

BOAT Name ONIAK 9400 Sail Nr ITA-15774	GPH 576.2	HULL Length Overall 8.999m Maximum Beam 2.858m Displacement 1,410kg Draft 1.923m IMS Reg. Division Sportboat Dynamic Allowance 0.001% Fwd Accommodation No Hull Construction Cored Carbon Rudder Yes Crew Arm Extension IMSL 8.593m VCGD 0.409m Sink 11.88kg/mm RL 8.242m VCGM 0.221m WS 15.66m² LSM0 7.965m Displacement/Length ratio 2.7904
GENERAL Class ONIAK 9400 Designer SVARA - MARCHESAN Builder MARCHESAN Series 01/2007 Age 07/2007 Age Allowance 0.357% Offset File ONIAK.off - 19/05/2016 15:01:48 Measurement by BERTONE - 12/05/2016		



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SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	564.4			640.5		
Time on Time	1.0631			1.0538		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	641.9	518.4	454.6	823.9	649.9	561.1
Time on Time	1.0516	1.3021	1.4849	0.8193	1.0387	1.2029

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	934.9	775.7	742.6	735.5	724.1	718.9	734.9
52°	611.9	533.0	517.8	512.0	505.6	496.8	497.8
60°	580.2	516.8	497.6	488.5	482.6	467.7	465.4
75°	560.9	504.1	464.7	449.5	440.8	432.1	413.1
90°	563.1	506.2	457.0	418.7	402.7	393.0	373.4
110°	554.0	484.6	449.6	418.3	393.7	363.5	330.6
120°	567.6	488.1	434.7	403.7	377.3	351.0	316.9
135°	640.5	524.1	463.9	401.4	352.8	323.3	279.6
150°	766.2	606.4	524.3	471.2	413.1	367.8	271.5
Run VMG	884.7	700.2	607.1	544.1	477.1	424.7	313.4

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Number **157741**
ORC Ref **ITA00027241**
Issued On **09/05/2018**
VPP Ver. **2018 1.00**
Valid until **31/12/2018**

Crew Weight

Default **498kg**
Maximum **498kg**
Minimum* **374kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Double H.GPH	605.0	0.9918
Double H.OSN	601.8	0.9970
Non Spin GPH	623.7	0.9620
Non Spin OSN	609.9	0.9837

Selected Courses							
Windward / Leeward	909.8	737.9	674.8	639.8	600.6	571.8	524.2
Circular Random	778.7	636.2	560.9	516.3	486.4	464.2	430.9
Coastal / Long Distance	907.3	696.2	606.8	548.6	503.4	464.1	402.2
Non Spinnaker	861.0	694.9	605.6	552.5	518.1	493.8	460.1

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	43.1°	40.4°	39.1°	39.6°	39.4°	39.5°	41.3°
Beat VMG	3.85	4.64	4.85	4.89	4.97	5.01	4.90
52°	5.88	6.75	6.95	7.03	7.12	7.25	7.23
60°	6.21	6.97	7.24	7.37	7.46	7.70	7.74
75°	6.42	7.14	7.75	8.01	8.17	8.33	8.72
90°	6.39	7.11	7.88	8.60	8.94	9.16	9.64
110°	6.50	7.43	8.01	8.61	9.14	9.90	10.89
120°	6.34	7.37	8.28	8.92	9.54	10.26	11.36
135°	5.62	6.87	7.76	8.97	10.21	11.13	12.87
150°	4.70	5.94	6.87	7.64	8.71	9.79	13.26
Run VMG	4.07	5.14	5.93	6.62	7.55	8.48	11.49
Gybe Angles	142.2°	145.6°	150.7°	148.6°	144.7°	144.2°	145.9°

Class Division Length

CDL = **8.418**

Storm Sails Areas


Heavy Weather Jib **19.51**
Storm Jib (JL=7.81) **7.23**
Storm Trysail **8.20**

Owner

BOAT	
Name ONIAK 9400	Sail Nr ITA-15774
File I15774	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS			
Inclining Test Current Inclining		Flotation date 03/05/2016 SG 1.0230	
FFM 0.803	FF 0.803	SFFP 0.057	
FAM 0.766	FA 0.766	SAFP 8.778	
W1 24.0	PD1 572.4	WD 11.770	
W2 24.0	PD2 563.0	GSA 1.0	
W3 24.0	PD3 578.5	RSA 1.0	
W4 24.0	PD4 567.9	PLM 9000.0	
LCF from stem on CL / on sheer		5.122 / 5.293	
Maximum beam station from stem		6.230	
RM Measured		39.0kg·m	
RM Default		50.7kg·m	
Limit of positive stability / Stab.Index		94.2° / 87.0	
Freeboard at mast at 3.717		0.787	

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				
P 12.140	E 3.860	MDT1 0.093	MW 0.150	
IG 11.920	J 3.570	MDL1 0.150	GO 0.180	
ISP 13.790	SFJ 0.147	MDT2 0.084	BD 0.160	
BAS 1.160	SPL	MDL2 0.121	MWT 87.00	
FSP 0.068	TPS 5.070	TL 1.010	MCG 4.937	




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IMS Measurement Certificate

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MIZZEN RIG AND SAILS	
N/A	

PROPELLER	
Type No Propeller	

COMMENTS	

MOVABLE BALLAST	
N/A	

CENTERBOARD	
N/A	

SAILS (Maximum Areas)									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	0.700	1.23	1.83	2.69	3.32	30.66	31.39	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		
	15.52	12.51	14.02	8.15	8.47	95.93	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
0.08	0.57	1.04	1.85	2.61	3.49	12.01	21.80	Y	N	09/05/2016	Carbon	
0.09	0.62	1.02	1.85	2.63	3.46	11.92	21.66	Y	N	09/05/2016	Carbon	
0.09	0.53	1.00	1.79	2.60	3.45	11.95	21.29	Y	N	09/05/2016	Carbon	
0.10	0.54	0.98	1.74	2.56	3.47	11.93	21.03	Y	N	09/05/2016	Carbon	
0.00	0.00	0.00	0.00	0.00	3.37	11.79	20.22	Y	N	09/05/2016	Carbon	
0.00	0.00	0.00	0.00	0.00	2.51	11.56	14.77	Y	N	09/05/2016	Technor	

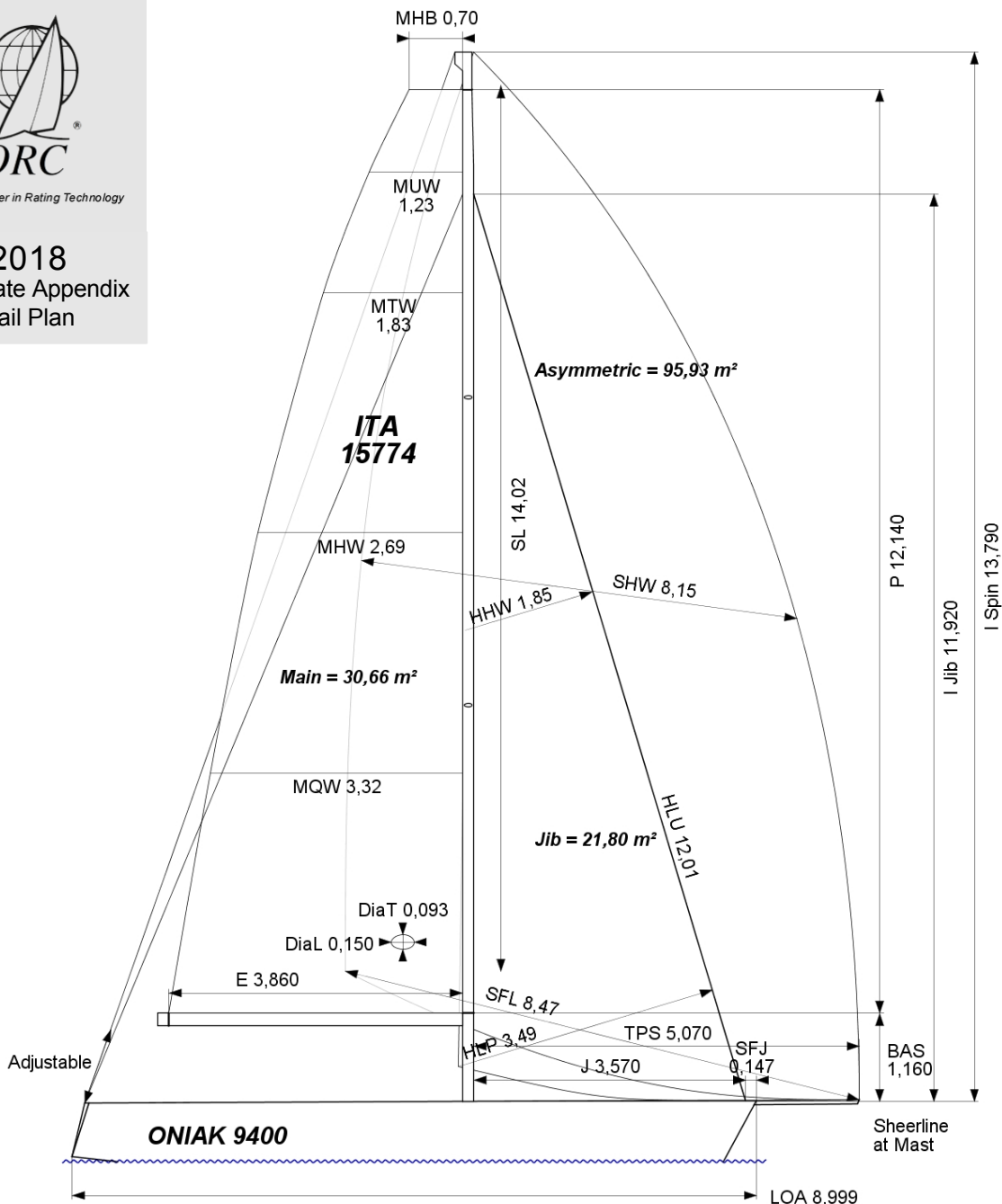
MEASUREMENT INVENTORY				
Measurer BERTONE 134				
Date 03/05/2016				
Comment				
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>
<i>Id</i>	<i>Item</i>	<i>Maker</i>	<i>Model</i>	
A	Engine	MERCURY	Type	5 HP 4T -
<i>Id</i>	<i>Item</i>	<i>Weight Description</i>		

MEASUREMENT INVENTORY				
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>
A	Battery	14.0	6.05	-0.02 1 x 40 Ah



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Sail Plan



SAILS INVENTORY

MAINSAIL (1)

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
A	0.700	1.23	1.83	2.69	3.32	30.66	134	12/05/2016	QUANTUM	Carbon	

HEADSAILS (6)

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
LB	0.08	0.57	1.04	1.85	2.61	3.49	12.01	98%	21.80	Y	N	134	09/05/2016	NORTH	Carbon	
A	0.09	0.62	1.02	1.85	2.63	3.46	11.92	97%	21.66	Y	N	134	09/05/2016	NORTH	Carbon	
B	0.09	0.53	1.00	1.79	2.60	3.45	11.95	97%	21.29	Y	N	134	09/05/2016	NORTH	Carbon	
C	0.10	0.54	0.98	1.74	2.56	3.47	11.93	97%	21.03	Y	N	134	09/05/2016	NORTH	Carbon	
D	0.00	0.00	0.00	0.00	0.00	3.37	11.79	94%	20.22	Y	N	134	09/05/2016	NORTH	Carbon	
E	0.00	0.00	0.00	0.00	0.00	2.51	11.56	70%	14.77	Y	N	134	09/05/2016	HANNIBAL	Technor	

SYMMETRIC SPINNAKERS (0)

Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment
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ASYMMETRIC SPINNAKERS (3)

Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment
A	15.52	12.51	14.02	8.15	8.47	95.93	asym	134	12/05/2016	QUANTUM	Nylon	
B	16.26	13.68	14.97	7.22	8.40	93.01	asym	134	09/05/2016	ULLMAN	Nylon	
C	13.61	11.92	12.77	8.04	8.02	85.48	asym	134	09/05/2016	GARDA	Nylon	