

BOAT Name J 70-310 Sail Nr J70-310	GPH 670.9	HULL Length Overall 6.910m Maximum Beam 2.254m Displacement 811kg Draft 1.382m Plan Review IMS Reg. Division Sportboat Dynamic Allowance 0.000% Hull Construction Cored Carbon Rudder No Crew Arm Extension 0.50
GENERAL Class J-70 ONE DESIGN Designer JOHNSTONE Builder J BOATS Series 02/2012 Age 02/2013 Age Allowance 0.260% Offset File j70.OD - 10/01/2020 00:00:00 Measurement by - 01/02/2013		IMSL 6.689m VCGD -0.184m Sink 7.58kg/mm RL 7.025m VCGM -0.194m WS 9.18m² LSM0 6.181m Displacement/Length ratio 3.4344



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SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	649.6			739.6		
Time on Time	0.9236			0.9127		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	770.4	597.9	507.4	992.4	747.3	636.0
Time on Time	0.8762	1.1289	1.3304	0.6802	0.9033	1.0614

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1184.9	971.9	866.0	796.7	778.8	777.2	785.4
52°	777.7	648.2	598.2	569.1	551.3	545.6	542.9
60°	728.1	620.8	581.6	549.4	523.3	514.2	510.5
75°	696.3	603.8	565.8	528.7	490.4	465.3	451.3
90°	657.4	576.2	530.3	507.3	480.4	443.0	394.2
110°	648.2	567.4	506.7	455.3	426.5	404.0	354.8
120°	666.8	577.6	518.3	457.2	404.9	373.0	321.3
135°	744.0	612.3	553.9	499.4	443.0	391.2	277.3
150°	875.6	694.2	607.2	560.9	513.5	460.3	331.6
Run VMG	1011.1	801.6	701.1	647.6	592.9	531.5	382.9

Certificate
Number **US6220**
ORC Ref **03410000J2T**
Issued On **28/05/2020**
VPP Ver. **2020 1.00**
Valid until **31/12/2020**

Crew Weight
Default 347kg
Maximum **340kg**
Minimum* **255kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring
ToD ToT
Non Spin GPH **730.0 0.8219**
Non Spin OSN **699.9 0.8572**

Selected Courses							
Windward / Leeward	1098.0	886.7	783.6	722.2	685.9	654.4	584.2
Circular Random	926.7	749.1	652.2	592.6	551.4	519.6	468.4
Coastal / Long Distance	1089.3	832.8	706.4	622.0	568.3	521.5	436.8
Non Spinnaker	1028.6	821.4	707.4	638.6	594.1	563.3	521.0

Sails Limitations
Headsails **5** Spinnakers **4**
Woven Polyester

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	42.8°	42.0°	41.1°	38.1°	37.1°	37.5°	38.6°
Beat VMG	3.04	3.70	4.16	4.52	4.62	4.63	4.58
52°	4.63	5.55	6.02	6.33	6.53	6.60	6.63
60°	4.94	5.80	6.19	6.55	6.88	7.00	7.05
75°	5.17	5.96	6.36	6.81	7.34	7.74	7.98
90°	5.48	6.25	6.79	7.10	7.49	8.13	9.13
110°	5.55	6.34	7.10	7.91	8.44	8.91	10.15
120°	5.40	6.23	6.95	7.87	8.89	9.65	11.21
135°	4.84	5.88	6.50	7.21	8.13	9.20	12.98
150°	4.11	5.19	5.93	6.42	7.01	7.82	10.86
Run VMG	3.56	4.49	5.13	5.56	6.07	6.77	9.40
Gybe Angles	145.0°	148.0°	150.5°	148.0°	145.0°	143.5°	137.6°

Class Division Length
CDL = **6.851**

Storm Sails Areas
Heavy Weather Jib **8.79**
Storm Jib (JL=5.25) **3.26**
Storm Triesail **4.02**

Owner

BOAT	
Name J 70-310	Sail Nr J70-310
File US6220	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS			
Inclining Test Enter RM directly			
Flotation date 01/02/2016		SG 1.0200	
		RM _{Ce} 21.6	
FFM 0.790	FF 0.792	SFFP 0.155	
FAM 0.570	FA 0.571	SAFP 6.903	
LCF from stem on CL / on sheer		3.697 / 3.856	
Maximum beam station from stem		4.358	
RM Measured		21.6kg-m	
RM Default		19.7kg-m	
Limit of positive stability / Stab.Index		112.9° / 104.2	
Freeboard at mast at 2.500		0.674	



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RIG			
Forestay Tension Aft	Spreaders 1		
Inner Stay None Fitted	Runners/Checkstays 0		
Carbon Mast Yes	Jib Furler Yes		
Fiber Rigging No	Main Furler No		
Non-Circular Rigging No			
Articulated Bowsprit No			
P 7.974	E 2.876	MDT1 0.080	MW 0.116
IG 8.000	J 2.340	MDL1 0.116	GO 0.136
ISP 9.290	SFJ 0.160	MDT2 0.070	BD 0.095
BAS 0.992	SPL	MDL2 0.070	MWT 24.00
FSD 0.000	TPS 4.025	TL 1.000	MCG 3.880

MIZZEN RIG AND SAILS	
N/A	

PROPELLER	
Type No Propeller	

Certificate	
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ORC Ref 03410000J2T	
Issued On 28/05/2020	
VPP Ver. 2020 1.00	
Valid until 31/12/2020	

COMMENTS	
weight acc to OD class rules incl outboard engine, 4 crew	

MOVABLE BALLAST	
N/A	



CENTERBOARD	
N/A	

SAILS (Maximum Areas)									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	0.37	0.88	1.43	2.13	2.57	15.44	16.00	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	AS · (SFL + 4·SHW) / 6		
	10.80	8.80	9.80	5.56	5.70	45.64			

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	Flying	Meas.Date	Material	Comment
0.06		0.65	1.25	1.86	2.45	8.00	10.02	Y	No			CLASS

MEASUREMENT INVENTORY				
Measurer Class rules weight				
Date 01/02/2016				
Comment				
Internal Ballast total = 0.0				
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>
4	Anchor	7.0	3.40	0.00 Class-rule 5kg-
	Tools			0.00
<i>Id</i>	<i>Item</i>	<i>Maker</i>	<i>Model</i>	
E	Engine		OUTBOARD	
<i>Id</i>	<i>Item</i>	<i>Weight Description</i>		

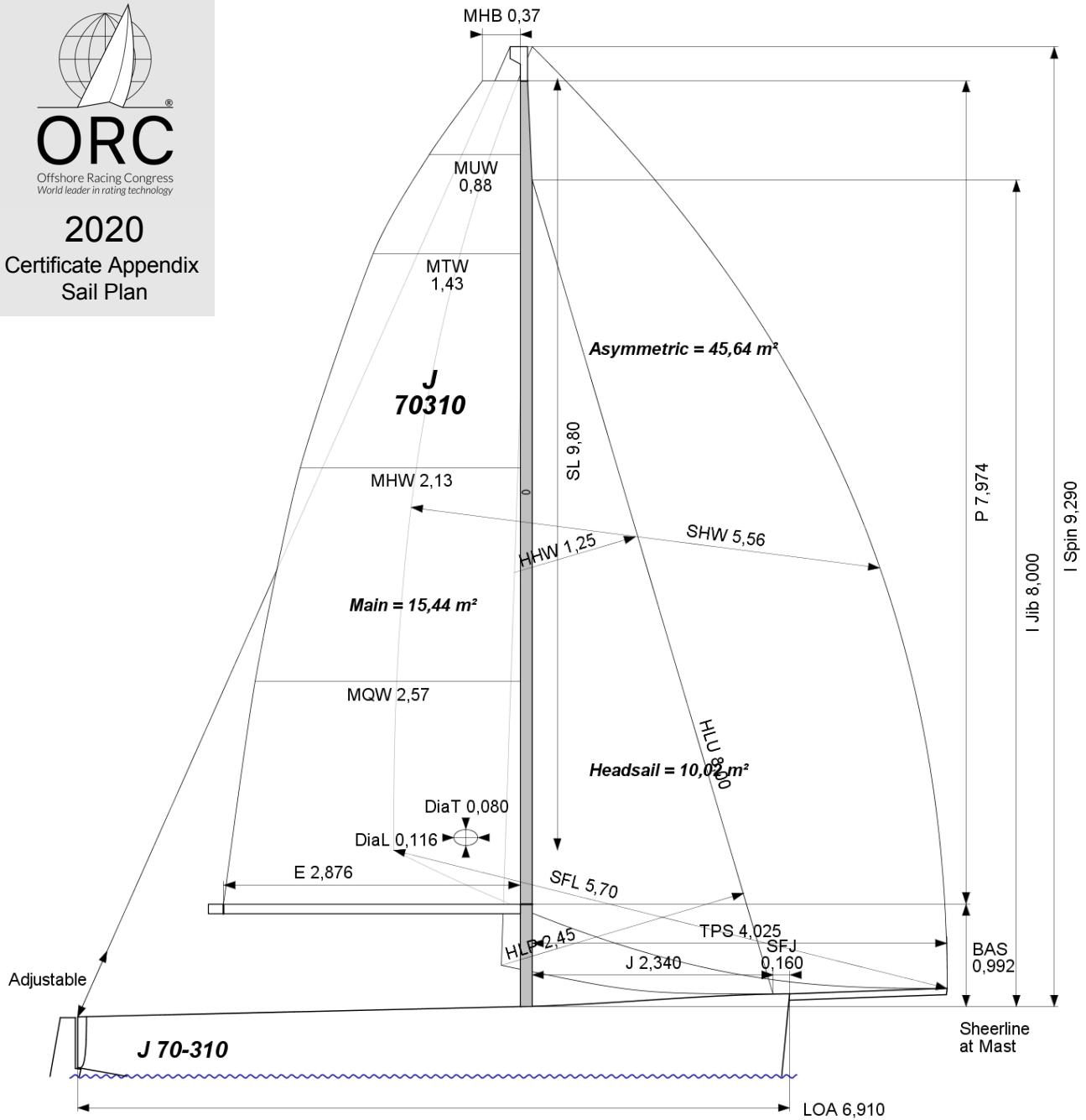
MEASUREMENT INVENTORY				
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>



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Sail Plan



SAILS INVENTORY

MAINSAIL (1)

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
ORC	0.37	0.88	1.43	2.13	2.57	15.44	CLASS				CLASS

HEADSAILS (1)

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Flying	Measurer	Meas.Date	Manufacture	Material	Comment
ORC	0.06		0.65	1.25	1.86	2.45	8.00	105%	10.02	Y	No	CLASS				CLASS

SYMMETRIC SPINNAKERS (0)

Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment
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ASYMMETRIC SPINNAKERS (1)

Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment
ORC	10.80	8.80	9.80	5.56	5.70	45.64	asym	CLASS				CLASS