

Geronimo J/109 USA 198

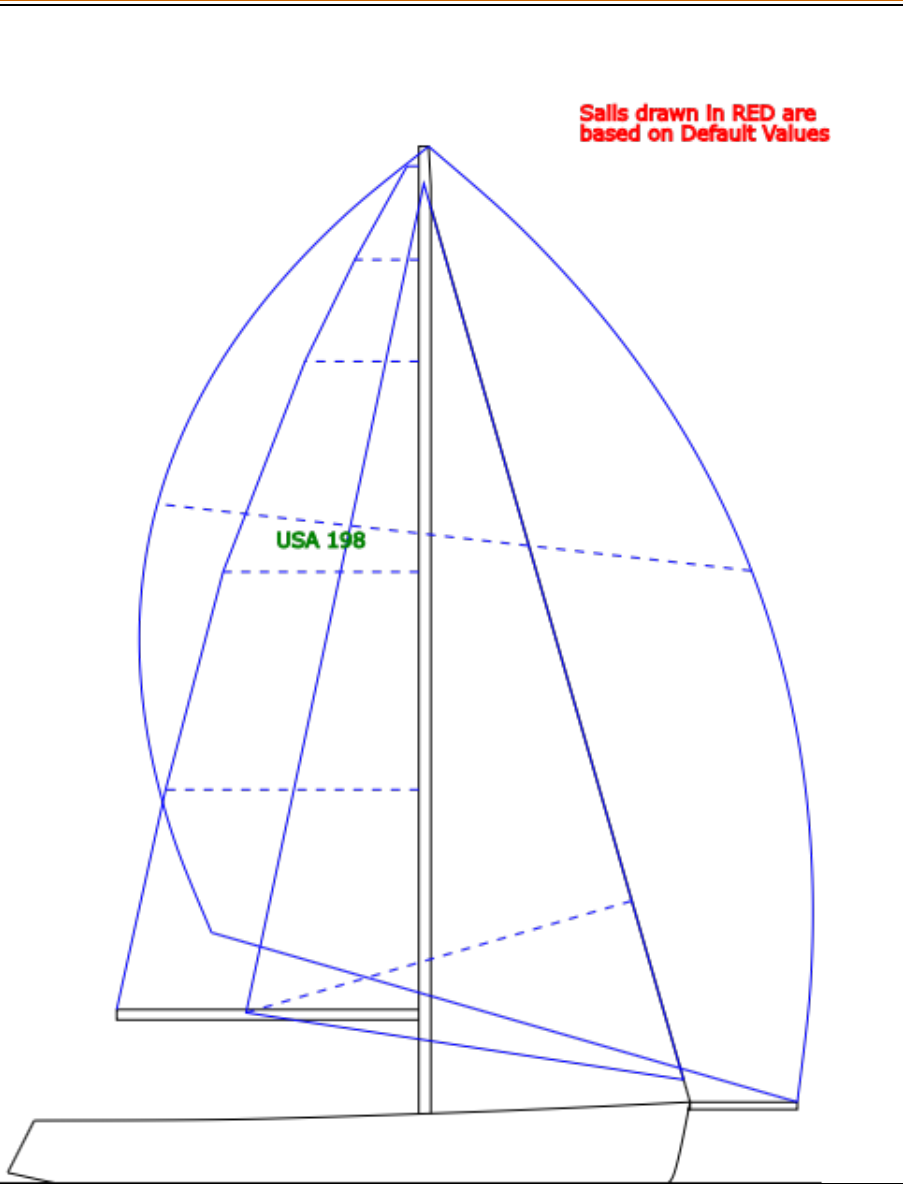
Spinnaker	GPH: 0.883 / 600.2	IR#: 0.888 / 603.5	PHRF BM: 67.3
Non-Spin	GPH: 0.832 / 636.9	IR#: 0.869 / 617.1	PHRF BM: 80.9

Class: J/109
 Configuration:
 Sail Number: USA 198
 Year Built: 2002
 Builder: Pearson Composites
 Owner(s): Pitkin, Gene
 Carter, Steve

Certificate #: EZ10025-1
 Valid Year: 2024
 Type: Mid Seas Change
 Issue Date: 2024-07-12
 Exp.Date: 2024-12-31
 Offsets_file: F199.OFF
 Cert Group: ORR-Ez SOCAL
 Comment:

Rig Type: Sloop
 Forestay: Masthead
 Keel Type: Fin
 Prop Type: Folding
 Prop Install: Strut Drive
 Prop Blades: 2

LOA: 35.29 ft
 LWL: 30.51 ft
 Rated Length: 31.94 ft
 Beam Max: 11.54 ft
 Draft: 6.98 ft
 Disp Empty: 10931 lbs
 Disp Sailing: 12710 lbs
 Crew: 1431 lbs
 Water Ballast: 0 lbs
 Wetted Area: 280.1 ft²
 LPS: 119.2 °
 RM20: 812.6 ft-lbs
 Stab Index: 118 °



Spinnaker: Asymmetrical tacked centerline on bow, sprit or prod
 Genoa/Jib Leech: No Roach - Leech is straight
 Large Roach Headsail: No
 Jib Furler: Yes Above Deck
 Main Roller Furling: No

Rig Dimensions	Mainsail Meas.	Jib/Genoa Meas.	Asymmetric Spin. Meas.
IG: 46.49 ft	HB: 0.61 ft	LP: 20.60 ft	ASLU: 56.43 ft
ISP: 49.60 ft	MGT: 3.28 ft	LPG %: 154.9 %	ASLE: 46.42 ft
J: 13.30 ft	MGU: 5.84 ft	J Luff: 49.08 ft	AMG: 30.48 ft
P: 43.25 ft	MGM: 10.04 ft	J Leech: 44.36 ft	ASF: 30.05 ft
E: 15.50 ft	MGL: 12.99 ft	Area: 505.6 ft ²	Area: 1302.4 ft ²
TPS: 18.80 ft	Area: 408.1 ft ²		

Spinnaker

Polar Time Allowances

True Wind Speed	4 kts	6 kts	8 kts	10 kts	12 kts	16 kts	20 kts	24 kts
Opt Beat Angle	45.9	45.0	44.0	40.7	38.3	36.0	35.4	35.7
Beat VMG	1,416.54	1,022.64	836.30	749.17	706.28	668.55	656.46	654.31
52°	895.83	657.46	548.40	514.80	499.05	484.01	477.21	474.51
60°	810.74	609.93	524.89	497.03	483.35	469.42	462.62	458.58
75°	738.78	568.59	504.35	476.64	462.76	443.44	432.42	425.31
90°	698.36	540.74	483.62	459.46	442.99	420.70	406.63	397.36
110°	696.65	538.49	480.48	448.29	427.72	399.32	378.80	364.75
120°	721.93	556.39	494.44	461.47	435.63	392.24	367.03	349.46
135°	917.39	658.87	542.79	499.17	469.15	421.83	375.43	324.14
150°	1,123.57	805.90	654.07	566.76	513.47	454.82	411.64	367.96
165°	1,253.18	898.86	729.52	632.14	564.62	486.07	436.96	395.33
Run VMG	1,297.39	930.57	755.26	654.44	584.54	491.18	441.61	400.34
Opt Run Angle	134.4	136.5	139.3	148.4	157.7	173.0	172.8	171.9

Benchmark Ratings

	TOT (Spin)	TOD (Spin)
GPH	0.883	600.2
IR#	0.888	603.5

Performance Metrics

SA/D Dnwind:	50.260
SA/D Average:	38.69
SA/D Upwind:	27.120
D/Length:	174.1
Ave Perf Screen:	22.200
DnWind Perf	28.9
Screen:	

PCS Ratings

	4 kts	6 kts	8 kts	10 kts	12 kts	16 kts	20 kts	24 kts
RANDOM LEG	1,123.6	810.5	662.1	584.0	539.0	491.8	465.9	447.1
W50/L50	1,388.0	996.7	810.1	711.9	653.1	586.4	554.3	532.3
W60/L40	1,399.9	1,006.2	818.7	721.9	665.6	604.3	576.0	558.0
MOSTLY WW	1,482.4	1,061.4	859.6	753.8	694.5	639.4	618.6	610.8
MOSTLY LW	1,215.5	868.6	701.9	608.7	550.2	479.8	438.6	409.0
MOSTLY REACH	1,028.2	746.0	613.8	546.0	507.5	466.7	441.8	422.0

Non-Spinnaker

Polar Time Allowances

True Wind Speed	4 kts	6 kts	8 kts	10 kts	12 kts	16 kts	20 kts	24 kts
Opt Beat Angle	45.9	45.0	44.0	40.7	38.3	36.0	35.4	35.7
Beat VMG	1,416.54	1,022.64	836.30	749.17	706.28	668.55	656.46	654.31
52°	895.83	657.46	548.40	514.80	499.05	484.01	477.21	474.51
60°	810.74	609.93	524.89	497.03	483.35	469.42	462.62	459.50
75°	737.57	568.59	505.48	476.64	463.58	448.55	440.45	435.38
90°	729.22	563.79	503.21	471.46	450.42	432.46	421.92	413.93
110°	816.64	615.84	531.60	496.32	470.95	431.45	404.03	393.08
120°	940.51	687.48	570.65	520.87	490.85	447.45	411.27	387.03
135°	1,287.65	889.70	692.49	587.71	529.90	470.71	429.85	392.80
150°	1,590.11	1,064.33	801.48	661.07	570.82	488.42	442.62	404.51
165°	1,627.56	1,098.23	833.82	680.28	582.59	488.02	437.40	395.33
Run VMG	1,648.96	1,111.93	843.62	687.55	588.36	492.65	442.11	400.34
Opt Run Angle	172.2	172.2	172.3	172.3	172.2	173.0	172.8	171.9

Benchmark Ratings

	TOT (Non-Spin)	TOD (Non-Spin)
GPH	0.832	636.9
IR#	0.869	617.1

Performance Metrics

SA/D:	27.12
D/Length:	174.1
Perf Screen:	15.6

PCS Ratings

	4 kts	6 kts	8 kts	10 kts	12 kts	16 kts	20 kts	24 kts
RANDOM LEG	1,245.9	885.5	711.1	617.9	563.3	508.2	481.3	464.6
W50/L50	1,552.8	1,084.5	854.0	729.2	656.7	587.0	554.6	532.3
W60/L40	1,531.1	1,076.5	854.0	735.8	668.5	604.7	576.2	558.0
MOSTLY WW	1,511.6	1,078.2	869.6	759.5	697.6	640.8	620.1	612.6
MOSTLY LW	1,423.6	990.3	776.5	657.2	583.5	502.0	456.9	425.3
MOSTLY REACH	1,144.8	819.7	663.9	581.9	534.6	486.5	461.8	446.2

Geronimo J/109 USA 198

Spinnaker

Standard 5 Winds

	TOT (Spin)					TOD (Spin)				
	V.Light <5	Light 5-7	Lt/Med 7-9	Medium 9-15	Heavy >15	V.Light <5	Light 5-7	Lt/Med 7-9	Medium 9-15	Heavy >15
RANDOM LEG	0.463	0.601	0.759	0.905	1.111	1,123.6	865.4	685.5	575.1	468.3
W50/L50	0.457	0.596	0.756	0.908	1.138	1,388.0	1,064.9	839.6	698.7	557.7
W60/L40	0.463	0.603	0.763	0.912	1.118	1,399.9	1,074.9	849.0	710.3	579.4
MOSTLY WW	0.464	0.606	0.771	0.924	1.103	1,482.4	1,134.5	891.6	743.7	622.9
MOSTLY LW	0.435	0.569	0.728	0.890	1.195	1,215.5	928.7	726.4	594.0	442.4
MOSTLY REACH	0.472	0.610	0.764	0.901	1.095	1,028.2	796.0	635.3	538.6	443.5

Standard Single Wind

	TOT (Spin) Single	TOD (Spin) Single
RANDOM LEG	0.879	592.2
W50/L50	0.883	718.8
W60/L40	0.885	732.1
MOSTLY WW	0.891	771.2
MOSTLY LW	0.870	608.0
MOSTLY REACH	0.877	553.7

Legacy 4 Winds

	TOT (Spin)				TOD (Spin)			
	V.Light	Light	Medium	Heavy	V.Light	Light	Medium	Heavy
RANDOM LEG	0.428	0.671	0.883	1.028	1,123.6	716.7	544.4	467.7
W50/L50	0.424	0.669	0.892	1.056	1,388.0	878.9	659.5	556.8
W60/L40	0.429	0.676	0.894	1.038	1,399.9	888.3	672.0	578.6
MOSTLY WW	0.425	0.674	0.896	1.012	1,482.4	934.0	702.4	621.8
MOSTLY LW	0.400	0.638	0.874	1.101	1,215.5	762.0	556.0	441.5
MOSTLY REACH	0.438	0.679	0.880	1.017	1,028.2	663.0	512.1	443.1

Non-Spinnaker

Standard 5 Winds

	TOT (Non-Spin)					TOD (Non-Spin)				
	V.Light <5	Light 5-7	Lt/Med 7-9	Medium 9-15	Heavy >15	V.Light <5	Light 5-7	Lt/Med 7-9	Medium 9-15	Heavy >15
RANDOM LEG	0.418	0.549	0.705	0.857	1.074	1,245.8	947.5	738.2	607.0	484.7
W50/L50	0.409	0.545	0.714	0.887	1.137	1,552.8	1,163.7	889.2	715.4	558.0
W60/L40	0.423	0.561	0.729	0.895	1.117	1,531.1	1,153.9	888.7	723.7	579.7
MOSTLY WW	0.455	0.596	0.761	0.917	1.100	1,511.5	1,153.1	902.4	749.0	624.5
MOSTLY LW	0.371	0.497	0.654	0.826	1.146	1,423.7	1,063.5	808.0	640.0	461.4
MOSTLY REACH	0.424	0.554	0.705	0.848	1.045	1,144.8	876.1	688.5	572.7	464.8

Standard Single Wind

	TOT (Non-Spin) Single	TOD (Non-Spin) Single
RANDOM LEG	0.829	627.9
W50/L50	0.853	744.3
W60/L40	0.861	752.6
MOSTLY WW	0.884	777.7
MOSTLY LW	0.800	661.1
MOSTLY REACH	0.821	591.4

Legacy 4 Winds

	TOT (Non-Spin)				TOD (Non-Spin)			
	V.Light	Light	Medium	Heavy	V.Light	Light	Medium	Heavy
RANDOM LEG	0.386	0.620	0.843	0.993	1,245.8	775.0	570.1	483.9
W50/L50	0.379	0.627	0.883	1.056	1,552.8	938.0	666.1	557.1
W60/L40	0.392	0.642	0.887	1.038	1,531.1	935.7	677.3	578.8
MOSTLY WW	0.416	0.665	0.891	1.009	1,511.5	946.4	706.0	623.4
MOSTLY LW	0.341	0.569	0.822	1.056	1,423.7	853.6	591.7	460.3
MOSTLY REACH	0.394	0.625	0.834	0.971	1,144.8	721.3	540.4	464.1

Spinnaker

PHRF Benchmark

67.3

Aligned Ratings are based on the Farr 40

MH as Scratch Boat.

PHRF Single Wind

RANDOM LEG	71.8
W50/L50	84.1
W60/L40	84.3
MOSTLY WW	84.1
MOSTLY LW	79.2
MOSTLY REACH	68.2

PHRF 5 Winds

	V.Light <5	Light 5-7	Lt/Med 7-9	Medium 9-15	Heavy >15
RANDOM LEG	134.8	103.2	80.8	67.5	65.3
W50/L50	180.5	136.3	103.2	79.1	69.8
W60/L40	180.4	136.4	103.5	79.4	69.3
MOSTLY WW	175.8	132.5	101.0	79.7	68.6
MOSTLY LW	153.7	117.7	91.9	75.1	71.4
MOSTLY REACH	121.4	94.0	74.8	64.5	61.9

Non-Spinnaker

PHRF Benchmark

80.9

Aligned Ratings are based on the Farr 40

MH as Scratch Boat.

PHRF Single Wind

RANDOM LEG	107.5
W50/L50	109.6
W60/L40	104.8
MOSTLY WW	90.6
MOSTLY LW	132.3
MOSTLY REACH	105.9

PHRF 5 Winds

	V.Light <5	Light 5-7	Lt/Med 7-9	Medium 9-15	Heavy >15
RANDOM LEG	257.0	185.3	133.5	99.4	81.7
W50/L50	345.3	235.1	152.8	95.8	70.1
W60/L40	311.6	215.4	143.2	92.8	69.6
MOSTLY WW	204.9	151.1	111.8	85.0	70.2
MOSTLY LW	361.9	252.5	173.5	121.1	90.4
MOSTLY REACH	238.0	174.1	128.0	98.6	83.2

