



# 2024 Offshore Racing Rule Certificate Data



## B'Quest USA 43513

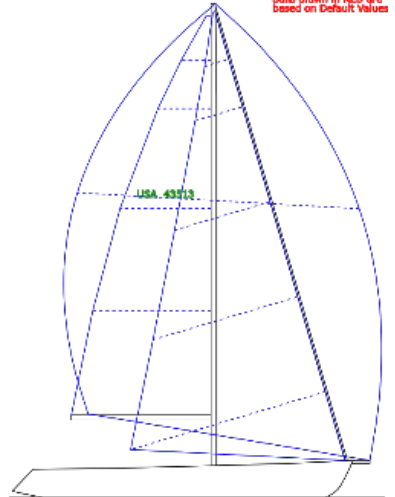
ORR Type: Offshore  
 Measurement: Partially Measured  
 Valid Year: 2024

Certification #: US40354  
 Issue Date: 15-Jan-2024  
 Build Date: 01-May-1991  
 Measure Date: 31-May-2005  
 Float Date: 23-Jun-1991

Owner(s): Ericson, Keith

Class: TRIPP 40  
 Builder: CARROLL  
 Rig Type: Masthead Sloop  
 Prop Type: 2 Blade Folding Exposed  
 Comment:  
 Keel Type: Fixed Keel  
 Spinnaker: Asymmetrical tacked centerline on bow, sprit or prod  
 Hull Const: Cored  
 Mast Const: Aluminum  
 Offset File: US30012.OFF

LOA: 40.299 ft  
 Beam Max: 11.909 ft  
 Rated Crew Wgt.: 1825 lbs  
 Base Crew Wgt.: 1521 lbs  
 Stab Index: 122.3 °  
 PIPA: 0.0377 ft²  
 Inventory Wgt: 0.0 lbs  
 Canting Angle: 0.0 °  
 List Angle: 0.0 °  
 Water Ballast: 0 lbs  
 Trim Water Ball: 0.000 ft³  
 Stored Power: □



General Purpose Handicap(GPH): 578.8 SpM

Measurement Trim	Genoa/Jib	Mainsail/Mast	Mizzen
SFFP: 2.014 ft	IG: 51.841 ft	GO: 0.620 ft	EB: 0.000 ft
SAFP: 36.713 ft	J: 14.990 ft	MW: 0.509 ft	PY: 0.000 ft
FFM: 4.150 ft	SFJ: 0.689 ft	P: 45.000 ft	EY: 0.000 ft
FAM: 3.241 ft	JLP: 23.261 ft	E: 16.001 ft	HBV: ft
SG: 1.024	FSP: 0.220 ft	HB: 0.558 ft	MGTY: ft
Disp Empty: 12461 lbs	JLU: 52.789 ft	MGT: 3.412 ft	MGUY: ft
LCB: 20.771 ft	JH: 0.262 ft	MGU: 6.070 ft	MGMV: ft
VCGD: -0.131 ft	JMGT: 2.887 ft	MGM: 10.400 ft	MGLY: ft
VCGM: -0.364 ft	JMGU: 5.676 ft	MGL: 13.550 ft	Area Mizzen: 0.0 ft²
Wetted Area: 283.7 ft²	JMGM: 11.417 ft	Area Main: 440.8 ft²	MDT1Y: 0.000 ft
Draft: 7.549 ft	JMGL: 17.290 ft	Main Wt: 34.8 lbs	MDL1Y: 0.000 ft
ECE: 0.000 ft	JLE: 50.394 ft	MDT1: 0.400 ft	MDL2Y: 0.000 ft
LSM0: 32.480 ft	Area Jib: 619.5 ft²	MDL1: 0.650 ft	MDT2Y: 0.000 ft
RMC: 1008.7 ft-lbs	Fstay Adj: Via Backstay	MDT2: 0.390 ft	TLY: 0.000 ft
Sink/Float: 1098.0 lb/in	Inner Fst Adj: None	MDL2: 0.509 ft	
MTCT: 1736.07 ft-lbs/in	Whisker Pole: □	TL: 10.810 ft	
<b>Sailing Trim</b>	Outrigger: □	Mast Wt: 0.0 lbs	<b>Large Roach Headsail</b>
FF: 4.170 ft	<b>Spinnaker(s)</b>	Mast CG: 0.000 ft	ILRH: 0.000 ft
FA: 2.917 ft	ISP: 52.119 ft	BAS: 5.679 ft	JLRH: 0.000 ft
Disp Sailing: 14800 lbs	SL: ft		LRHLP: ft
LCB: 21.404 ft	SMW: ft		LRHLU: ft
VCGM: 0.135 ft	SF: ft		LRHHB: ft
Wetted Area: 305.0 ft²	Area Symm: 0.0 ft²		LRHTW: ft
Draft: 7.736 ft			LRHUW: ft
Rated Length: 34.114 ft	TPS: 17.589 ft		LRHMW: ft
LSM1: 33.829 ft	ASLU: 56.988 ft	<b>Mizzen Staysail</b>	LRHQW: ft
LSM3: 33.478 ft	ASLE: 51.181 ft	YSD: ft	LRHSHW: ft
LSM4: 38.094 ft	AMG: 32.316 ft	YSMG: ft	LRHF: ft
RM2: 1060.3 ft-lbs	ASF: 32.316 ft	YSF: ft	LRHLE: ft
RM20: 991.7 ft-lbs	Area Asym: 1456.5 ft²	Area Staysail: 0.0 ft²	Area LRH: 0.0 ft²
RM40: 842.2 ft-lbs	<b>Propeller</b>	ESL: 3.261 ft	ST1: 0.059 ft
RM60: 590.8 ft-lbs	Prop Dia.: 1.401 ft	PSA: 17.0 °	ST2: 0.341 ft
RM90: 265.1 ft-lbs	PBW: 0.390 ft	PSD: 0.089 ft	ST3: 0.371 ft
LPS: 122.1 °	Twin Prop Inst: □	PHD: 0.141 ft	ST4: 0.180 ft
		PHL: 0.499 ft	ST5: 0.659 ft





# 2024 Offshore Racing Rule Certificate Polars



*B'Quest USA 43513*

**Table of Boat Speed Polars (knots)\* (at True Wind Angles)**

True Wind Speed	6 kts	8 kts	10 kts	12 kts	16 kts	20 kts	24 kts
Opt Beat Angle	44.3°	43.3°	40.1°	37.7°	35.3°	34.5°	34.8°
Optimum Beat	5.25	6.22	6.58	6.74	6.91	6.99	7.05
52°	5.81	6.85	7.27	7.50	7.74	7.85	7.91
60°	6.26	7.14	7.52	7.73	7.97	8.09	8.17
75°	6.67	7.40	7.83	8.05	8.41	8.64	8.80
90°	6.94	7.68	8.09	8.40	8.87	9.20	9.43
110°	6.93	7.73	8.29	8.70	9.33	9.87	10.31
120°	6.72	7.53	8.06	8.51	9.46	10.18	10.78
135°	5.56	6.84	7.41	7.88	8.74	9.77	11.36
150°	4.12	5.32	6.45	7.17	8.11	8.94	9.96
165°	3.36	4.44	5.46	6.40	7.56	8.36	9.15
180°	3.00	4.00	4.96	5.82	7.17	7.99	8.70
Optimum Run	5.92	6.61	6.70	6.85	7.51	8.25	9.09
Opt Run Angle	131.7°	137.5°	146.8°	156.6°	166.6°	168.8°	166.6°

\* Speed through the water. Available as a Performance Package from the Offshore Racing Association with detailed polar charts and files to upload into popular tactical programs. Go to: <https://offshoreracingrule.org/orr/polar-package>"

**Table of Time Allowances (sec/mile)\***

True Wind Speed	6 kts	8 kts	10 kts	12 kts	16 kts	20 kts	24 kts
Opt Beat Angle	44.3	43.3	40.1	37.7	35.3	34.5	34.8
Beat VMG	958.5	795.4	715.2	674.7	638.1	625.2	621.8
52°	619.6	525.9	495.1	480.1	465.4	458.4	455.3
60°	575.3	504.5	478.6	465.5	451.9	445.0	440.6
75°	540.1	486.3	459.6	447.0	427.9	416.6	409.0
90°	519.0	468.7	445.0	428.5	406.0	391.5	381.7
110°	519.5	465.8	434.5	414.0	385.9	364.7	349.1
120°	535.8	478.0	446.8	422.9	380.5	353.6	333.9
135°	646.1	526.5	485.5	457.0	411.7	368.3	316.8
150°	791.3	640.0	555.9	501.9	444.2	402.6	361.4
165°	882.6	713.8	620.0	553.4	476.0	430.5	393.3
Run VMG	913.7	739.0	641.9	572.9	492.7	444.9	407.1
Opt Run Angle	131.7	137.5	146.8	156.6	166.6	168.8	166.6

\* Sec/mile rating assume gybing downwind when target angles are deeper than best VMG angles.





# 2024 Offshore Racing Rule Certificate Ratings



**B'Quest USA 43513**

### GPH Rating (SPM)

GPH	578.8
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### General Ratings (TCF)

Ocean Non Spinnaker	0.9145
Offshore Offwind	0.8922

### Ratings by Wind Speed (TCF)

	Light	Medium	Heavy
Closed Course	0.7970	0.9113	1.0797
WL 50/50	0.7707	0.9135	1.1288
WL 60/40	0.7795	0.9178	1.1128

### Performance Metrics

SA/D Dnwind:	50.370
SA/D Average:	39.26
SA/D Upwind:	28.150
D/Length:	166.4
Ave Perf Screen:	23.600

### Performance Curve Scoring (PCS) Ratings (SPM)

	6kt	8kt	10kt	12kt	16kt	20kt	24kt
Closed Course	778.0	637.3	563.0	520.3	474.8	449.3	430.1
WL 50/50	955.9	780.7	687.9	631.7	571.4	540.2	519.1
WL 60/40	960.8	786.7	695.6	642.1	586.1	558.4	540.8
Newport to Bermuda	851.8	673.9	566.7	495.0	424.3	406.7	393.0
Marion to Bermuda	856.1	678.7	572.7	502.2	432.8	415.4	402.1

### Custom Ratings (TCF) ORA works with OA's to create custom ratings for your race course and wind conditions.

Chicago Mac Upwind	0.9219
Chicago Mac AP	0.9069
Chicago Mac Offwind	0.8922
Bayview Mac	0.9136
California Offshore	0.8906
Pacific Cup	0.8786
Transpac (Approx.)	0.7740
Puerto Vallarta	0.8919
Cabo San Lucas	0.8869
Acapulco WW/LW	0.9150
Acapulco Random	0.9114
Acapulco WW/LW5	0.9183
Acapulco Stat Fit	0.9148
San Francisco Bay	0.9114





2024 Offshore Racing Rule Certificate Line  
Drawing  
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Sails drawn in RED are based on Default Values

