

BOAT Name TO NESSA Sail Nr BRA 2531	GPH 682,7	HULL Length Overall 6,910 m Maximum Beam 2,254 m Displacement 811 kg Draft 1,384 m IMS Reg. Division Sportboat Dynamic Allowance 0,000% Fwd Accommodation No Hull Construction Cored Carbon Rudder No Crew Arm Extension
GENERAL Class J-70 Designer JOHNSTONE Builder J BOATS Series 02/2012 Age 02/2013 Age Allowance 0,098% Offset File j7015.od - 27/1/2015 23:03:18 Measurement by Cl. Rules/PATACCA - 26/05/2014		IMS L 6,483 VCGD -0,138 Sink 7,14 kg/mm RL 6,779 VCGM -0,153 WS 8,91 m²



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ORC International
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	OFFSHORE COASTAL / LONG DISTANCE			INSHORE WINDWARD / LEEWARD		
	PLT	PLD		PLT	PLD	
Time On Distance	663,7			754,5		
Time On Time	0,9040			0,8947		
Performance Line	0,710	56,1		0,799	238,6	
Triple Number	Low 0,8562	Medium 1,1144	High 1,2947	Low 0,6538	Medium 0,8907	High 1,0340

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1231,1	1005,0	879,1	811,0	790,6	783,9	797,8
52°	793,0	654,8	598,1	569,0	556,0	549,8	548,0
60°	739,9	623,5	580,2	547,1	527,7	519,4	515,6
75°	691,7	593,6	563,5	526,0	489,9	472,0	462,2
90°	640,9	571,6	537,0	510,2	482,4	451,9	407,3
110°	648,3	568,9	506,7	456,0	432,9	414,6	375,5
120°	668,8	576,2	525,5	472,9	419,7	394,2	346,9
135°	765,5	624,1	564,4	515,8	467,4	417,0	305,2
150°	913,2	726,5	624,1	569,5	526,1	483,5	368,0
Run VMG	1054,5	838,9	718,4	639,5	593,3	552,6	425,0

Certificate

Number **253101**
ORC Ref **no00000506**
Issued On **13/4/2015**
VPP Ver. **2015 1.00**
Valid until **31/12/2015**

Crew Weight

Declared **340 kg**
Default* **333 kg**
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Non Spin GPH	735,8	0,8154
Non Spin OSN	708,0	0,8474
N/S Perf. Line	44,3	0,642

Selected Courses							
Windward / Leeward	1142,8	921,9	798,7	725,2	691,9	668,2	611,4
Circular Random	945,5	762,7	663,0	602,7	562,7	533,4	488,2
Ocean for PCS	1009,8	796,9	676,3	599,5	544,8	501,3	429,6
Non Spinnaker	1038,7	828,1	712,6	643,4	599,3	569,1	528,6

Sails Limitations

Headsails	Spinnakers
6	3

Dacron Sails

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°	43,8°	42,0°	39,4°	38,4°	38,2°	39,7°
Beat VMG	2,92	3,58	4,10	4,44	4,55	4,59	4,51
52°	4,54	5,50	6,02	6,33	6,48	6,55	6,57
60°	4,87	5,77	6,20	6,58	6,82	6,93	6,98
75°	5,20	6,06	6,39	6,84	7,35	7,63	7,79
90°	5,62	6,30	6,70	7,06	7,46	7,97	8,84
110°	5,55	6,33	7,11	7,89	8,32	8,68	9,59
120°	5,38	6,25	6,85	7,61	8,58	9,13	10,38
135°	4,70	5,77	6,38	6,98	7,70	8,63	11,80
150°	3,94	4,96	5,77	6,32	6,84	7,45	9,78
Run VMG	3,41	4,29	5,01	5,63	6,07	6,51	8,47
Gybe Angles	143,3°	144,6°	153,8°	161,2°	169,8°	160,2°	136,2°

Class Division Length

CDL = **6,632**

Storm Sails Areas

Heavy Weather Jib	8,79
Storm Jib (JL=5,24)	3,26
Storm Trysail	4,02

Owner

BOAT	
Name TO NESSA	Sail Nr BRA2531
File (0)	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS			
Inclining Test Enter RM directly			
Flotation date 01/02/2013		SG 1,0250	
		RMCe 19,3	
FFM 0,734	FF 0,734	SFFP 0,155	
FAM 0,627	FA 0,627	SAFP 6,903	
LCF from stem on CL / on sheer		3,479 / 3,641	
Maximum beam station from stem		4,358	
RM Measured / Default		19,3 / 18,4	
Limit of positive stability / Stab.Index		112,2° / 103,5	
Freeboard at mast at 2,340		0,661	

RIG			
Forestay Tension Aft	Spreaders 1		
Inner Stay None Fitted	Runners 0		
Carbon Mast No	Jumper Struts None		
Taper Hollows No	Jib Furler Yes		
Fiber Rigging No	Main Furler No		
Lenticular Rigging No	Without Backstay No		
Articulated Bowsprit No			
P 7,970	E 2,880	MDT1 0,080	MW 0,116
IG 8,000	J 2,340	MDL1 0,116	GO 0,136
ISP 9,290	SFJ	MDT2 0,070	BD 0,095
BAS 0,992	SPL 0,000	MDL2 0,070	MWT 23,90
FSP 0,060	TPS 3,890	TL 1,000	MCG 4,880



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Measurements Datasheet

MIZZEN RIG AND SAILS	
N/A	

PROPELLER	
Type No Propeller	

Certificate	
Number 253101	
ORC Ref no00000506	
Issued On 13/4/2015	
VPP Ver. 2015 1.00	
Valid until 31/12/2015	

COMMENTS	
weight acc to OD class rules incl outboard engine, 4 crew x 85kg Correcao de Numeral 2528 para 2531	

MOVEABLE BALLAST	
N/A	

CENTERBOARD	
N/A	



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SAILS (Maximum Areas)									
Mainsail	HB	MGT	MGU	MGM	MGL	Area	Area (r)	Formula	
	0,364	0,88	1,43	2,13	2,57	15,43	15,99	P/8 · (E + 2·MGL + 2·MGM + 1.5·MGU + MGT + 0.5·HB)	
Symmetric Not Available									
Asymmetric	SLU	SLE	ASL	AMG	ASF	Area	Formula		
	10,80	8,80	9,80	5,56	5,70	45,64	ASL · (ASF + 4·AMG) / 6		

HEADSAILS												
Area = 0.1125·JL·(1.445·LPG+2·JGL+2·JGM+1.5·JGU+JGT+0.5·JH)												
JH	JGT	JGU	JGM	JGL	LPG	JL	Area	Btn	Fly	Meas.Date	Material	Comment
0,06		0,65	1,25	1,86	2,45	8,00	10,01	Y				

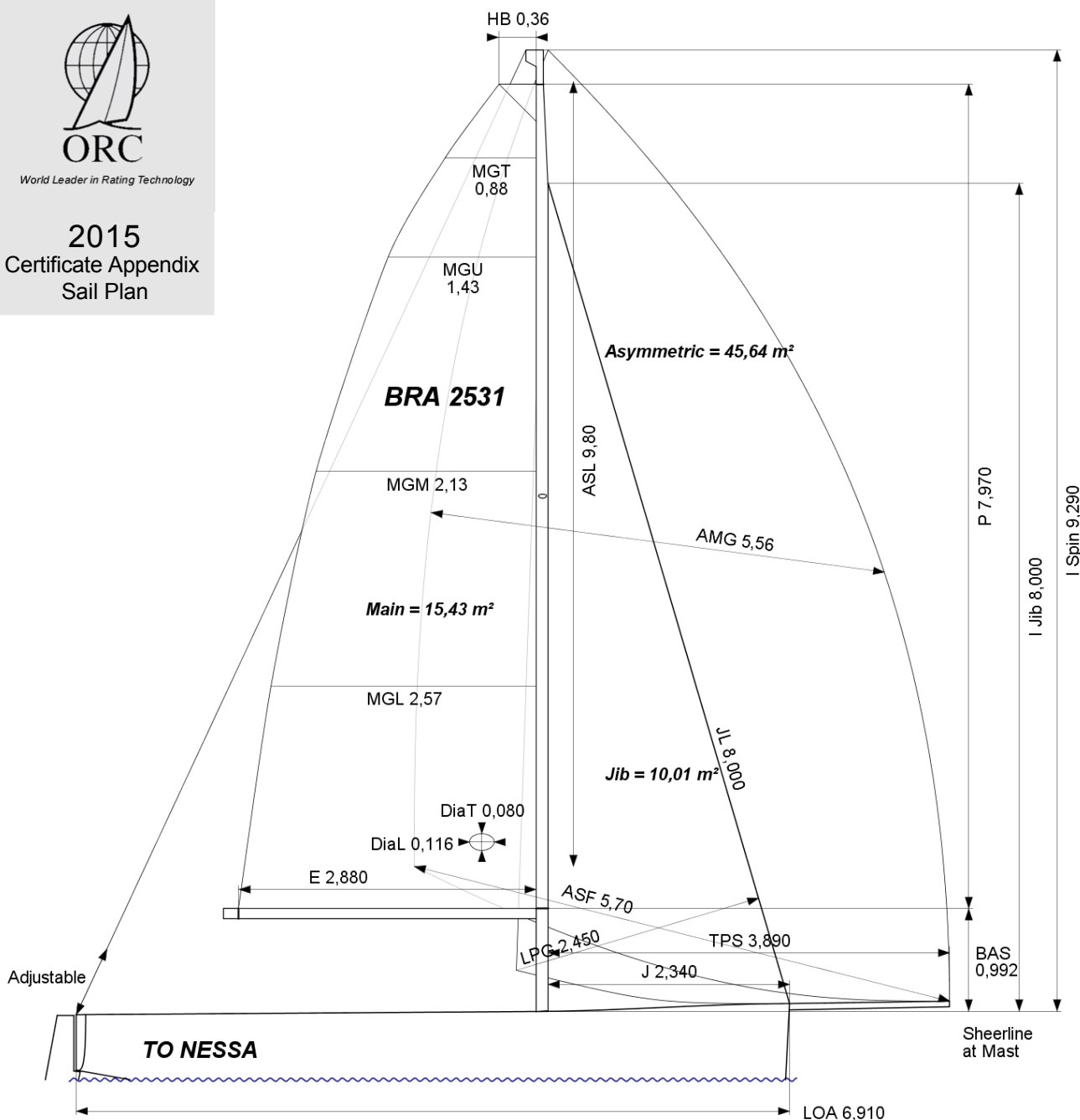
MEASUREMENT INVENTORY				
Measurer				
Date				
Comment				
Id	Item	Weight	Distance	VCG Description
Id	Item	Weight Description		

MEASUREMENT INVENTORY				
Id	Item	Weight	Distance	VCG Description



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Certificate Appendix
Sail Plan



SAILS INVENTORY

MAINSAIL

Id	HB	MGT	MGU	MGM	MGL	Area	Measurer	Meas.Date	Manufacture	Material	Comment
ORC	0,364	0,88	1,43	2,13	2,57	15,43					

HEADSAILS

Id	JH	JGT	JGU	JGM	JGL	LPG	JL	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
ORC	0,06		0,65	1,25	1,86	2,45	8,00	105%	10,01	Y						

SYMMETRIC SPINNAKERS

Id	SL	SMG	SF	Area	Measurer	Meas.Date	Manufacture	Material	Comment
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ASYMMETRIC SPINNAKERS

Id	SLU	SLE	ASL	AMG	ASF	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment
ORC	10,80	8,80	9,80	5,56	5,70	45,64	asym					