

BOAT Name L'ESPIRIT Sail Nr 7041	GPH 583.9	HULL Length Overall 13.668m Maximum Beam 4.490m Displacement 11,262kg Draft 2.223m IMS Reg. Division Dynamic Allowance 0.158% Fwd Accommodation Yes Hull Construction Cored Carbon Rudder No Crew Arm Extension
GENERAL Class SUN ODYSSEY 469 Designer P BRRAND Builder JEANEAU Series 01/2011 Age 10/2017 Age Allowance 0.195% Offset File Sun Odyssey 469 GTE_DV SFFP Measurement by Andrew rson - 22/11/2017		IMSL 12.688m VCGD 0.306m Sink 33.83kg/mm RL 9.486m VCGM 0.324m WS 43.18m² LSMO 12.620m Displacement/Length ratio 5.6032



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SCORING OPTIONS	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
	Time On Distance	565.9			636.5	
Time On Time	1.0603			1.0605		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	691.4	511.8	444.3	906.8	643.1	538.0
Time on Time	0.9763	1.3188	1.5194	0.7444	1.0496	1.2546

TIME ALLOWANCES	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1064.7	866.0	757.3	685.6	648.7	630.5	616.7
52°	679.8	561.4	494.2	456.8	441.3	434.8	429.5
60°	631.6	526.5	468.6	440.9	427.4	421.3	415.9
75°	591.9	497.5	450.8	429.0	414.2	402.6	391.6
90°	591.3	497.1	447.8	427.7	412.6	398.2	373.1
110°	603.9	490.2	438.0	413.6	396.9	386.0	366.4
120°	616.4	500.2	443.1	417.0	394.7	373.8	350.9
135°	680.5	544.7	467.9	431.9	410.1	388.7	346.3
150°	819.9	649.2	536.0	468.5	434.4	413.7	374.7
Run VMG	946.7	749.7	618.9	538.5	490.7	453.7	409.0

Selected Courses	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Windward / Leeward	1005.7	807.9	688.1	612.0	569.7	542.1	512.9
Circular Random	823.1	656.7	565.4	511.0	477.0	454.5	426.2
Ocean for PCS	1015.6	774.8	637.0	551.8	496.3	458.2	407.3
Non Spinnaker	886.1	702.1	599.8	537.8	498.5	472.5	440.9

Velocity Prediction in Knots for True Wind Speeds	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat Angles	45.3°	43.9°	43.3°	42.9°	41.4°	40.4°	40.5°
Beat VMG	3.38	4.16	4.75	5.25	5.55	5.71	5.84
52°	5.30	6.41	7.28	7.88	8.16	8.28	8.38
60°	5.70	6.84	7.68	8.17	8.42	8.55	8.66
75°	6.08	7.24	7.99	8.39	8.69	8.94	9.19
90°	6.09	7.24	8.04	8.42	8.73	9.04	9.65
110°	5.96	7.34	8.22	8.70	9.07	9.33	9.82
120°	5.84	7.20	8.12	8.63	9.12	9.63	10.26
135°	5.29	6.61	7.69	8.33	8.78	9.26	10.39
150°	4.39	5.54	6.72	7.68	8.29	8.70	9.61
Run VMG	3.80	4.80	5.82	6.69	7.34	7.94	8.80
Gybe Angles	138.0°	148.1°	145.7°	152.8°	159.0°	176.0°	180.0°

Certificate

Number **2865**
ORC Ref **AUS00001170**
Issued On **05/12/2017**
VPP Ver. **2017 1.00**
Valid until **30/06/2018**

Crew Weight

Declared **959kg**
Default* **959kg**
Non Manual Pwr **No**

Special Scoring

ToD ToT
Non Spin GPH **620.0 0.9677**
Non Spin OSN **600.9 0.9986**

Sails Limitations

Headsails	Spinnakers
1	4

Class Division Length

CDL = 11.088

Storm Sails Areas


Heavy Weather Jib **40.98**
Storm Jib (JL=11.32) **15.18**
Storm Triesail **14.84**

Owner

BOAT	
Name L'ESPIRIT	Sail Nr 7041
File 2865	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS			
Inclining Test Current Inclining			
Flotation date 22/11/2017		SG 1.0250	
FFM 1.565	FF 1.554	SFFP 0.146	
FAM 1.250	FA 1.265	SAFP 12.639	
W1 34.0	PD1 51.0	WD 15.500	
W2 68.0	PD2 101.0	GSA 19.4	
W3 102.0	PD3 152.0	RSA 6400.0	
W4 136.0	PD4 202.0	PLM 2040.0	
LCF from stem on CL / on sheer		7.467 / 7.790	
Maximum beam station from stem		8.772	
RM Measured		371.1kg·m	
RM Default		358.7kg·m	
Limit of positive stability / Stab.Index		102.6° / 106.3	
Freeboard at mast at 5.660		1.358	

RIG			
Forestay Tension Aft	Spreaders 2		
Inner Stay None Fitted	Runners 0		
Carbon Mast No	Jumper Struts None		
Taper Hollows No	Jib Furler Yes		
Fiber Rigging No	Main Furler No		
Lenticular Rigging No	Without Backstay No		
Articulated Bowsprit No			
P 16.610	E 5.105	MDT1 0.145	MW 0.260
IG 17.330	J 5.660	MDL1 0.260	GO 0.290
ISP 18.020	SFJ 0.000	MDT2 0.145	BD 0.230
BAS 1.920	SPL 6.300	MDL2 0.260	MWT
FSP 0.120	TPS 6.116	TL 0.000	MCG




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MIZZEN RIG AND SAILS	
N/A	

PROPELLER		
Installation Strut	PRD 0.540	
Type Folding 3 or 4 blades	PBW 0.135	
Twin Screw No	PIPA 0.0044	
ST1 0.050	ST3 0.180	ST5 0.410
ST2 0.180	ST4 0.112	EDL 3.420

COMMENTS	
417206029	

MOVEABLE BALLAST	
N/A	

CENTERBOARD	
N/A	

SAILS (Maximum Areas)									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	0.095	1.00	1.82	3.25	4.26	49.63	50.33	P/8 · (E + 2·MQW+ 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
Symmetric	SLU	SLE	SL	SHW	SFL	186.95		SL · (SFL + 4·SHW) / 6	
	19.23	19.23	19.23	11.79	11.17				
Asymmetric Not Available									

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
0.09	0.97	1.90	3.81	5.76	7.83	17.14	66.18			15/11/2017	Unknow	
0.06	0.59	1.16	2.46	3.87	5.41	16.33	41.96			15/11/2017	Unknow	

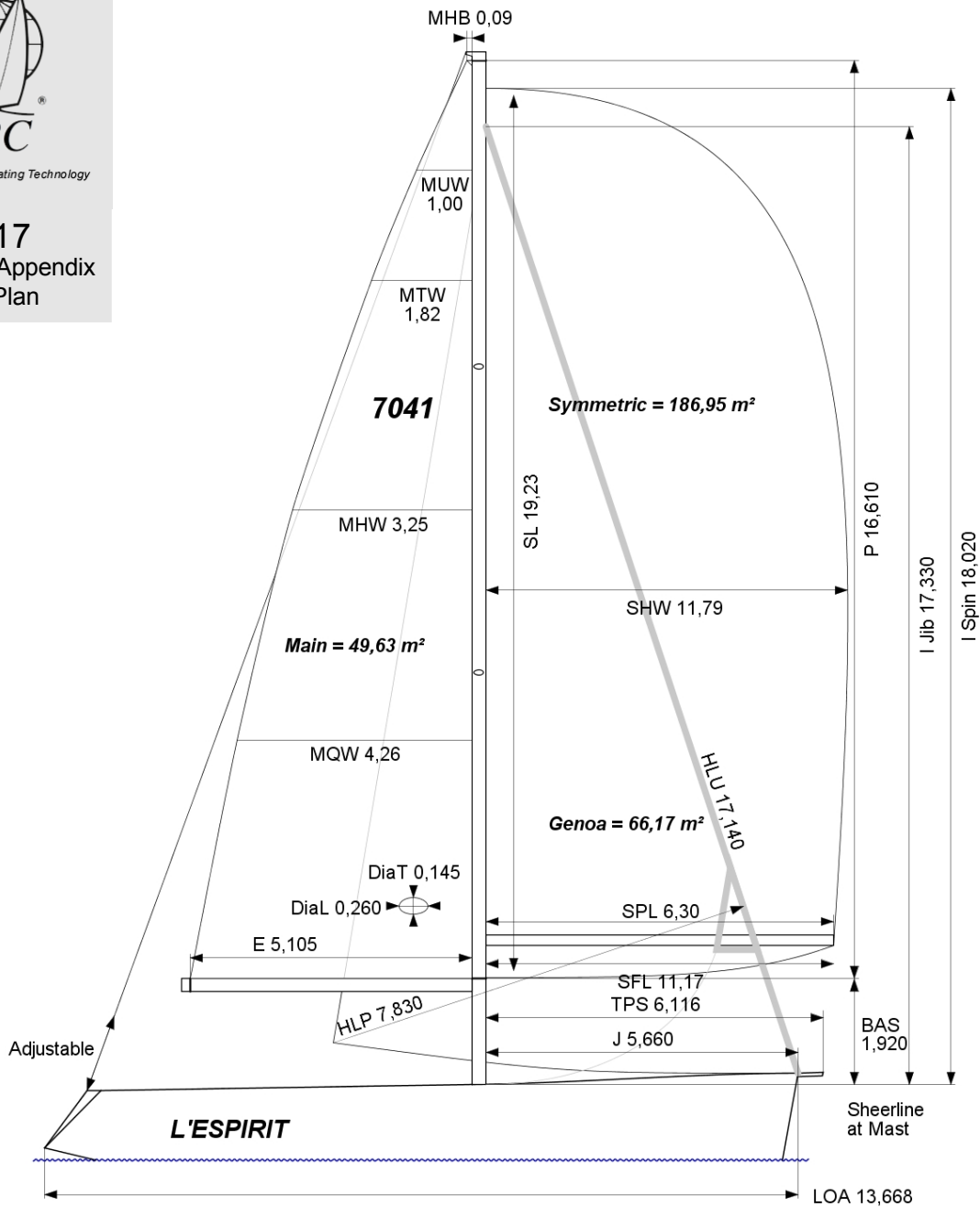
MEASUREMENT INVENTORY				
Measurer	Date	Comment		
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>
1	Engine	YANMAR		4JH5-CE
<i>Id</i>	<i>Item</i>	<i>Weight Description</i>		

MEASUREMENT INVENTORY						
<i>Id</i>	<i>Item</i>	<i>Tank Use</i>	<i>Tank Type</i>	<i>Capcty</i>	<i>Dist.</i>	<i>VCG Condtn Description</i>
3	Tank	Water	PLASTIC	400.0	3.80	
2	Tank	Water	PLASTIC	250.0	11.60	0-0
1	Tank	FUEL	PLASTIC	240.0	11.60	0.45 157.0
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>		
2	Battery	30.0	9.00	1 X 12v	ENGINE	
2	Battery	60.0	10.40	2X 12v	BOW THRUSTER	
3	Battery	90.0	10.40	5 x 12v	HOUSE	
2	Misc	39.5	2.50	BOW THRUSTER		
1	Misc	20.0	1.18	ANCHOR WINCH		



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Sail Plan



SAILS INVENTORY

MAINSAIL (1)

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
1	0.095	1.00	1.82	3.25	4.26	49.63	2038		North	Unknown	

HEADSAILS (2)

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
1	0.09	0.97	1.90	3.81	5.76	7.83	17.14	138%	66.18			2039	15/11/2017	North	Unknown	
2	0.06	0.59	1.16	2.46	3.87	5.41	16.33	96%	41.96			2039	15/11/2017	North	Unknown	

SYMMETRIC SPINNAKERS (1)

Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment
1	19.23	19.23	19.23	11.79	11.17	186.95	2039	14/11/2017	North	Nylon	

ASYMMETRIC SPINNAKERS (0)

Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment
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