

BOAT Name BLUE SHARK Sail Nr GRE-1961	GPH 608.2	HULL Length Overall 9.550m Maximum Beam 2.964m Displacement 2,809kg Draft 2.084m Plan Review IMS Reg. Division Performance Dynamic Allowance 0.000% Hull Construction Solid Carbon Rudder No Crew Arm Extension IMSL 9.350m VCGD -0.224m Sink 14.69kg/mm RL 9.056m VCGM -0.188m WS 18.96m² LSM0 9.398m Displacement/Length ratio 3.3841
GENERAL Class GRAND SURPRISE Designer JOUBERT/NIVELT Builder ARCHAMBAULT Series 10/1999 Age 01/2009 Age Allowance 0.487% Offset File H00301.off - 27/06/2000 10:18:42 Measurement by - 09/04/2009		



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SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	591.1			666.1		
Time on Time	1.0151			1.0134		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	692.4	540.7	477.6	893.3	666.1	584.9
Time on Time	0.9748	1.2483	1.4132	0.7556	1.0134	1.1541

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1028.7	845.7	742.0	701.7	687.7	682.1	669.0
52°	675.2	567.0	522.5	505.0	497.8	494.0	484.9
60°	639.3	545.7	511.0	492.1	481.7	476.1	466.8
75°	614.8	531.9	501.6	477.5	456.6	444.3	434.4
90°	607.8	519.0	492.9	473.8	447.5	423.7	395.8
110°	598.7	511.5	473.4	442.0	423.2	405.5	372.7
120°	616.3	518.3	478.7	439.3	405.0	383.1	348.1
135°	690.7	556.0	501.8	465.4	426.5	387.7	316.6
150°	819.3	651.8	552.8	506.9	480.7	450.5	371.7
Run VMG	946.0	752.6	638.3	584.7	552.6	512.1	429.2

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Number **00331**
ORC Ref **03420000KTA**
Issued On **17/06/2020**
VPP Ver. **2020 1.02**
Valid until **28/02/2021**

Crew Weight
Default **630kg**
Maximum **630kg**
Minimum* **473kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring
ToD ToT
Non Spin GPH **652.3 0.9198**
Non Spin OSN **631.9 0.9496**

Selected Courses							
Windward / Leeward	987.4	799.2	690.1	643.2	620.2	597.1	549.1
Circular Random	833.9	675.1	590.5	541.4	509.9	486.9	450.5
Coastal / Long Distance	983.2	751.1	626.4	561.3	524.2	490.6	429.9
Non Spinnaker	916.8	732.4	631.9	572.3	534.4	508.4	472.6

Sails Limitations
Headsails **5** Spinnakers **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	42.8°	41.3°	39.2°	37.5°	36.8°	36.4°	36.4°
Beat VMG	3.50	4.26	4.85	5.13	5.23	5.28	5.38
52°	5.33	6.35	6.89	7.13	7.23	7.29	7.42
60°	5.63	6.60	7.05	7.32	7.47	7.56	7.71
75°	5.86	6.77	7.18	7.54	7.89	8.10	8.29
90°	5.92	6.94	7.30	7.60	8.04	8.50	9.10
110°	6.01	7.04	7.60	8.14	8.51	8.88	9.66
120°	5.84	6.95	7.52	8.20	8.89	9.40	10.34
135°	5.21	6.47	7.17	7.74	8.44	9.29	11.37
150°	4.39	5.52	6.51	7.10	7.49	7.99	9.69
Run VMG	3.81	4.78	5.64	6.16	6.51	7.03	8.39
Gybe Angles	143.5°	146.5°	149.0°	151.0°	174.0°	177.0°	142.3°

Class Division Length
CDL = **9.200**

Storm Sails Areas
Heavy Weather Jib **21.00**
Storm Jib (JL=8.11) **7.78**
Storm Trysail **9.36**

Owner

BOAT			
Name	BLUE SHARK	Sail Nr	GRE-1961
File	GR1961	Data in	meters/kilograms
RIG			
Forestay Tension	Aft	Spreaders	2
Inner Stay	None Fitted	Runners/Checkstays	0
Carbon Mast	No	Jib Furler	No
Fiber Rigging	No	Main Furler	No
Non-Circular Rigging	No		
Articulated Bowsprit	No		
P	12.195	E	4.385
IG	12.463	J	3.423
ISP	13.533	SFJ	0.132
BAS	1.333	SPL	0.130
FSD	0.027	TPS	4.925
MDT1	0.106	MW	0.161
MDL1	0.161	GO	0.163
MDT2	0.072	BD	0.146
MDL2	0.130	MWT	
TL	0.350	MCG	

INCLINING TEST AND FREEBOARDS			
Inclining Test Current Inclining			
Flotation date		08/04/2009	SG 1.0270
FFM	0.949	FF	0.957
FAM	0.703	FA	0.703
SFFP	0.230	SAFP	9.178
W1	56.1	PD1	261.0
W2	56.1	PD2	261.0
W3	56.1	PD3	261.0
W4	56.1	PD4	261.0
WD	9.190	GSA	41.9
RSA	6082.1	PLM	2110.0
LCF from stem on CL / on sheer		5.312 / 5.509	
Maximum beam station from stem		5.905	
RM Measured		72.4kg-m	
RM Default		67.2kg-m	
Limit of positive stability / Stab.Index		115.6° / 112.8	
Freeboard at mast at 3.555		0.776	



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MIZZEN RIG AND SAILS			
N/A			

PROPELLER			
Installation	Shaft exposed	PRD	0.380
Type	Folding 2 blades	PBW	0.101
Twin Screw	No	PIPA	0.0040
PSA	16.386	PHL	0.114
PSD	0.025	ST1	0.017
PHD	0.068	ST2	0.077
ST3	0.086	ESL	0.805
ST4	0.048		
ST5	0.170		

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COMMENTS			

MOVABLE BALLAST			
N/A			

CENTERBOARD			
N/A			

SAILS (Maximum Areas)									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	0.17	0.90	1.66	2.82	3.68	31.80	32.47	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	Formula		
	15.07	12.76	13.91	7.78	7.95	90.61	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	Flying	Meas.Date	Material	Comment
0.09	0.54	1.01	1.88	2.72	3.56	12.22	22.61	Y	No	18/02/2019	Carbon	No 2
0.10	0.55	1.01	1.89	2.75	3.55	11.98	22.27	Y	No	17/03/2019	Kevlar	
0.10	0.45	0.83	1.60	2.39	3.14	11.51	18.47		No	09/04/2009	Kevlar	No 3
					2.87	10.65	15.56		No	09/04/2009	Dacron	No 4 (HW jib)

MEASUREMENT INVENTORY				
Measurer GRE-21				
Date 08/04/2009				
Comment				
Internal Ballast total = 0.0				
Id	Item	Weight	Distance	VCG Description
4	Anchor	44.0	4.20	DELTA
2	Anchor	4.0	4.20	DANFORTH
4	Chain	45.0	4.20	8mm, 10m
2	Chain	45.0	4.20	8mm, 10m
4	Toots	40.0	4.40	
Id	Item	Maker	Model	
1	Engine	NANNI	2.14 (14 HP)	
Id	Item	Weight Description		

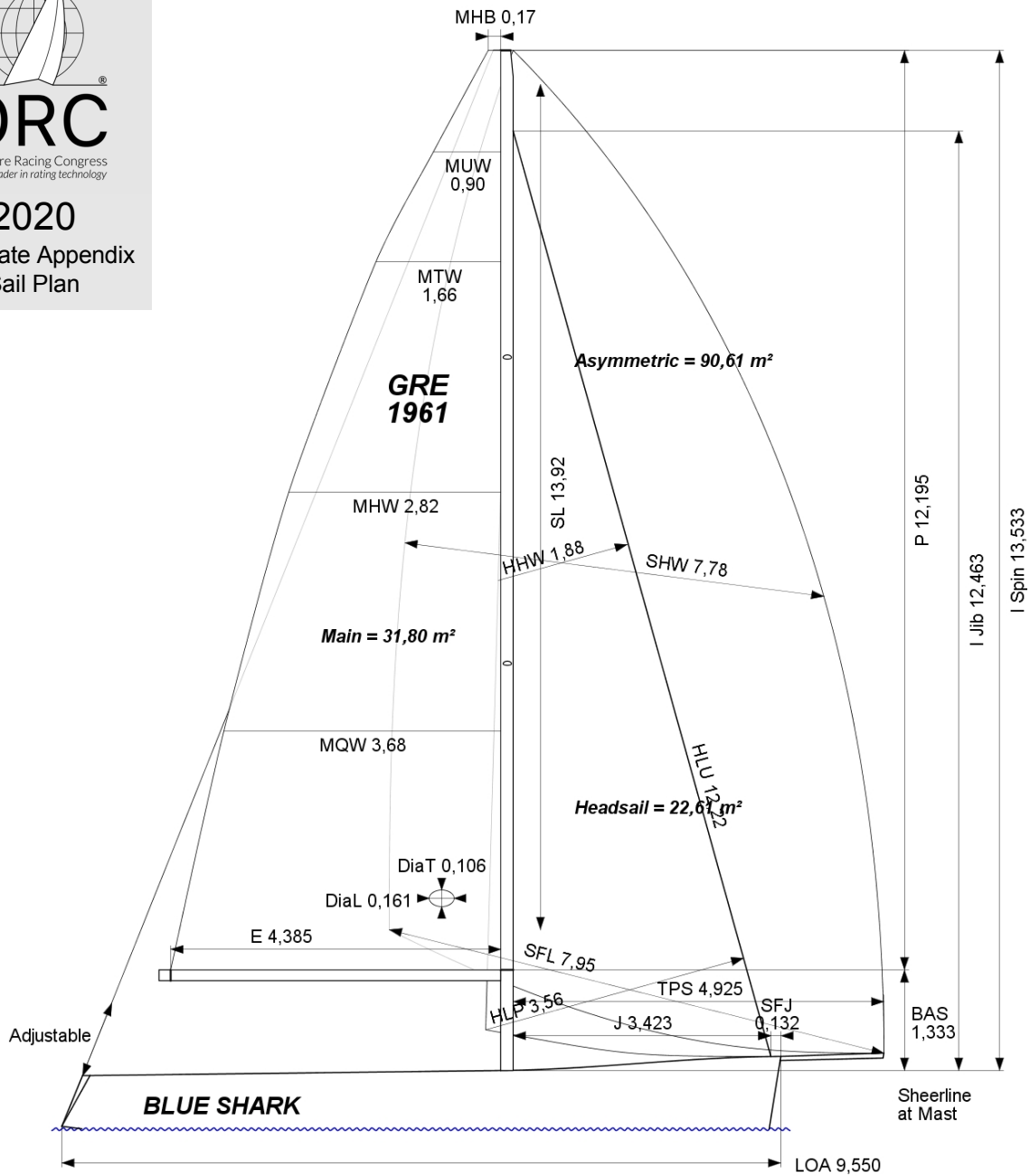
MEASUREMENT INVENTORY							
Id	Item	Tank Use	Tank Type	Capcty	Dist.	VCG	Condtn Description
1	Tank	FUEL	PVC hard	30.0	7.70		0-0
2	Tank	WATER	PVC soft	40.0	3.40		0-0
Id	Item	Weight	Distance	VCG Description			
1	Battery	30.0	4.90	70 Ah			
2	Battery	24.5	4.90	50 Ah			



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Sail Plan



SAILS INVENTORY

MAINSAIL (1)

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
1	0.17	0.90	1.66	2.82	3.68	31.80		18/02/2019	QUANTUM	Carbon	

HEADSAILS (4)

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Flying	Measurer	Meas.Date	Manufacture	Material	Comment
2	0.09	0.54	1.01	1.88	2.72	3.56	12.22	104%	22.61	Y	No		18/02/2019	QUANTUM	Carbon	No 2
1	0.10	0.55	1.01	1.89	2.75	3.55	11.98	104%	22.27	Y	No		17/03/2019	QUANTUM	Kevlar	
3	0.10	0.45	0.83	1.60	2.39	3.14	11.51	92%	18.47		No		09/04/2009	QUANTUM	Kevlar	No 3
4						2.87	10.65	84%	15.56		No		09/04/2009	QUANTUM	Dacron	No 4 (HW jib)

SYMMETRIC SPINNAKERS (0)

Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment
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ASYMMETRIC SPINNAKERS (2)

Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment
2	15.07	12.76	13.92	7.78	7.95	90.61	asym		03/04/2018	QUANTUM	Nylon	0.9
1	15.12	12.96	14.04	7.51	8.41	89.98	asym		03/04/2018	QUANTUM	Nylon	0.5