

BOAT Name JOY RIDE Sail Nr 89	GPH 572.9	HULL Length Overall 12.200m Maximum Beam 3.638m Displacement 6,902kg Draft 2.216m IMS Reg. Division Cruiser/Racer Dynamic Allowance 0.075% Fwd Accommodation Yes Hull Construction Cored Carbon Rudder Yes Crew Arm Extension
GENERAL Class J 122E Designer JOHNSTONE Builder J BOATS Series 01/2012 Age 01/2014 Age Allowance 0.195% Offset File us42407.off - 27/05/2014 12:43:22 Measurement by Baittinger - 23/02/2018		IMSL 11.025m VCGD -0.088m Sink 22.66kg/mm RL 10.117m VCGM -0.101m WS 30.25m² LSM0 10.841m Displacement/Length ratio 5.4171



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Rating Office

US Sailing
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SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	557.1			625.0		
Time on Time	1.0771			1.0800		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	651.0	508.3	457.9	840.2	625.7	553.6
Time on Time	1.0369	1.3280	1.4740	0.8034	1.0788	1.2194

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	968.1	794.7	701.5	663.9	647.4	639.3	622.6
52°	635.8	530.4	484.5	468.3	462.0	458.7	452.1
60°	602.5	508.6	472.0	456.9	449.9	446.1	440.8
75°	578.2	494.9	463.0	445.8	433.5	425.8	418.7
90°	578.8	486.7	462.9	443.5	427.0	412.1	392.3
110°	567.7	476.9	445.0	427.1	413.4	401.1	378.5
120°	580.7	483.1	447.4	421.5	399.3	384.8	359.0
135°	649.7	521.3	465.6	437.8	411.0	384.5	331.5
150°	769.2	614.6	519.0	469.3	448.3	428.6	383.2
Run VMG	888.2	709.6	599.3	541.3	515.4	480.4	434.9

Certificate

Number **US6271**
ORC Ref **USAX01CNNEH**
Issued On **26/06/2018**
VPP Ver. **2018 1.00**
Valid until **28/02/2019**

Crew Weight

Default **772kg**
Maximum **710kg**
Minimum* **533kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

ToD	ToT
Non Spin GPH 613.3	0.9783
Non Spin OSN 595.8	1.0070

Selected Courses							
Windward / Leeward	928.2	752.2	650.4	602.6	581.4	559.8	528.7
Circular Random	784.5	634.7	555.8	511.1	484.0	465.7	439.4
Coastal / Long Distance	924.2	706.4	588.9	526.9	495.5	468.2	422.5
Non Spinnaker	859.6	687.5	594.0	539.1	505.0	482.4	452.9

Sails Limitations

Headsails	Spinnakers
6	4

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°	41.4°	40.3°	38.8°	38.0°	37.8°	37.2°
Beat VMG	3.72	4.53	5.13	5.42	5.56	5.63	5.78
52°	5.66	6.79	7.43	7.69	7.79	7.85	7.96
60°	5.98	7.08	7.63	7.88	8.00	8.07	8.17
75°	6.23	7.27	7.78	8.07	8.30	8.46	8.60
90°	6.22	7.40	7.78	8.12	8.43	8.74	9.18
110°	6.34	7.55	8.09	8.43	8.71	8.98	9.51
120°	6.20	7.45	8.05	8.54	9.02	9.36	10.03
135°	5.54	6.91	7.73	8.22	8.76	9.36	10.86
150°	4.68	5.86	6.94	7.67	8.03	8.40	9.39
Run VMG	4.05	5.07	6.01	6.65	6.98	7.49	8.28
Gybe Angles	143.6°	146.7°	148.3°	151.0°	152.1°	176.0°	177.3°

Class Division Length

CDL = **10.572**

Storm Sails Areas

Heavy Weather Jib **37.51**
Storm Jib (JL=10.84) **13.89**
Storm Trysail **14.52**

Owner

John Murkowski
403 18th ave east
Seattle, WA 98112

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

Signature

BOAT	
Name JOY RIDE	Sail Nr 89
File US6271	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS			
Inclining Test Current Inclining			
Flotation date 17/06/2018		SG 1.0230	
FFM 1.379	FF 1.375	SFFP 0.300	
FAM 0.985	FA 0.999	SAFP 11.850	
W1 114.1	PD1 528.0	WD 13.120	
W2 114.1	PD2 528.0	GSA 63.6	
W3 114.1	PD3 528.0	RSA 7697.7	
W4 114.1	PD4 528.0	PLM 3775.0	
LCF from stem on CL / on sheer		6.725 / 6.944	
Maximum beam station from stem		7.800	
RM Measured		185.8kg-m	
RM Default		180.7kg-m	
Limit of positive stability / Stab.Index		122.1° / 125.6	
Freeboard at mast at 4.873		1.165	



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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 No		
Fiber Rigging No	Main Furler No		
Lenticular Rigging No	Without Backstay No		
Articulated Bowsprit No			
P 15.654	E 5.300	MDT1 0.126	MW 0.210
IG 16.608	J 4.574	MDL1 0.250	GO 0.227
ISP 17.601	SFJ 0.299	MDT2 0.096	BD 0.222
BAS 1.716	SPL	MDL2 0.154	MWT
FSP 0.070	TPS 6.492	TL 1.171	MCG

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MIZZEN RIG AND SAILS	
N/A	

PROPELLER		
Installation Strut	PRD 0.469	
Type Folding 2 blades	PBW 0.114	
Twin Screw No	PIPA 0.0039	
ST1 0.064	ST3 0.177	ST5 0.300
ST2 0.175	ST4 0.111	EDL 2.382

COMMENTS	

MOVABLE BALLAST	
N/A	

BILGEBOARD		
BS	BT	BA
BF	BX	
BC	BY	

SAILS (Maximum Areas)									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	0.160	1.13	2.03	3.44	4.43	49.50	50.46	P/8 · (E + 2·MQW + 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
Symmetric Not Available									
Asymmetric	SLU	SLE	SL	SHW	SFL	Area	Formula		
	20.20	16.55	18.38	10.39	10.50	159.43	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
0.08	0.66	1.27	2.54	3.81	5.10	16.54	42.19					Lt Jib 2014

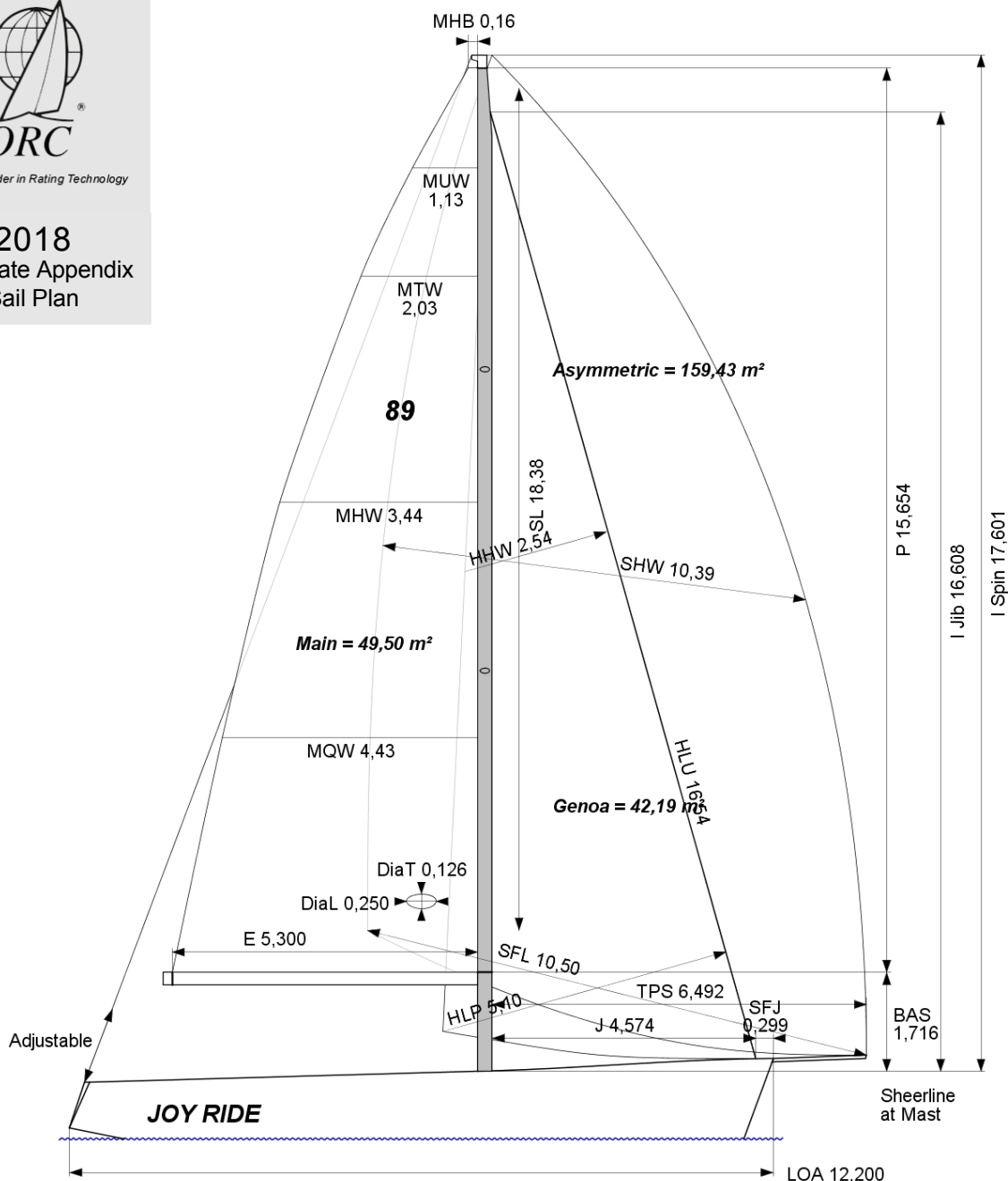
MEASUREMENT INVENTORY				
Measurer	Date	Comment		
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>
a	Anchor	0.0	0.00	
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Description</i>	

MEASUREMENT INVENTORY								
<i>Id</i>	<i>Item</i>	<i>Tank Use</i>	<i>Tank Type</i>	<i>Capcty</i>	<i>Dist.</i>	<i>VCG</i>	<i>Condtn</i>	<i>Description</i>
	Tank				8.73	0.25	120.0	
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>				



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Sail Plan



SAILS INVENTORY

MAINSAIL (1)

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
1918754	0.160	1.13	2.03	3.44	4.43	49.50			North	-	Replacement

HEADSAILS (1)

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
1664352	0.08	0.66	1.27	2.54	3.81	5.10	16.54	111%	42.19					North	SRI	Lt Jib 2014

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
1664363	20.20	16.55	18.38	10.39	10.50	159.43	asym			North	A4	