

BOAT
Name Babooshka
Sail Nr POL 11944

GPH
703.6

HULL				
Length Overall	8.410 m			
Maximum Beam	2.914 m			
Displacement	2,998 kg			
Draft	1.924 m			
IMS Reg. Division	Cruiser/Racer			
Dynamic Allowance	0.328%			
Fwd Accommodation	Yes			
Hull Construction	Solid			
Carbon Rudder	No			
Crew Arm Extension				
IMS L	7.973	VCGD	0.179	VCGM 0.258
Sink	13.66 kg/mm	Wetted Area	17.02 m ²	

GENERAL
Class Maxus 28
Designer Jacek Daszkiewicz
Builder Northman
Series 03/2010
Age 10/2010
Age Allowance 0.130%
Offset File maxus28a.off - 1/11/2013 15:38:46
Measurement by J.Gorski - 07/09/2011

SCORING OPTIONS						
	OFFSHORE COASTAL / LONG DISTANCE			INSHORE WINDWARD / LEEWARD		
Time On Distance	671.0			760.8		
Time On Time	0.8942			0.8872		
Performance Line	PLT	PLD		PLT	PLD	
	0.710	75.0		0.681	151.4	
Triple Number	Low	Medium	High	Low	Medium	High
	0.7741	1.0438	1.2619	0.6246	0.8825	1.0374

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1234.7	1008.0	873.4	803.8	775.1	757.7	748.3
52°	801.8	661.8	596.3	553.7	538.8	531.0	524.6
60°	752.8	632.4	575.0	537.2	518.0	510.6	504.1
75°	714.6	611.8	553.2	527.5	501.1	482.4	473.6
90°	704.6	595.4	538.3	506.1	494.8	480.4	450.2
110°	718.9	601.3	541.4	505.4	477.1	450.5	427.3
120°	754.6	620.5	554.3	516.9	487.7	462.6	410.2
135°	855.8	681.5	592.9	544.3	512.1	485.7	438.4
150°	1013.8	787.7	654.0	586.0	543.0	512.7	465.1
Run VMG	1170.7	909.6	750.3	654.9	594.8	552.9	498.0
Selected Courses							
Windward / Leeward	1202.7	958.8	811.8	729.4	684.9	655.3	623.1
Circular Random	988.5	790.0	681.5	617.3	577.4	551.2	518.7
Ocean for PCS	1053.0	824.3	695.7	616.7	565.0	528.4	476.5
Non Spinnaker	1046.1	831.0	712.2	641.3	596.8	567.7	532.4

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	43.7°	42.8°	40.8°	39.1°	38.3°	37.9°	38.5°
Beat VMG	2.92	3.57	4.12	4.48	4.64	4.75	4.81
52°	4.49	5.44	6.04	6.50	6.68	6.78	6.86
60°	4.78	5.69	6.26	6.70	6.95	7.05	7.14
75°	5.04	5.88	6.51	6.82	7.18	7.46	7.60
90°	5.11	6.05	6.69	7.11	7.28	7.49	8.00
110°	5.01	5.99	6.65	7.12	7.55	7.99	8.42
120°	4.77	5.80	6.49	6.96	7.38	7.78	8.78
135°	4.21	5.28	6.07	6.61	7.03	7.41	8.21
150°	3.55	4.57	5.50	6.14	6.63	7.02	7.74
Run VMG	3.08	3.96	4.80	5.50	6.05	6.51	7.23
Gybe Angles	146.3°	152.1°	156.4°	166.5°	169.9°	173.3°	174.5°




World Leader in Rating Technology

2012

ORC International
Certificate

Rating Office

Offshore
Racing
Congress



World Leader in Rating Technology

Certificate
Number 3
ORC Ref pol00000815
Issued On 6/9/2012
VPP Ver. 2012 1.01
Valid until 31/12/2012

Crew Weight
Declared 380 kg
Default* 495 kg
Non Manual Pwr No

Special Scoring
ToD ToT
D. Hand OSN 674.5 0.8896
Non Spin. OSN 702.1 0.8546
N/S Perf. Line 53.2 0.650

Sails Limitations		
Genoas 3	Jibs 2	Spinnakers 3
Spinnaker configuration Symmetric		

Storm Sails Areas
Heavy Weather Jib 13.96
Storm Jib (JL=6.61) 5.17
Storm Trysail 7.01

Owner

BOAT			
Name	Babooshka	Sail Nr	POL 11944
File	Babooshka.dxt	Data in	meters/kilograms

RIG			
Forestay Tension	Aft	Spreaders	1
Inner Stay	None Fitted	Runners	0
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		
P	10.320	E	3.880
IG	9.990	J	2.850
ISP	10.490	SFJ	0.100
SPS	2.220	SPL	2.940
BAS	1.220	TPS	
BAL	0.150	FSP	
MDT1	0.090	MDL1	0.134
MDT2	0.090	MDL2	0.134
MW	0.134	GO	0.184
TL		MWT	62.00
		MCG	4.400
		CPW	2.430
		BD	0.116
		BWT	12.80

MIZZEN RIG AND SAILS			
N/A			


COMMENTS			

INCLINING TEST AND FREEBOARDS			
Inclining Test Current Inclining			
Flotation date	07/06/2012	SG	1.0000
FFM	1.125	FF	1.132
FAM	1.036	FA	1.040
		SFFP	0.311
		SAFP	8.181
W1	9.000	PD1	44.0
W2	19.800	PD2	101.0
W3	36.100	PD3	186.0
W4	46.900	PD4	241.0
		WD	8.370
		GSA	15.9
		RSA	10751.
		PLM	2115.0
LCF from stem on CL / on sheer		4.497 / 0.000	
Maximum beam station from stem		5.775	
RM Measured / Default		60.1 / 61.6	
Limit of positive stability / Stab.Index		107.9° / 106.1	
Freeboard at mast at 2.950		1.102	

PROPELLER	
Type	No Propeller

MOVEABLE BALLAST	
N/A	

CENTERBOARD	
N/A	



World Leader in Rating Technology

2012

IMS Measurement Certificate

Certificate


Number **3**

ORC Ref **pol00000815**

Issued On **6/9/2012**

VPP Ver. **2012 1.01**

Valid until **31/12/2012**



World Leader in Rating Technology

SAILS (Maximum Areas)									
Mainsail	HB	MGT	MGU	MGM	MGL		Area	Area (r)	Formula
	0.320	0.87	1.43	2.43	3.24		23.73	24.24	$P/8 \cdot (E + 2 \cdot MGL + 2 \cdot MGM + 1.5 \cdot MGU + MGT + 0.5 \cdot HB)$
Jib/Genoa	JH	JGT	JGU	JGM	JGL	JL	LPG		
	0.04	0.44	0.87	1.75	2.69	9.88	3.63	17.66	$0.1125 \cdot JL \cdot (1.445 \cdot LPG + 2 \cdot JGL + 2 \cdot JGM + 1.5 \cdot JGU + JGT + 0.5 \cdot JH)$
Symmetric	SL	SMG	SF					47.24	$SL \cdot (SF + 4 \cdot SMG) / 6$
	10.04	5.67	5.55						
Asymmetric									
Not Available									
Code Zero									
Not Available									

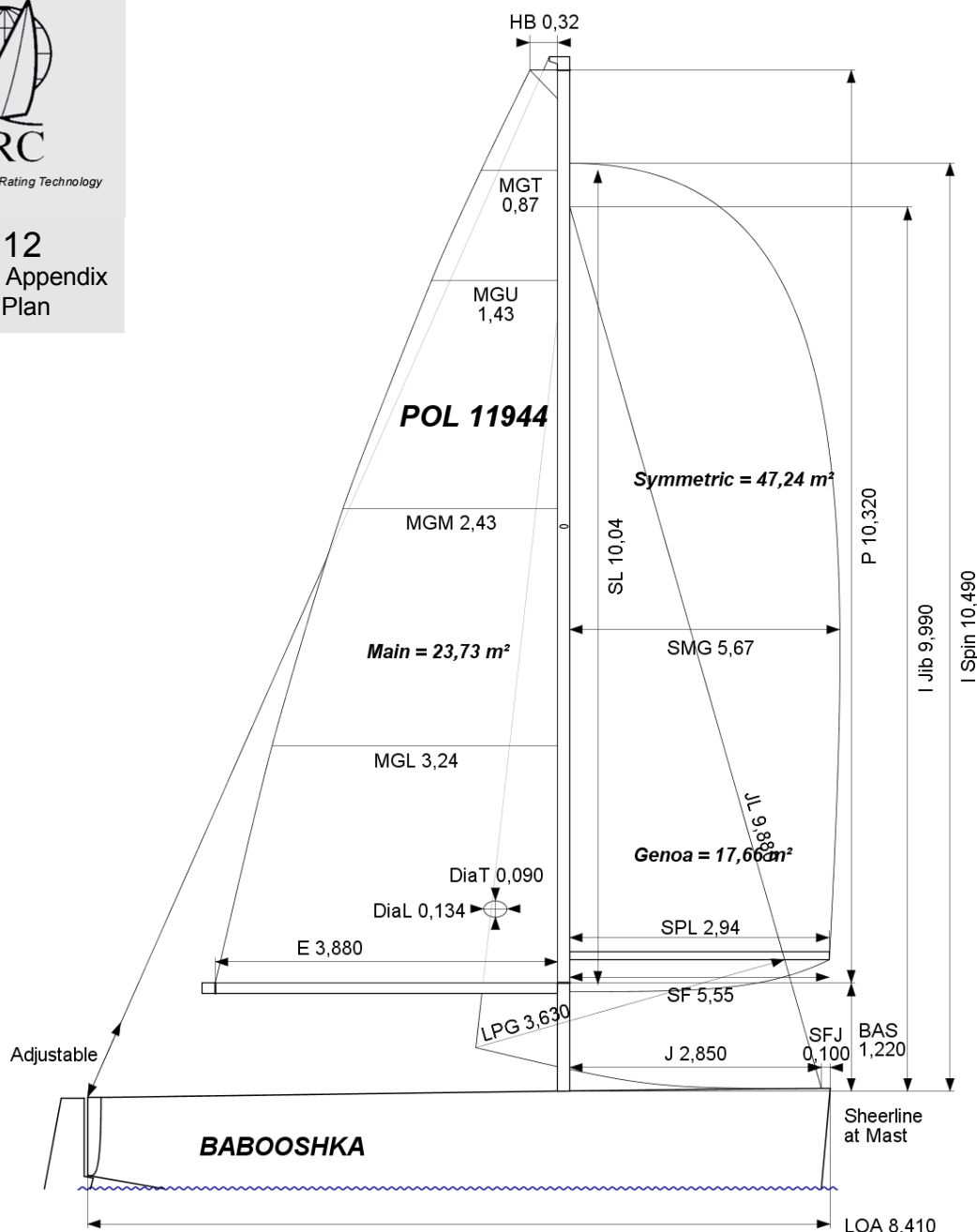
MEASUREMENT INVENTORY				
Measurer J.Gorski				
Date 07/09/2011				
Comment				
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>
1	Anchor	7.5	0.50	0.00 at the stern
2	Anchor	8.0	0.50	0.00 at the bow
1	Tools	15.0	3.95	at the
<i>Id</i>	<i>Item</i>	<i>Maker</i>	<i>Model</i>	
1	Engine	Suzuki	15KM	
<i>Id</i>	<i>Item</i>	<i>Weight Description</i>		

MEASUREMENT INVENTORY								
<i>Id</i>	<i>Item</i>	<i>Tank Use</i>	<i>Tank Type</i>	<i>Capcty</i>	<i>Dist.</i>	<i>VCG</i>	<i>Condtn</i>	<i>Description</i>
1	Tank		fresh water	50.0	1.00			0.0 at CL
2	Tank		fuel	15.0	8.25			0.0
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>				
1	Battery	24.0	6.45	2 batteries at the stern in C.L. 80Ah				
2	Battery	12.0	0.95	1 batterie at the bow in C.L. 80Ah				



World Leader in Rating Technology

2012 Certificate Appendix Sail Plan



SAILS INVENTORY

MAINSAIL

Id	HB	MGT	MGU	MGM	MGL	Area	Measurer	Meas.Date	Manufacture	Material	Comment
1	0.320	0.87	1.43	2.43	3.24	23.73	J.Gorski	07/09/2011	Ocean Sails	Dacron	Ripstop
2	0.080	0.40	0.76	1.52	2.27	16.82	J.Gorski	24/05/2012	Sail Service	Dacron	storm mainsail

JIBS / GENOAS

Id	JH	JGT	JGU	JGM	JGL	LPG	JL	Ovrlp	Area	Measurer	Meas.Date	Manufacture	Material	Comment
4	0.04	0.44	0.87	1.75	2.69	3.63	9.88	127%	17.66	J.Gorski	31/07/2012	Bryt Sails	Kevlar	
1	0.07	0.42	0.80	1.59	2.38	3.11	9.30	109%	14.74	J.Gorski	07/09/2011	Ocean Sails	Dacron	Ripstop
2	0.05	0.38	0.73	1.46	2.27	3.05	9.62	107%	14.47	J.Gorski	07/09/2011	Apollo Sails	Dacron	SQure
3	0.06	0.20	0.36	0.74	1.17	1.65	5.89	58%	4.62	J.Gorski	24/05/2012	Sail Service	Dacron	storm jib

SYMMETRIC SPINNAKERS

Id	SL	SMG	SF	Area	Measurer	Meas.Date	Manufacture	Material	Comment
2	10.04	5.67	5.55	47.24	J.Gorski	24/05/2012	Sail Service	Nylon	grey

ASYMMETRIC SPINNAKERS

Id	SLU	SLE	ASL	AMG	ASF	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment
----	-----	-----	-----	-----	-----	------	------	----------	-----------	-------------	----------	---------