

BOAT	GPH	HULL
Name IMPETUOUS Sail Nr USA 4206	537.1	Length Overall 12.801m Maximum Beam 3.900m Displacement 7,333kg Draft 2.710m IMS Reg. Division Cruiser/Racer Dynamic Allowance 0.000% Fwd Accommodation Yes Hull Construction Cored Carbon Rudder Yes Crew Arm Extension
GENERAL		IMSL 11.812m VCGD -0.425m Sink 24.00kg/mm
Class SWAN 42 Designer FRERS Builder SWAN Series 05/2007 Age 05/2007 Age Allowance 0.357% Offset File SWAN42B2.OFF - 27/07/2016 10:00:24 Measurement by - 20/10/2007		RL 11.428m VCGM -0.412m WS 32.61m²
		LSM0 11.482m Displacement/Length ratio 4.8443



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SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	522.6			587.3		
Time on Time	1.1481			1.1493		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	605.2	478.6	429.5	778.4	588.1	521.9
Time on Time	1.1154	1.4105	1.5715	0.8672	1.1477	1.2934

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	882.8	724.8	650.9	624.6	612.3	602.4	591.3
52°	581.7	488.1	456.1	445.4	440.2	437.4	428.8
60°	551.5	471.5	445.4	433.6	427.6	423.9	415.0
75°	529.8	461.4	436.4	419.7	407.2	400.0	393.7
90°	536.7	461.8	435.8	415.9	397.0	381.4	363.6
110°	536.1	453.4	422.6	404.6	389.4	375.1	349.9
120°	550.5	458.4	424.8	396.4	375.1	359.2	330.3
135°	611.4	491.7	442.9	414.2	384.4	355.1	300.0
150°	725.7	578.6	490.7	444.9	423.4	401.2	344.5
Run VMG	837.9	668.1	566.6	513.3	487.9	458.4	397.9
Selected Courses							
Windward / Leeward	860.4	696.4	608.8	568.9	550.1	530.4	494.6
Circular Random	731.4	593.7	521.5	480.5	455.0	436.9	409.0
Coastal / Long Distance	858.1	655.7	552.4	497.2	467.7	440.3	392.4
Non Spinnaker	800.4	642.6	557.3	507.2	475.6	454.1	425.3

Certificate

Number **US6007**
ORC Ref **USAX01D6DVV**
Issued On **02/07/2018**
VPP Ver. **2018 1.00**
Valid until **31/12/2018**

Crew Weight

Default **838kg**
Maximum **935kg**
Minimum* **701kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

ToD ToT
Non Spin GPH **574.9 1.0437**
Non Spin OSN **560.5 1.0706**

Sails Limitations

Headsails 7	Spinnakers 5
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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	42.4°	40.9°	39.1°	37.8°	37.4°	36.9°	36.7°
Beat VMG	4.08	4.97	5.53	5.76	5.88	5.98	6.09
52°	6.19	7.38	7.89	8.08	8.18	8.23	8.39
60°	6.53	7.63	8.08	8.30	8.42	8.49	8.67
75°	6.80	7.80	8.25	8.58	8.84	9.00	9.14
90°	6.71	7.80	8.26	8.66	9.07	9.44	9.90
110°	6.71	7.94	8.52	8.90	9.25	9.60	10.29
120°	6.54	7.85	8.48	9.08	9.60	10.02	10.90
135°	5.89	7.32	8.13	8.69	9.36	10.14	12.00
150°	4.96	6.22	7.34	8.09	8.50	8.97	10.45
Run VMG	4.30	5.39	6.35	7.01	7.38	7.85	9.05
Gybe Angles	143.2°	145.3°	149.2°	151.9°	151.3°	176.1°	143.2°

Class Division Length

CDL = **11.621**

Storm Sails Areas

Heavy Weather Jib **44.24**
Storm Jib (JL=11.77) **16.39**
Storm Trysail **17.43**

Owner

BOAT Name IMPETUOUS Sail Nr USA 4206 File US6007 Data in meters/kilograms		INCLINING TEST AND FREEBOARDS Inclining Test Current Inclining Flotation date 10/05/2007 SG 1.0240		 ORC Offshore Racing Congress World leader in rating technology 2018 IMS Measurement Certificate
RIG Forestay Tension Aft Spreaders 2 Inner Stay None Fitted Runners 0 Carbon Mast Yes Jumper Struts None Taper Hollows No Jib Furler Yes Fiber Rigging No Main Furler No Lenticular Rigging No Without Backstay No Articulated Bowsprit No		FFM 1.439 FF 1.446 SFFP 0.487 FAM 1.118 FA 1.122 SAFFP 12.602 W1 116.7 PD1 512.0 WD 12.500 W2 116.7 PD2 512.0 GSA 1.0 W3 116.7 PD3 512.0 RSA 1.0 W4 116.7 PD4 512.0 PLM 9000.0		
P 17.200 E 5.790 MDT1 0.132 MW 0.275 IG 17.975 J 5.010 MDL1 0.264 GO 0.310 ISP 19.170 SFJ 0.340 MDT2 0.099 BD 0.320 BAS 1.932 SPL 0.000 MDL2 0.190 MWT 231.00 FSP 0.076 TPS 7.300 TL 2.200 MCG 6.220		LCF from stem on CL / on sheer 7.129 / 7.375 Maximum beam station from stem 8.501 RM Measured 224.4kg-m RM Default 210.4kg-m Limit of positive stability / Stab.Index 137.4° / 139.4 Freeboard at mast at 5.350 1.245		
MIZZEN RIG AND SAILS N/A		PROPELLER Installation Strut PRD 0.430 Type Folding 2 blades PBW 0.110 Twin Screw PIPA 0.0041 ST1 0.065 ST3 0.178 ST5 0.302 ST2 0.178 ST4 0.110 EDL 1.800		
COMMENTS N/A		MOVABLE BALLAST N/A		Certificate Number US6007 ORC Ref USAX01D6DVV Issued On 02/07/2018 VPP Ver. 2018 1.00 Valid until 31/12/2018
Centerboard N/A		Invalid for Racing  World Leader In Rating Technology		

SAILS (Maximum Areas)									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	0.180	1.49	2.43	3.76	4.84	60.66	62.04	P/8 · (E + 2·MQW+ 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
Symmetric Not Available									
Asymmetric on centerline	SLU	SLE	SL	SHW	SFL				
	21.50	17.85	19.68	11.17	10.82	181.99		AS · (SFL + 4·SHW) / 6	

HEADSAILS												
Area = 0.1125·HLU · (1.445·HLP + 2·HQW + 2·HHW + 1.5·HTW + HUW + 0.5·HHB)												
HHB	HUW	HTW	HHW	HQW	HLP	HLU	Area	Btn	Fly	Meas.Date	Material	Comment
0.10	0.77	1.47	2.70	3.96	5.33	18.27	49.42					

MEASUREMENT INVENTORY				
Measurer Date Comment				
Id	Item	Weight	Distance	VCG Description
a	Anchor	0-0	0-00	
Id	Item	Weight	Distance	VCG Description

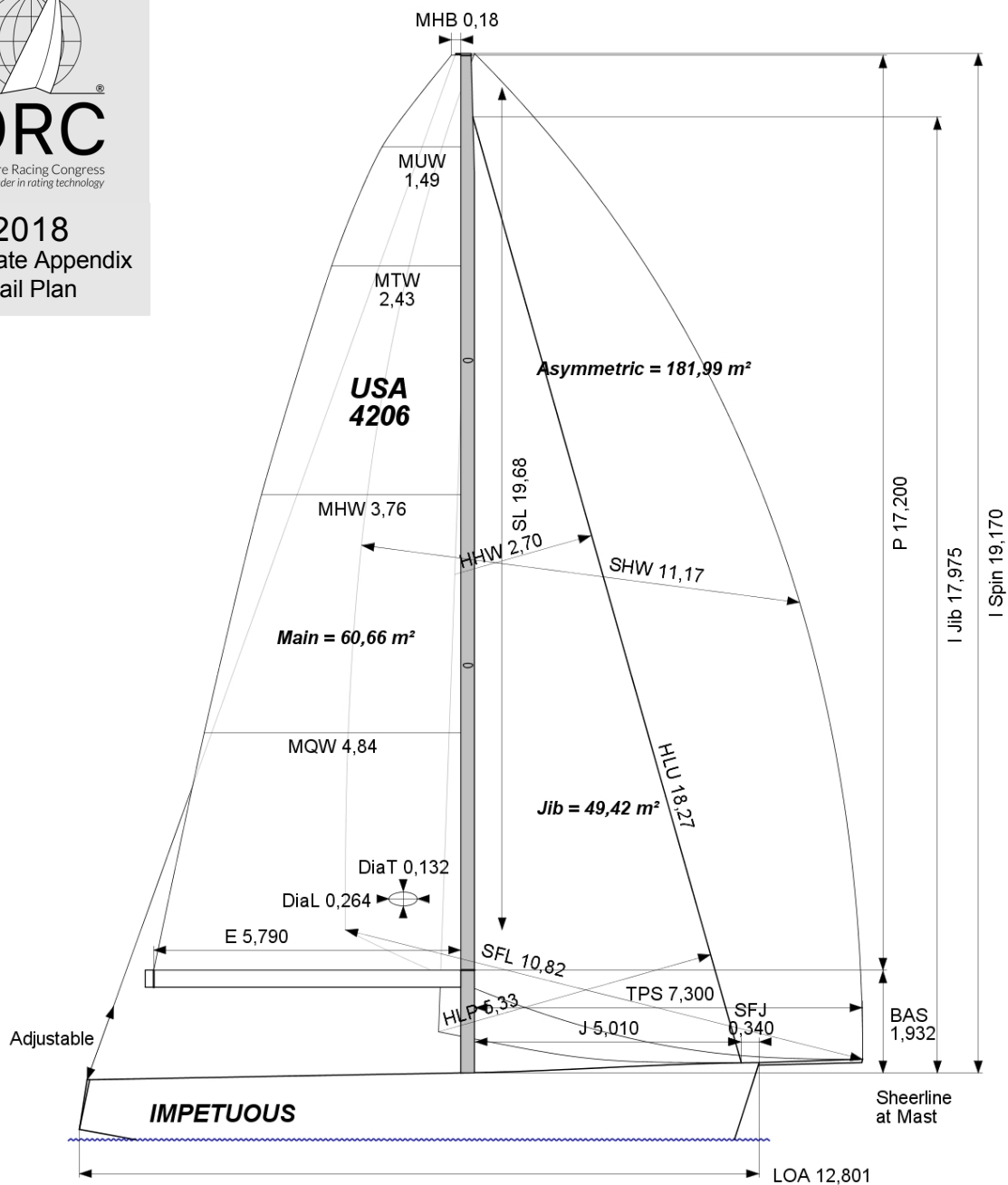
MEASUREMENT INVENTORY							
Id	Item	Tank Use	Tank Type	Capcty	Dist.	VCG	Condtn Description
					0.00	0.00	0-0
Id	Item	Weight	Distance	VCG Description			



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Sail Plan



SAILS INVENTORY

MAINSAIL (1)

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
1151709	0.18	1.49	2.43	3.76	4.84	60.67					

HEADSAILS (1)

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
1151716	0.10	0.77	1.47	2.70	3.96	5.33	18.27	106%	49.42							

SYMMETRIC SPINNAKERS (0)

Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment
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ASYMMETRIC SPINNAKERS (1)

Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment
1151725	21.50	17.85	19.68	11.17	10.82	182.00	asym					