



ORC

Offshore Racing Congress
World leader in rating technology

**2020
ORC Club
Certificate**

Rating Office

**Offshore
Racing
Congress**



Certificate

Number **US6580**
Issued On **03/09/2020**
ORC Ref **03410000PQO**
VPP Ver. **2020 1.02**
Valid until **31/12/2020**

Crew Weight

Default 631kg
Maximum **768kg**
Minimum* **576kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Non Spin GPH	657.5	0.9125
Non Spin OSN	635.8	0.9436

Sails Limitations

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

Asymmetric on centerline

Spinnaker configuration
Symmetric: **No**
Asymmetric: **Yes 119.17**
Flying H/S: **No**
Spin. Pole: **No**

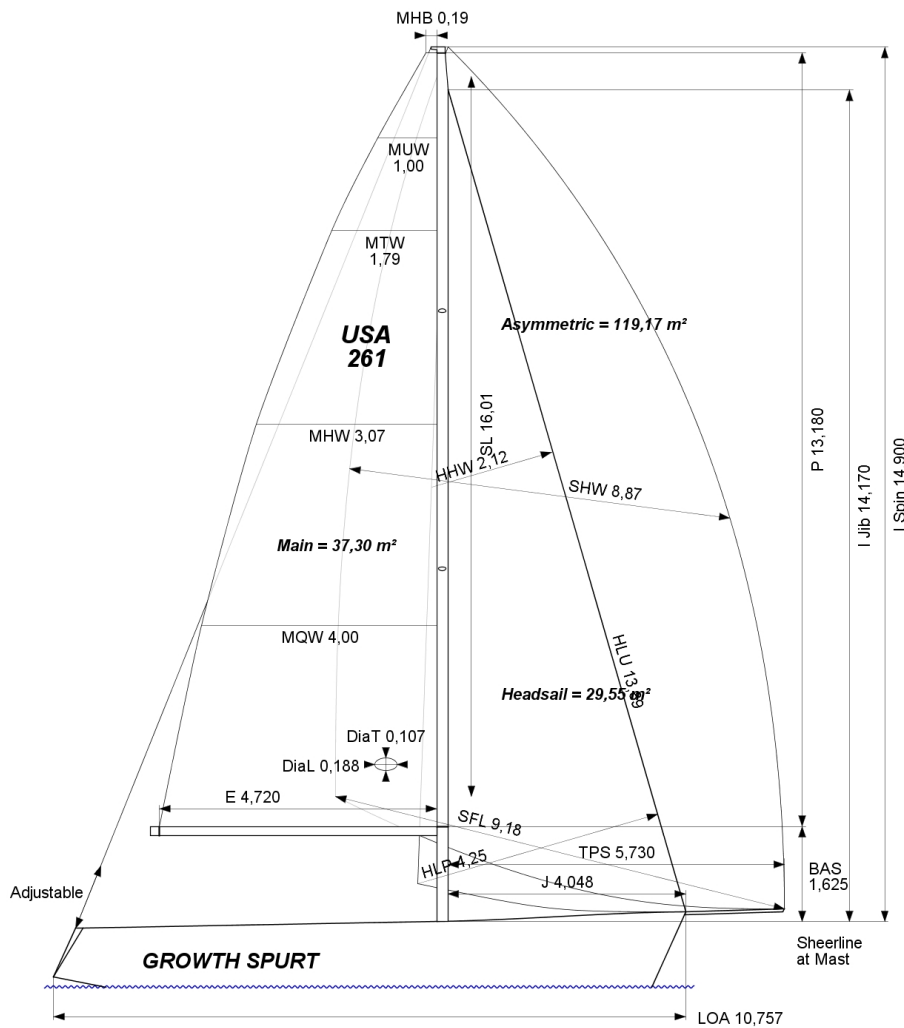
Class Division Length

CDL = 9.274

Stability (Estimated)

Limit Positive Stab.: **117.1°**
Stability Index: **116.3**

Owner



BOAT		GPH	HULL			
Name Growth Spurt Sail Nr USA 261		610.6	Data File US6580	LOA 10.757m		
			Offset File F199.OFF	MB 3.524m		
			Displacement 4,941kg	Draft 2.124m		
CLASS			IMS Division Performance	Dynamic All. 0.000%		
Class J-109			Plan Review	Construction Cored		
Designer J Boats			Fiber Rigging No	Aramid Core No		
Builder Pearson Composites			Crew Arm Ex 0.00	Carbon Rudder No		
Series 10/2001			Light Stanchions			
Age Date 01/2006			IMSL 9.598m	VCGD 0.023m		
Age Allowance 0.487%			RL 8.961m	VCGM 0.000m		
			WS 24.53m²			
COMMENTS			LSM0 9.413m	Displacement/Length ratio 5.9242		
			Water Ballast 0	Trim Tab No		
			BLR Index 0.0000			
PROPELLER			CENTERBOARD			
Installation Strut	PRD 0.000					
Type Folding 2 blades	PIPA 0.0032	N/A				
SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	595.4			668.8		
Time on Time	1.0078			1.0093		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	694.1	542.3	487.4	905.1	670.4	591.0
Time on Time	0.9725	1.2446	1.3849	0.7458	1.0068	1.1421

2020

ORC Club Certificate Appendix

BOAT							
Name	Growth Spurt	Certificate Number			US6580		
Sail Nr	USA 261	Issued On			03/09/2020		

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1052.3	868.2	760.1	705.4	687.6	680.7	670.4
52°	688.4	579.0	524.5	502.3	493.8	490.2	486.1
60°	649.7	546.7	511.2	491.7	481.3	476.6	473.4
75°	592.0	515.0	489.7	477.9	466.5	455.0	445.5
90°	569.4	502.7	475.4	456.6	443.8	434.6	419.8
110°	590.2	509.6	475.9	451.5	427.9	408.6	382.5
120°	617.5	517.1	479.7	451.1	425.0	405.1	372.4
135°	692.9	557.9	498.9	469.6	441.2	414.3	359.5
150°	818.1	654.0	553.7	504.2	481.4	461.9	414.5
Run VMG	944.6	755.2	639.4	581.7	552.7	510.2	463.9
Selected Courses							
Windward / Leeward	998.4	811.7	699.7	643.6	620.2	595.5	567.1
Circular Random	834.7	676.6	592.7	544.7	515.4	495.9	469.2
Coastal / Long Distance	993.1	760.4	632.0	561.6	527.3	498.0	450.3
Non Spinnaker	924.1	738.2	636.7	576.9	539.9	515.6	485.7

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	42.8°	41.3°	40.5°	38.3°	37.9°	37.7°	37.5°
Beat VMG	3.42	4.15	4.74	5.10	5.24	5.29	5.37
52°	5.23	6.22	6.86	7.17	7.29	7.34	7.41
60°	5.54	6.58	7.04	7.32	7.48	7.55	7.60
75°	6.08	6.99	7.35	7.53	7.72	7.91	8.08
90°	6.32	7.16	7.57	7.89	8.11	8.28	8.57
110°	6.10	7.06	7.56	7.97	8.41	8.81	9.41
120°	5.83	6.96	7.50	7.98	8.47	8.89	9.67
135°	5.20	6.45	7.22	7.67	8.16	8.69	10.02
150°	4.40	5.50	6.50	7.14	7.48	7.79	8.69
Run VMG	3.81	4.77	5.63	6.19	6.51	7.06	7.76
Gybe Angles	144.0°	148.0°	148.3°	150.5°	174.0°	177.0°	177.5°