



World Leader in Rating Technology

2016 ORC Club Certificate

Rating Office

ORC
Central Rating Office
issuing certificates for
CANADA



Certificate

Number **054/16**
Issued On **10.5.2016**.
ORC Ref **CAN00062915**
VPP Ver. **2016 1.01**
Valid until **31.12.2016**.

Crew Weight

Declared	454kg
Default*	567kg
Non Manual Pwr	No

Special Scoring

	ToD	ToT
Non Spin	GPH 696.5	0.8615
Non Spin	OSN 677.3	0.8859
N/S Perf. Line	14.0	0.566

Sails Limitations

Headsails **6** Spinnakers **3**

Spinnaker configuration

Symmetric: **Yes** **100.95**
Asymmetric: **No**
Flying H/S: **No**
Spin. Pole: **Yes**

Class Division Length

CDL = **8.021**

Stability

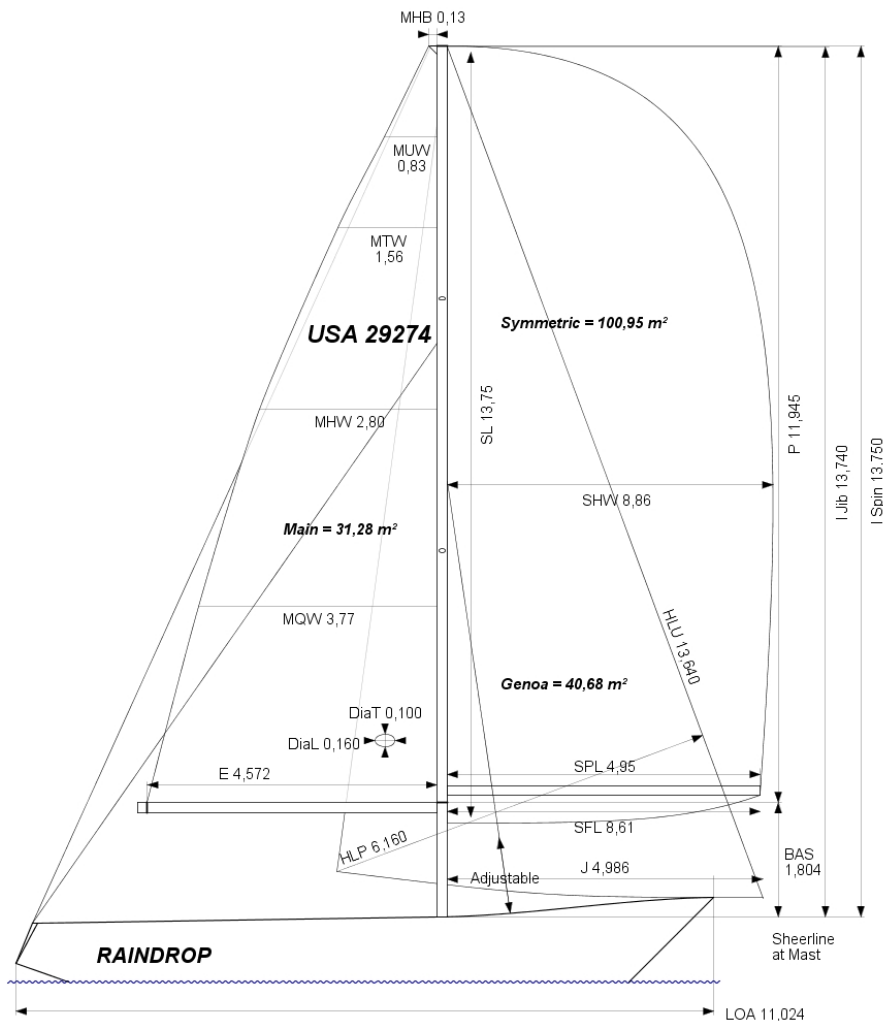
LPS (Estimated): **108.9°**
Stability Index: **114.9**
OSR Category: **N/A**

Owner

Joby Easton
9603 SW 54th Ave
Oregon
97219 Portland USA

I certify that I understand my responsibilities under ORC Rules and Regulations

Signature



BOAT		GPH		HULL			
Name Raindrop Sail Nr USA 29274		664.8		Data File USA29724.dxt	LOA 11.024m		
				Offset File CASC36CL.off	MB 3.048m		
				Displacement 5,897kg	Draft 1.829m		
CLASS				IMS Division Cruiser/Racer	Dynamic All. 0.269%		
Class Cascade 36				Fwd Accom. Yes	Construction Solid		
Designer Bob Smith				Fiber Rigging No	Aramid Core No		
Builder Yacht Constructors				Crew Arm Ex	Carbon Rudder No		
Series 01.1971					Light Stanchions No		
Age Date 01.1971				IMSL 8.992m	VCGD 0.097m	Sink 17.74kg/mm	
Age Allowance 0.487%				RL 7.048m	VCGM 0.118m	WS 25.47m2	
COMMENTS				LSM0 8.731m	Displacement/Length ratio 8.8601		
				Water Ballast 0	Trim Tab No		
PROPELLER				CENTERBOARD			
Installation Shaft exposed	PRD 0.381			N/A			
Type Folding 2 blades	PIPA 0.0014						
SCORING OPTIONS							
	OFFSHORE			INSHORE			
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD			
Time On Distance	647.4			725.4			
Time On Time	0.9268			0.9306			
Performance Line	PLT	PLD		PLT	PLD		
	0.635	42.9		0.778	196.8		
Triple Number	Low	Medium	High	Low	Medium	High	
	0.8800	1.1498	1.2878	0.6759	0.9241	1.0767	



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ORC Club Certificate Appendix

BOAT	
Name	Raindrop
Sail Nr	USA 29274
Certificate Number	054/16
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TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1168.7	972.6	856.0	795.4	767.0	750.3	733.9
52°	750.5	630.3	556.8	531.6	522.0	517.0	510.1
60°	701.8	590.0	533.0	512.9	505.4	501.4	495.9
75°	661.0	559.6	517.4	497.1	485.2	479.5	474.6
90°	661.8	560.5	518.8	497.6	480.8	466.8	453.5
110°	671.8	552.0	506.8	486.0	475.1	464.7	449.5
120°	689.5	563.7	512.1	485.4	462.9	450.2	431.8
135°	755.8	614.6	534.7	501.6	477.8	454.4	413.4
150°	894.1	710.8	598.1	531.6	501.9	479.7	437.5
Run VMG	1032.4	821.1	690.7	605.0	549.3	513.0	468.8

Selected Courses							
Windward / Leeward	1100.6	896.8	773.3	700.2	658.2	631.6	601.4
Circular Random	918.7	740.4	644.6	589.2	555.6	534.2	508.1
Ocean for PCS	1127.9	870.6	725.0	636.1	579.0	540.0	487.6
Non Spinnaker	975.2	780.7	674.7	612.2	573.6	548.6	518.1

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	45.0°	43.8°	44.4°	43.0°	41.6°	41.1°	40.8°
Beat VMG	3.08	3.70	4.21	4.53	4.69	4.80	4.91
52°	4.80	5.71	6.46	6.77	6.90	6.96	7.06
60°	5.13	6.10	6.75	7.02	7.12	7.18	7.26
75°	5.45	6.43	6.96	7.24	7.42	7.51	7.59
90°	5.44	6.42	6.94	7.23	7.49	7.71	7.94
110°	5.36	6.52	7.10	7.41	7.58	7.75	8.01
120°	5.22	6.39	7.03	7.42	7.78	8.00	8.34
135°	4.76	5.86	6.73	7.18	7.53	7.92	8.71
150°	4.03	5.06	6.02	6.77	7.17	7.50	8.23
Run VMG	3.49	4.38	5.21	5.95	6.55	7.02	7.68
Gybe Angles	146.6°	150.5°	149.5°	157.0°	179.8°	180.0°	180.0°