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2020
ORC Club
Certificate

Rating Office

Offshore
Racing
Congress



Certificate

Number **US6498**
Issued On **22/10/2020**
ORC Ref **03410000S98**
VPP Ver. **2020 1.02**
Valid until **31/12/2020**

Crew Weight

Default 919kg
Maximum **919kg**
Minimum* **689kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Non Spin GPH	534.6	1.1223
Non Spin OSN	520.5	1.1528

Sails Limitations

Headsails **7** Spinnakers **5**

Asymmetric on centerline

Spinnaker configuration
Symmetric: **No**
Asymmetric: **Yes 192.58**
Flying H/S: **No**
Spin. Pole: **No**

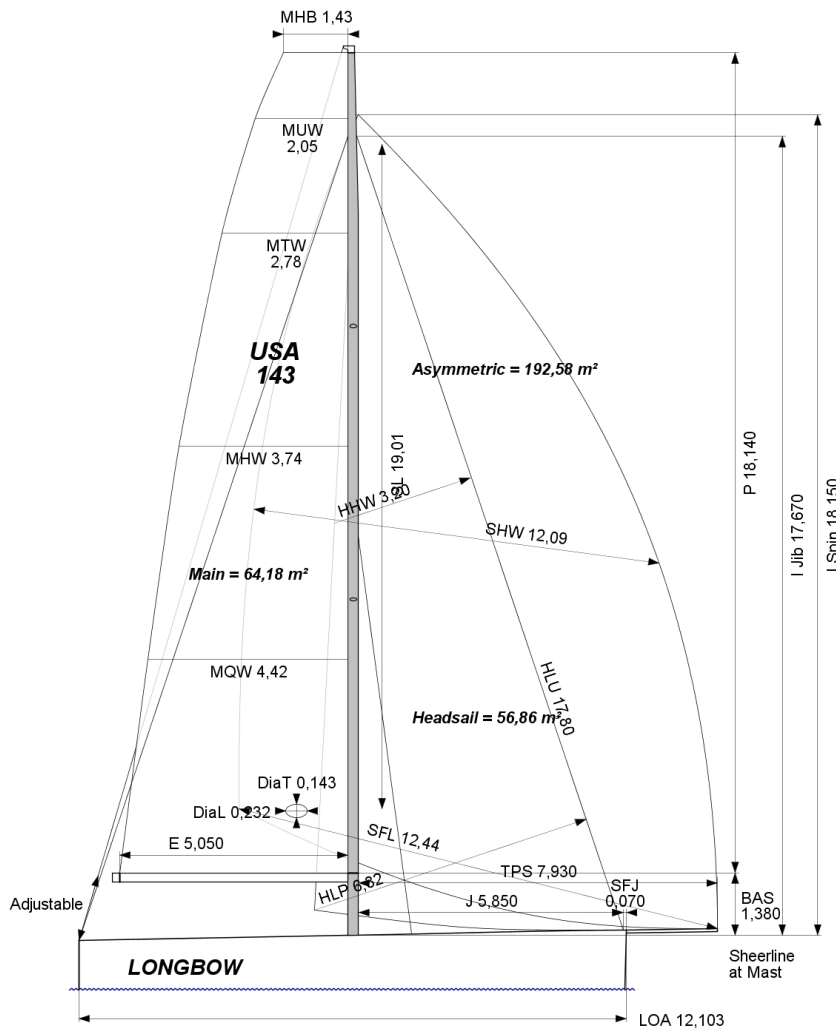
Class Division Length

CDL = 12.785

Stability (Estimated)

Limit Positive Stab.: **138.6°**
Stability Index: **135.3**

Owner



BOAT	GPH	HULL
Name LONGBOW Sail Nr USA143	490.9	Data File US6498 LOA 12.103m Offset File US42648.OFF MB 4.496m Displacement 4,577kg Draft 2.985m
CLASS Class CLASS 40 Designer OWEN CLARKE DESIGN Builder CARBON OCEAN YACHT Series 01/2015, CIN 1 Age Date 06/2015 Age Allowance 0.163%		IMS Division Performance Dynamic All. 0.000% Plan Review Construction Cored Fiber Rigging No Aramid Core No Crew Arm Ex Carbon Rudder Yes Light Stanchions
COMMENTS		IMSL 12.108m VCGD -1.293m Sink 27.98kg/mm RL 13.470m VCGM -1.293m WS 33.33m² LSM0 12.246m Displacement/Length ratio 2.4923
PROPELLER Installation Shaft non exposed PRD 0.430 Type Folding 2 blades PBW 0.110 PIPA 0.0101		Water Ballast 0 Trim Tab No BLR Index 0.0000
		CENTERBOARD N/A
SCORING OPTIONS		
	COASTAL / LONG DISTANCE	WINDWARD / LEEWARD
Time on Distance	476.7	545.8
Time on Time	1.2586	1.2366
Triple Number	Low Medium High	Low Medium High
Time on Distance	571.6 435.6 365.9	744.1 551.6 465.4
Time on Time	1.1808 1.5495 1.8450	0.9071 1.2237 1.4505

2020

ORC Club Certificate Appendix

BOAT			
Name	Longbow	Certificate Number	US6498
Sail Nr	USA143	Issued On	22/10/2020

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	830.4	671.8	600.0	575.3	563.1	553.7	544.0
52°	540.8	456.3	424.8	408.3	397.8	390.8	372.6
60°	508.6	443.7	409.2	386.8	374.7	367.2	347.8
75°	487.0	429.6	394.0	358.7	341.8	331.7	315.9
90°	474.4	420.1	371.8	345.3	321.1	302.8	283.1
110°	491.8	430.1	384.0	332.8	297.8	277.8	248.0
120°	523.7	441.1	393.1	341.9	309.1	273.0	230.0
135°	597.2	471.7	423.3	380.7	331.1	292.7	222.5
150°	714.8	562.0	474.7	426.5	392.2	346.4	265.7
Run VMG	825.3	649.0	548.1	493.9	452.9	400.0	306.8
Selected Courses							
Windward / Leeward	827.9	660.4	574.1	534.6	508.0	476.8	425.4
Circular Random	684.7	550.6	476.8	431.1	399.4	375.1	337.1
Coastal / Long Distance	827.6	621.6	516.3	454.5	416.0	376.2	312.7
Non Spinnaker	756.2	603.2	518.3	465.9	430.7	404.9	367.3

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°	41.6°	38.3°	36.4°	35.6°	34.9°	35.1°
Beat VMG	4.34	5.36	6.00	6.26	6.39	6.50	6.62
52°	6.66	7.89	8.47	8.82	9.05	9.21	9.66
60°	7.08	8.11	8.80	9.31	9.61	9.80	10.35
75°	7.39	8.38	9.14	10.04	10.53	10.85	11.40
90°	7.59	8.57	9.68	10.43	11.21	11.89	12.72
110°	7.32	8.37	9.38	10.82	12.09	12.96	14.51
120°	6.87	8.16	9.16	10.53	11.65	13.19	15.65
135°	6.03	7.63	8.50	9.46	10.87	12.30	16.18
150°	5.04	6.41	7.58	8.44	9.18	10.39	13.55
Run VMG	4.36	5.55	6.57	7.29	7.95	9.00	11.73
Gybe Angles	142.0°	143.0°	148.5°	152.0°	148.0°	144.5°	138.1°