

BOAT Name Jai Alai Sail Nr NED 7439	GPH 613.7	HULL Length Overall 10.757m Maximum Beam 3.524m Displacement 5,181kg Draft 2.139m IMS Reg. Division Cruiser/Racer Dynamic Allowance 0.004% Fwd Accommodation Yes Hull Construction Cored Carbon Rudder No Crew Arm Extension
GENERAL Class J-109 Designer Johnstone Builder J-Composite Series 01/2001 Age 03/2005 Age Allowance 0.487% Offset File f199.off - 12/03/2002 08:46:54 Measurement by L. Zandwijk - 13/10/2004		IMSL 9.671m VCGD 0.042m Sink 18.40kg/mm RL 8.985m VCGM 0.005m WS 24.90m² LSM0 9.511m Displacement/Length ratio 6.0219



World Leader in Rating Technology

2018
ORC International
Certificate

Rating Office

Offshore
Racing
Congress



World Leader in Rating Technology

SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	597.2			668.8		
Time on Time	1.0047			1.0093		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	695.2	545.1	493.8	893.3	670.5	595.3
Time on Time	0.9709	1.2382	1.3669	0.7556	1.0067	1.1338

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1013.4	839.8	742.3	704.5	689.4	682.7	677.9
52°	669.8	562.7	516.5	500.2	494.2	491.2	490.5
60°	636.7	541.3	504.4	489.0	481.9	478.1	475.8
75°	612.8	528.0	495.6	477.9	465.1	457.1	450.0
90°	620.3	523.6	489.8	475.4	457.9	442.8	423.2
110°	617.8	516.7	480.4	456.2	437.1	424.7	404.2
120°	634.5	526.8	485.8	458.3	432.4	410.3	383.5
135°	703.3	570.6	506.4	476.7	450.5	424.4	374.3
150°	828.3	661.3	562.1	511.3	487.0	468.5	425.9
Run VMG	956.4	763.6	649.0	590.2	558.9	514.1	468.1

Certificate

Number **21274**
ORC Ref **pub00012926**
Issued On **07/05/2018**
VPP Ver. **2018 1.00**
Valid until **31/03/2019**

Crew Weight

Default **641kg**
Maximum **685kg**
Minimum* **514kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Double H.GPH	618.9	0.9695
Double H.OSN	604.6	0.9924
Non Spin GPH	648.0	0.9259
Non Spin OSN	629.5	0.9531

Selected Courses							
Windward / Leeward	984.9	801.7	695.7	647.3	624.2	598.4	573.0
Circular Random	837.7	679.0	595.5	548.5	520.3	502.0	478.1
Coastal / Long Distance	982.1	754.0	630.3	566.2	532.5	502.3	456.7
Non Spinnaker	902.2	724.1	627.9	571.9	537.8	515.7	488.7

Sails Limitations

Headsails	Spinnakers
5	3

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	42.3°	41.2°	40.0°	38.5°	38.2°	37.8°	37.8°
Beat VMG	3.55	4.29	4.85	5.11	5.22	5.27	5.31
52°	5.37	6.40	6.97	7.20	7.28	7.33	7.34
60°	5.65	6.65	7.14	7.36	7.47	7.53	7.57
75°	5.87	6.82	7.26	7.53	7.74	7.88	8.00
90°	5.80	6.88	7.35	7.57	7.86	8.13	8.51
110°	5.83	6.97	7.49	7.89	8.24	8.48	8.91
120°	5.67	6.83	7.41	7.86	8.33	8.77	9.39
135°	5.12	6.31	7.11	7.55	7.99	8.48	9.62
150°	4.35	5.44	6.40	7.04	7.39	7.68	8.45
Run VMG	3.76	4.71	5.55	6.10	6.44	7.00	7.69
Gybe Angles	144.6°	148.1°	148.6°	150.2°	173.9°	176.6°	177.7°

Class Division Length

CDL = **9.329**

Storm Sails Areas

Heavy Weather Jib **27.48**
Storm Jib (JL=9.27) **10.18**
Storm Trysail **10.89**

Owner

BOAT	
Name Jai Alai File NEDC7439	Sail Nr NED 7439 Data in meters/kilograms

RIG	
Forestay Tension Aft	Spreaders 2
Inner Stay None Fitted	Runners 0
Carbon Mast Yes	Jumper Struts None
Taper Hollows No	Jib Furler No
Fiber Rigging No	Main Furler No
Lenticular Rigging No	Without Backstay No
Articulated Bowsprit No	
P 13.182	E 4.720 MDT1 0.123 MW 0.135
IG 14.110	J 4.060 MDL1 0.190 GO 0.180
ISP 15.150	SFJ 0.000 MDT2 0.102 BD 0.248
BAS 1.630	SPL 0.000 MDL2 0.120 MWT 120.00
FSP 0.072	TPS 5.750 TL 3.410 MCG 4.440

MIZZEN RIG AND SAILS	
N/A	

COMMENTS

INCLINING TEST AND FREEBOARDS			
Inclining Test Current Inclining		Flotation date 27/06/2016 SG 1.0250	
FFM 1.239	FF 1.239	SFFP 0.420	
FAM 1.002	FA 1.002	SAFP 10.254	
W1 81.0	PD1 579.7	WD 10.800	
W2 81.0	PD2 569.3	GSA 1.0	
W3 81.0	PD3 586.1	RSA 1.0	
W4 81.0	PD4 564.5	PLM 9000.0	
LCF from stem on CL / on sheer		5.917 / 6.162	
Maximum beam station from stem		6.540	
RM Measured		119.9kg-m	
RM Default		121.0kg-m	
Limit of positive stability / Stab.Index		116.5° / 116.5	
Freeboard at mast at 4.060		1.092	


PROPELLER			
Installation Strut	PRD 0.410		
Type Folding 2 blades	PBW 0.110		
Twin Screw No	PIPA 0.0032		
ST1 0.048	ST3 0.181	ST5 0.285	
ST2 0.181	ST4 0.100	EDL 1.980	

MOVABLE BALLAST	
N/A	

CENTERBOARD	
N/A	

SAILS (Maximum Areas)									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	0.220	1.00	1.78	3.05	3.93	37.01	37.78	P/8 · (E + 2·MQW+ 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
Symmetric Not Available									
Asymmetric	SLU	SLE	SL	SHW	SFL	Area	AS · (SFL + 4·SHW) / 6		
	16.80	13.30	15.05	8.45	8.08	105.05			

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	0.73	1.40	2.76	4.17	5.69	14.17	39.79	N		18/04/2018	Unknow	




World Leader in Rating Technology

2018

IMS Measurement Certificate

Certificate

Number **21274**
ORC Ref **pub00012926**
Issued On **07/05/2018**
VPP Ver. **2018 1.00**
Valid until **31/03/2019**

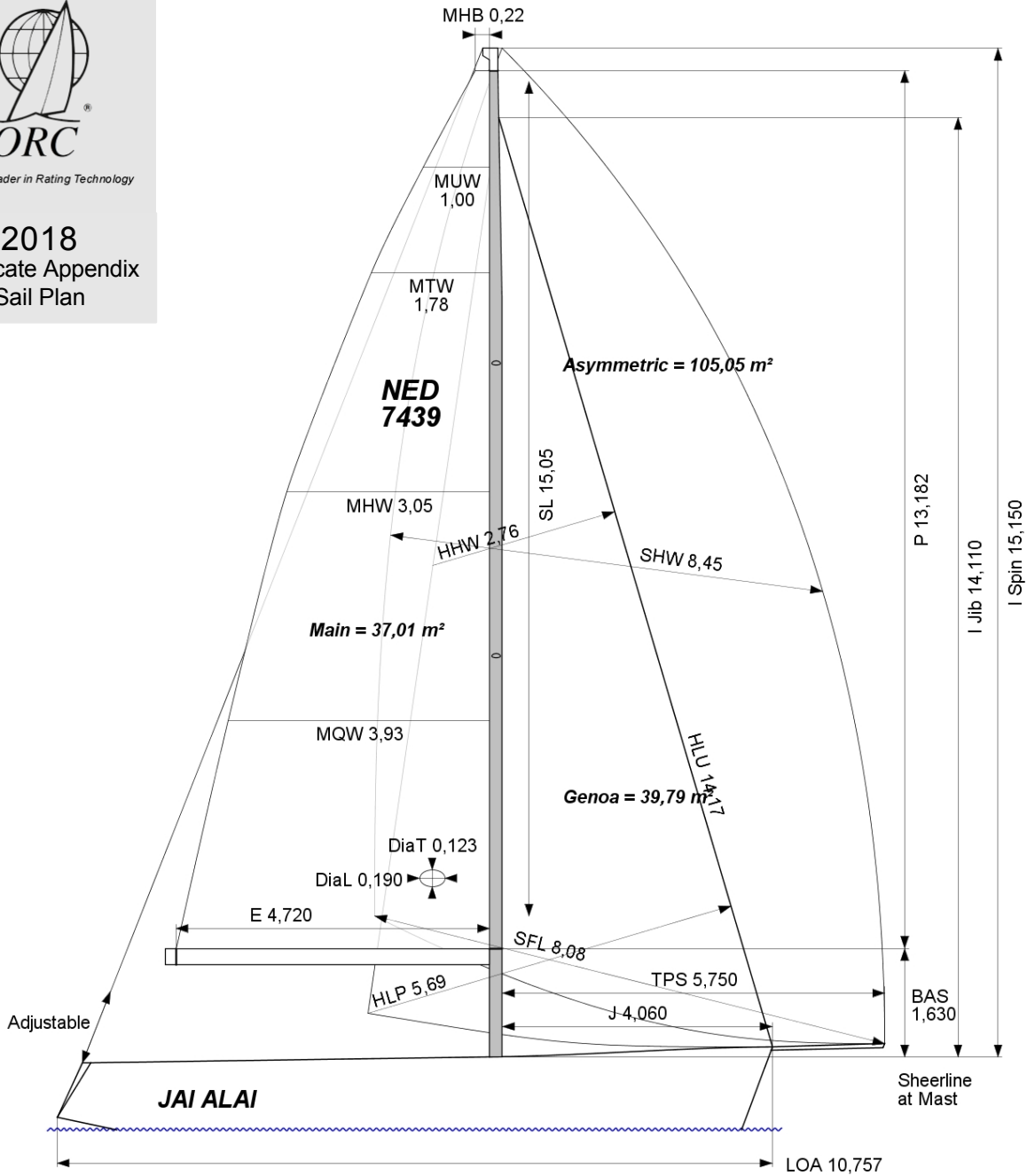


World Leader In Rating Technology



World Leader in Rating Technology

2018
Certificate Appendix
Sail Plan



SAILS INVENTORY

MAINSAIL (1)

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
3	0.220	1.00	1.78	3.05	3.93	37.01	h32	18/04/2018	north sails	Unknown	

HEADSAILS (1)

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
4	0.10	0.73	1.40	2.76	4.17	5.69	14.17	140%	39.79	N		h32	18/04/2018	north sails	Unknow	

SYMMETRIC SPINNAKERS (0)

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

ASYMMETRIC SPINNAKERS (1)

Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment
3	16.80	13.30	15.05	8.45	8.08	105.05	asym	h32	18/04/2018	north sails	Unknown	