	29/03/2017	Quantum		
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				
1	14.85	13.09	13.97	8.63	8.52	100.21	asym	McKinney	29/03/2017	Quantum						