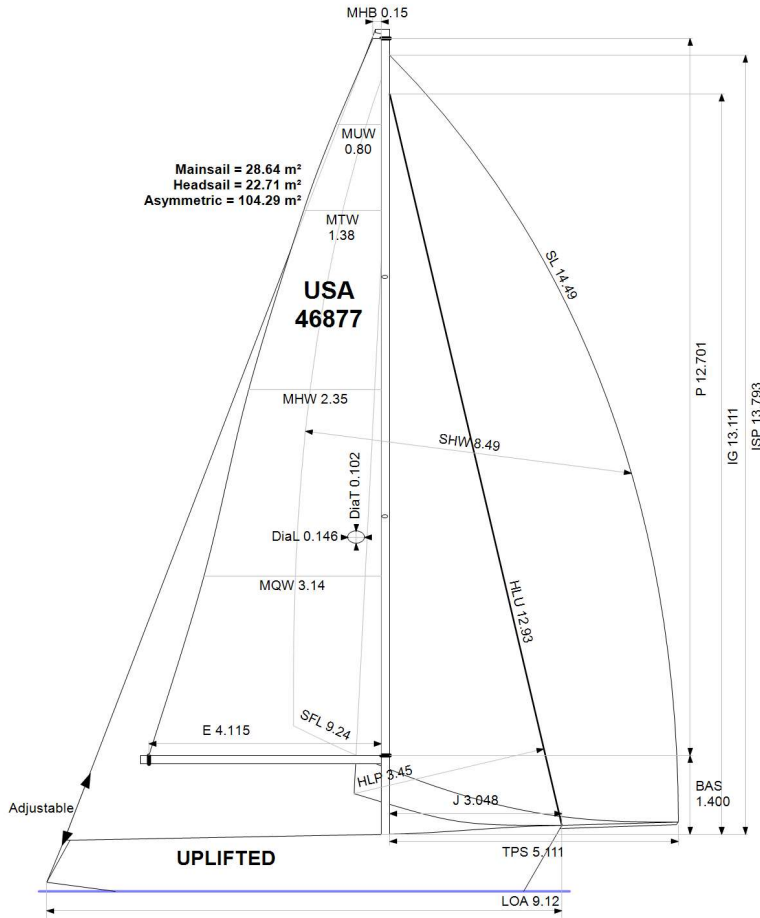


APH ToD: **530.1** CDL: **8.552**
APH ToT: **1.1318** CertNo: **US4687**



BOAT

Class **Bravura 29 S**
Designer **Beiley**
Builder **Bravura Boat**
Age date **01/2001**
Series date **01/2001**
Offset file **B29_Bravura_JT.off**
Data file **USA 46877**

HULL

Length Overall **9.117 m**
Maximum Beam **2.998 m**
Draft **2.064 m**
Displacement **1,797 kg**
DLR **4.7382**
IMS Division **Sportboat**
Dynamic Allowance **0.000%**
Age Allowance **0.487%**

PROPELLER

Installation **No Propeller**
Type **N/A**
Diameter **N/A**

CREW

Maximum weight **546 kg** (declared)
Minimum weight **416 kg** *when applied
Non Manual Power
Crew Arm Extension

SAIL AREAS (m²)

	Measured	Rated
Mainsail	28.64	28.91
Headsail Luffed	22.71	22.71
Headsail Flying		
Symmetric		
Asymmetric	104.29	104.29

(All asymmetric spinnakers with SHW/SFL > 85%)

STORM SAIL AREAS (m²)

Trysail **9.15**
Storm Jib **8.60**
Heavy Weather Jib **23.21**

SAIL LIMITS

Headsails **5**
Spinnakers **4**

STABILITY

Righting Moment **N/A**
Stability Index **N/A**

The owner and any other person in charge is responsible that boat is complying with her certificate in accordance with RRS 78.1 and ORC Rule 304.

Rated boat velocities in knots								
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt	24 kt
Beat Angles	41.2°	38.5°	36.3°	35.7°	35.4°	35.4°	36.0°	37.9°
Beat VMG	3.95	4.69	5.02	5.15	5.22	5.26	5.26	5.12
52°	5.86	6.61	6.92	7.06	7.15	7.22	7.29	7.23
60°	6.09	6.74	7.11	7.28	7.40	7.48	7.58	7.56
75°	6.22	6.84	7.27	7.60	7.79	7.93	8.13	8.22
90°	6.19	6.84	7.25	7.68	8.09	8.41	8.86	9.16
110°	6.33	7.11	7.61	7.97	8.32	8.68	9.38	10.60
120°	6.22	7.07	7.72	8.29	8.77	9.27	10.37	11.68
135°	5.66	6.71	7.40	8.11	8.99	10.13	12.32	14.18
150°	4.81	5.95	6.74	7.33	7.90	8.72	12.09	15.51
Run VMG	4.16	5.15	5.84	6.34	6.84	7.55	10.47	13.43
Gybe Angles	143.8°	148.5°	151.1°	149.8°	146.6°	144.0°	144.7°	148.6°



Time Allowances in secs/NM								
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt	24 kt
Beat VMG	911.8	768.2	716.7	699.1	689.9	684.5	684.0	702.8
52°	613.9	545.0	519.9	509.8	503.2	498.5	493.9	497.7
60°	591.0	533.8	506.7	494.4	486.8	481.1	475.0	476.5
75°	578.5	526.4	495.2	473.7	462.3	453.8	442.6	437.9
90°	581.3	526.1	496.8	468.8	445.0	428.3	406.5	392.9
110°	568.7	506.0	473.0	451.7	432.5	414.8	383.7	339.5
120°	578.9	509.0	466.4	434.3	410.5	388.6	347.1	308.2
135°	636.2	536.2	486.8	443.8	400.5	355.4	292.2	253.9
150°	749.0	605.3	534.0	491.4	455.8	412.9	297.7	232.1
Run VMG	864.9	699.0	616.0	567.4	526.3	476.8	343.7	268.0
Selected Courses								
Windward / Leeward	888.3	733.6	666.4	633.3	608.1	580.6	513.9	485.4
All purpose	694.4	594.0	548.3	521.4	500.1	479.5	438.8	417.3

Single Number Scoring Options		
Course	Time On Distance	Time On Time
Windward / Leeward	646.4	0.9282
All purpose	530.1	1.1318

Custom scoring options for United States of America

Scoring Option	TOD	TOT	
Triple Number AP Low	644.2	0.9314	
Triple Number AP Medium	531.1	1.1296	
Triple Number AP High	469.4	1.2782	
Triple Number Windward/Leeward Low	810.9	0.7399	
Triple Number Windward/Leeward Medium	646.3	0.9283	
Triple Number Windward/Leeward High	562.5	1.0667	
Single Number Predominant Upwind	574.9	1.0436	
Single Number Predominant Reaching	506.8	1.1840	
Single Number Predominant Downwind	529.2	1.1337	
Predominant Upwind - Low	703.7	0.8526	
Predominant Upwind - Low/Med	616.0	0.9741	
Predominant Upwind - Medium	565.0	1.0619	
Predominant Upwind - Med/High	531.4	1.1291	
Predominant Upwind - High	510.5	1.1753	
Predominant Downwind Low	694.8	0.8636	
Predominant Downwind Low/Med	590.4	1.0163	
Predominant Downwind Medium	517.4	1.1596	
Predominant Downwind Med/High	447.4	1.3412	
Predominant Downwind High	384.7	1.5598	
Predominant Reaching Low	632.1	0.9492	
Predominant Reaching Low/Med	553.7	1.0837	
Predominant Reaching Medium	497.6	1.2057	
Predominant Reaching Med/High	447.0	1.3424	
Predominant Reaching High	410.5	1.4616	
SA/DSPL Upwind	34.68	SA/DSPL Downwind	89.77

Scoring Option	TOD	TOT
5-Band Windward/Leeward Low	853.2	0.7032
5-Band Windward/Leeward Low/Med	717.8	0.8358
5-Band Windward/Leeward Medium	638.5	0.9398
5-Band Windward/Leeward Med/High	578.4	1.0373
5-Band Windward/Leeward High	520.5	1.1527
Windward/Leeward 60-40 Low	858.4	0.6990
Windward/Leeward 60-40 Low/Med	726.5	0.8259
Windward/Leeward 60-40 Medium	651.8	0.9206
Windward/Leeward 60-40 Med/High	600.0	0.9999
Windward/Leeward 60-40 High	553.9	1.0833
5-Band AP Low	671.6	0.8934
5-Band AP Low/Med	582.0	1.0310
5-Band AP Medium	524.8	1.1432
5-Band AP Med/High	479.6	1.2510
5-Band AP High	442.1	1.3570
5-Band SF Bay Tour - Low	812.1	0.7388
5-Band SF Bay Tour - Low/Med	687.9	0.8722
5-Band SF Bay Tour - Medium	614.8	0.9760
5-Band SF Bay Tour - Med/High	560.4	1.0707
5-Band SF Bay Tour - High	512.1	1.1716
Chicago-Mac Upwind		1.0253
Chicago-Mac All Purpose		1.0683
Chicago-Mac Downwind		1.1188
Bayview-Mac Shore		1.0120
Harvest Moon Regatta	455.0	1.3187



Data in meters/kilograms (Metric)

HULL AND APPENDAGES (Lightship Trim)

Class	Bravura 29 S	LOA	9.117	VCGD	-0.213
Measurement		Max. Beam	2.998	VCGM	-0.208
HIN		Draft	2.064	RM Rated (kg·m)	51.0
Plan review		Displacement	1,797	Limit of positive stability(°)	N/A
Hull construction	Cored	Wetted area	14.18	Stability Index	N/A
Carbon Rudder	No	IMS L	7.981	Default crew weight	434
Light stanchions	No	LSM0	7.237	Declared crew weight	546
Trim tab	No	Acc. length	9.117		
		Sink (kg/mm)	11.29		

PROPELLER

Propeller Type **No Propeller**
Hydro generator **No**

RIG

Forestay tension	Aft	P	12.701	E	4.115
Inner stay	None Fitted	IG	13.111	J	3.048
Mast material		ISP	13.793	BAS	1.400
Single headsail furler	No	MDT1	0.102	FSD	0.032
Mainsail furler		MDL1	0.146	SFJ	0.000
Articulated bowsprit	No	MDT2		SPL	
Non-circular rigging	No	MDL2		WPL	
Fiber rigging	No	TL	2.000	TPS	5.111
Adjustable mast foot	No	MW		BD	
Runners/Checkstays	0	GO		MWT	
Spreaders	2			MCG	
Rotating mast	No				

FLOTATION AND STABILITY

Calculation method **RM estimated**
Flotation Date **01/01/2013**



Club
Certificate
2024

Boat
UPLIFTED
USA 46877

US SAILING
1 ROGER WILLIAMS UNI WAY
BRISTOL, RI 02809
USA



MAINSAIL

<i>Id</i>	<i>MHB</i>	<i>MUW</i>	<i>MTW</i>	<i>MHW</i>	<i>MQW</i>	<i>Area</i>	<i>Meas.Date</i>	<i>Comment</i>
main	0.15	0.80	1.38	2.35	3.14	28.64		

HEADSAIL

<i>Id</i>	<i>HMB</i>	<i>HUW</i>	<i>HTW</i>	<i>HHW</i>	<i>HQW</i>	<i>HLP</i>	<i>HLU</i>	<i>Btn</i>	<i>Flying FT</i>	<i>Area</i>	<i>Meas.Date</i>	<i>Comment</i>
0						3.45	12.93	Yes	No	22.71		

ASYMMETRIC SPINNAKER

<i>Id</i>	<i>SLU</i>	<i>SLE</i>	<i>SL</i>	<i>SHW</i>	<i>SFL</i>	<i>Ratio</i>	<i>Area</i>	<i>Meas.Date</i>	<i>Comment</i>
0	15.55	13.42	14.49	8.49	9.24	92%	104.29		