

BOAT Name BLUE FLAG Sail Nr ESP-8910	GPH 644.6	HULL Length Overall 10.698m Maximum Beam 3.377m Displacement 5,319kg Draft 1.988m IMS Reg. Division Cruiser/Racer Dynamic Allowance 0.209% Fwd Accommodation Yes Hull Construction Cored Carbon Rudder No Crew Arm Extension 0.00
GENERAL Class J-35 Designer JOHNSTONE Builder BASHFORD Series 01/1983 Age 01/1991 Age Allowance 0.487% Offset File US30636.OFF - 19/06/1995 10:24:30 Measurement by - 10/01/2018		IMSL 9.508m VCGD 0.019m Sink 18.12kg/mm RL 7.765m VCGM 0.021m WS 24.58m² LSM0 9.466m Displacement/Length ratio 6.2709



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SCORING OPTIONS						
Time on Distance	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
	627.4			700.5		
Time on Time	0.9563			0.9636		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	734.0	571.5	514.6	945.2	703.8	614.4
Time on Time	0.9196	1.1810	1.3118	0.7141	0.9591	1.0987

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1073.0	891.5	798.0	757.8	741.5	734.7	717.2
52°	707.0	597.2	542.9	523.8	517.0	513.7	504.7
60°	671.0	570.3	526.4	509.5	502.6	499.0	491.6
75°	643.4	551.5	514.1	496.7	485.5	478.7	472.9
90°	649.4	549.0	507.5	492.7	477.7	464.8	446.1
110°	650.9	541.2	499.9	477.1	458.1	446.4	428.1
120°	670.5	554.1	505.4	480.1	456.9	435.3	409.2
135°	744.1	604.5	529.0	495.8	472.4	448.7	405.1
150°	876.8	696.3	590.0	526.5	496.2	474.1	430.0
Run VMG	1012.4	804.0	680.5	599.4	542.8	506.3	462.3

Certificate
Number **891003**
ORC Ref **ESP00005497**
Issued On **19/09/2019**
VPP Ver. **2019 1.01**
Valid until **31/12/2019**

Selected Courses							
Windward / Leeward	1042.7	847.7	739.2	678.6	642.1	620.5	589.8
Circular Random	883.2	714.7	625.4	574.5	543.8	523.7	496.9
Coastal / Long Distance	1039.7	796.7	666.7	593.9	555.3	525.3	475.4
Non Spinnaker	942.7	756.5	656.2	598.1	562.6	539.6	510.1

Crew Weight
Default **637kg**
Maximum **320kg**
Minimum* **235kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring
ToD ToT
Double H.GPH **648.5 0.9252**
Double H.OSN **631.7 0.9498**
Non Spin GPH **677.3 0.8859**
Non Spin OSN **657.6 0.9124**

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	42.4°	40.8°	40.8°	40.3°	39.8°	39.5°	39.2°
Beat VMG	3.36	4.04	4.51	4.75	4.85	4.90	5.02
52°	5.09	6.03	6.63	6.87	6.96	7.01	7.13
60°	5.37	6.31	6.84	7.07	7.16	7.21	7.32
75°	5.60	6.53	7.00	7.25	7.41	7.52	7.61
90°	5.54	6.56	7.09	7.31	7.54	7.75	8.07
110°	5.53	6.65	7.20	7.55	7.86	8.06	8.41
120°	5.37	6.50	7.12	7.50	7.88	8.27	8.80
135°	4.84	5.96	6.81	7.26	7.62	8.02	8.89
150°	4.11	5.17	6.10	6.84	7.26	7.59	8.37
Run VMG	3.56	4.48	5.29	6.01	6.63	7.11	7.79
Gybe Angles	145.4°	149.8°	151.3°	157.1°	180.0°	180.0°	180.0°

Sails Limitations
Headsails **5** Spinnakers **3**

Class Division Length
CDL = **8.637**

Storm Sails Areas
Heavy Weather Jib **27.09**
Storm Jib (JL=9.21) **10.04**
Storm Trysail **10.16**

Owner

BOAT	
Name BLUE FLAG	Sail Nr ESP-8910
File E8910	Data in meters/kilograms

RIG	
Forestay Tension Aft	Spreaders 2
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 12.300	E 4.720 MDT1 0.100 MW 0.110
IG 14.130	J 4.050 MDL1 0.110 GO 0.120
ISP 14.130	SFJ 0.000 MDT2 0.100 BD 0.166
BAS 1.560	SPL 4.140 MDL2 0.110 MWT 130.00
FSP 0.066	TPS 4.950 TL 2.350 MCG 4.400

INCLINING TEST AND FREEBOARDS			
Inclining Test Current Inclining			
Flotation date 04/10/2017		SG 1.0260	
FFM 1.206	FF 1.205	SFFP 0.574	
FAM 0.927	FA 0.929	SAFP 10.259	
W1 69.7	PD1 527.7	WD 10.810	
W2 69.7	PD2 528.1	GSA 1.0	
W3 69.7	PD3 527.9	RSA 1.0	
W4 69.7	PD4 527.6	PLM 9000.0	
LCF from stem on CL / on sheer		6.059 / 6.265	
Maximum beam station from stem		6.314	
RM Measured		112.4kg-m	
RM Default		110.4kg-m	
Limit of positive stability / Stab.Index		113.4° / 115.3	
Freeboard at mast at 4.050		1.040	



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MIZZEN RIG AND SAILS	
N/A	

PROPELLER			
Installation Shaft exposed	PRD 0.400		
Type Folding 2 blades	PBW 0.137		
Twin Screw No	PIPA 0.0055		
PSA 16.690	PHL 0.150	ST3 0.086	ESL 0.805
PSD 0.025	ST1 0.021	ST4 0.045	
PHD 0.085	ST2 0.086	ST5 0.177	

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COMMENTS	

MOVABLE BALLAST	
N/A	

CENTERBOARD	
N/A	



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SAILS (Maximum Areas)									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	0.150	1.08	1.92	3.12	3.99	35.32	36.32	P/8 · (E + 2·MQW + 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
Symmetric	SLU	SLE	SL	SHW	SFL				
	13.86	13.86	13.86	7.26	7.24	83.81		SL · (SFL + 4·SHW) / 6	
Asymmetric on centerline	SLU	SLE	SL	SHW	SFL				
	15.60	13.80	14.70	6.82	6.80	83.50		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
0.05	1.06	1.83	2.53	3.14	3.55	14.16	32.34	Y		18/09/2019	Unknow	18091902
0.14	0.83	1.35	2.32	3.22	4.07	14.10	31.55	Y		04/01/2019	Unknow	04011904
0.14	0.71	1.23	2.26	3.20	4.10	14.20	31.10	Y		20/11/2018	Unknow	20111801
0.11	0.70	1.27	2.33	3.22	4.05	13.67	30.16	Y		11/01/2017	Unknow	11011701
0.08	0.53	0.99	1.94	2.87	3.78	14.15	27.28	Y		16/08/2017	Unknow	16081702

MEASUREMENT INVENTORY				
Measurer ESP-222				
Date 04/10/2017				
Comment				
Id	Item	Weight	Distance	VCG Description
Id	Item	Weight Description		

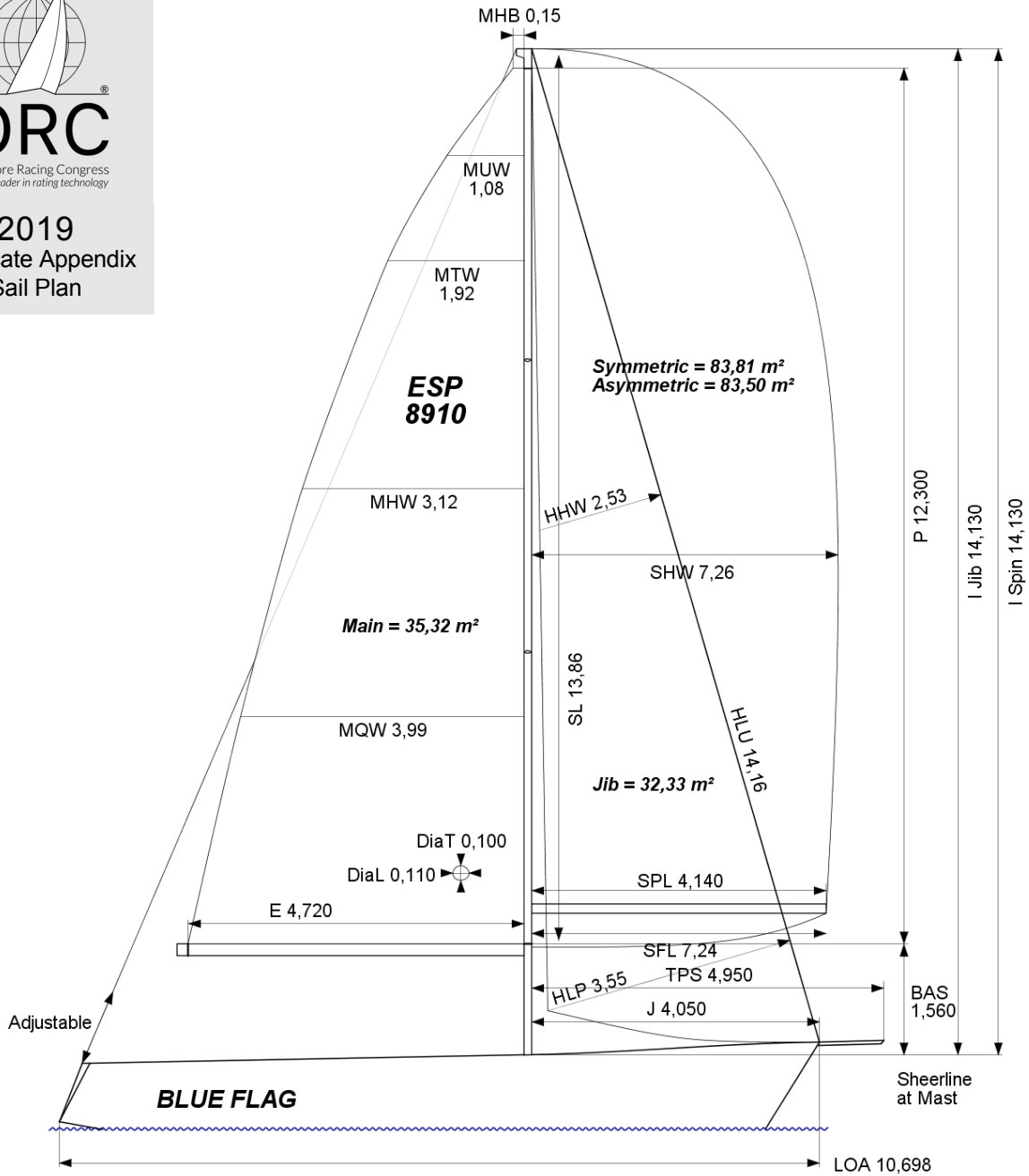
MEASUREMENT INVENTORY								
Id	Item	Tank Use	Tank Type	Capcty	Dist.	VCG	Condtn	Description
1	Tank Fuel		Plastico	70.0	7.50	0.00	20-0	
Id	Item	Weight	Distance	VCG Description				



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Sail Plan



SAILS INVENTORY

MAINSAIL (1)

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
002	0.15	1.08	1.92	3.12	3.99	35.33		18/09/2019	GP SAIL	Unknown	18091901

HEADSAILS (5)

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
Reacher	0.05	1.06	1.83	2.53	3.14	3.55	14.16	88%	32.34	Y			18/09/2019	GP SAIL	Unknown	18091902
L	0.14	0.83	1.35	2.32	3.22	4.07	14.10	100%	31.55	Y			04/01/2019		Unknown	04011904
P	0.14	0.71	1.23	2.26	3.20	4.10	14.20	101%	31.10	Y			20/11/2018		Unknown	20111801
JC	0.11	0.70	1.27	2.33	3.22	4.05	13.67	100%	30.16	Y			11/01/2017		Unknown	11011701
3	0.08	0.53	0.99	1.94	2.87	3.78	14.15	93%	27.28	Y			16/08/2017		Unknown	16081702

SYMMETRIC SPINNAKERS (3)

Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment
S1	13.86	13.86	13.86	7.26	7.24	83.81		04/01/2019	GP SAILS	Unknown	04011906
S3	13.68	13.68	13.68	7.29	7.22	82.95		18/08/2017		Unknown	18081701
KS	13.77	13.77	13.77	6.86	6.88	78.77		11/01/2017		Unknown	11011703

ASYMMETRIC SPINNAKERS (1)

Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment
001	15.60	13.80	14.70	6.82	6.80	83.50	asym		05/05/2019		Unknown	