

BOAT Name JACKHAMMER Sail Nr USA 61111	GPH 567.5	HULL Length Overall 12.190m Maximum Beam 3.746m Displacement 6,356kg Draft 2.522m IMS Reg. Division Cruiser/Racer Dynamic Allowance 0.179% Fwd Accommodation No Hull Construction Cored Carbon Rudder Yes Crew Arm Extension
GENERAL Class J 121 DEEP KEEL Designer JOHNSTONE Builder CCF COMPOSITES Series 07/2017 Age 04/2018 Age Allowance 0.033% Offset File US42817.OFF - 31/05/2018 13:49:44 Measurement by - 19/05/2018		IMSL 11.681m VCGD 0.008m Sink 23.99kg/mm RL 10.780m VCGM 0.008m WS 30.83m² LSM0 11.560m Displacement/Length ratio 4.1144



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SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	549.1			617.5		
Time on Time	1.0927			1.0931		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	659.8	499.3	442.2	855.2	617.1	538.1
Time on Time	1.0230	1.3520	1.5266	0.7893	1.0938	1.2544

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	990.0	800.6	692.7	643.1	625.1	616.5	598.7
52°	650.2	535.4	477.0	456.5	449.0	445.1	438.5
60°	615.8	510.9	464.4	445.8	436.7	432.1	428.6
75°	591.4	495.1	455.9	435.8	420.6	409.9	401.2
90°	583.5	480.0	450.7	435.6	416.5	398.2	373.5
110°	573.9	471.8	435.2	412.7	397.4	383.7	358.5
120°	588.1	480.2	439.2	410.3	383.8	366.4	338.6
135°	663.3	526.0	460.1	430.1	401.0	371.4	313.7
150°	788.6	623.4	521.1	464.2	439.9	419.6	364.9
Run VMG	910.5	719.8	601.7	536.0	507.1	478.4	421.4

Certificate
Number **US6308**
ORC Ref **USAX01L73TO**
Issued On **25/09/2018**
VPP Ver. **2018 1.00**
Valid until **31/12/2018**

Crew Weight
Default **846kg**
Maximum **846kg**
Minimum* **635kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring
ToD ToT
Non Spin GPH **613.5 0.9780**
Non Spin OSN **592.7 1.0123**

Selected Courses							
Windward / Leeward	950.2	760.2	647.2	589.6	566.1	547.5	510.0
Circular Random	790.7	633.8	549.7	501.2	471.2	450.7	420.4
Coastal / Long Distance	946.3	712.9	584.2	515.0	481.3	453.5	405.0
Non Spinnaker	875.5	693.5	593.2	533.5	496.0	471.0	438.2

Sails Limitations
Headsails **6** Spinnakers **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	42.6°	41.1°	40.1°	38.2°	37.1°	36.7°	36.3°
Beat VMG	3.64	4.50	5.20	5.60	5.76	5.84	6.01
52°	5.54	6.72	7.55	7.89	8.02	8.09	8.21
60°	5.85	7.05	7.75	8.08	8.24	8.33	8.40
75°	6.09	7.27	7.90	8.26	8.56	8.78	8.97
90°	6.17	7.50	7.99	8.26	8.64	9.04	9.64
110°	6.27	7.63	8.27	8.72	9.06	9.38	10.04
120°	6.12	7.50	8.20	8.77	9.38	9.83	10.63
135°	5.43	6.84	7.82	8.37	8.98	9.69	11.48
150°	4.57	5.77	6.91	7.75	8.18	8.58	9.87
Run VMG	3.95	5.00	5.98	6.72	7.10	7.52	8.54
Gybe Angles	143.1°	146.3°	146.9°	150.5°	151.1°	174.9°	143.1°

Class Division Length
CDL = **11.231**

Storm Sails Areas
Heavy Weather Jib **33.25**
Storm Jib (JL=10.20) **12.32**
Storm Trysail **13.48**

Owner

BOAT		
Name	JACKHAMMER	Sail Nr USA 61111
File	US6308	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS					
Inclining Test Current Inclining					
Flotation date 15/05/2018				SG 1.0150	
FFM	1.268	FF	1.271	SFFP	1.000
FAM	0.929	FA	0.931	SAFP	12.144
W1	100.3	PD1	518.2	WD	11.980
W2	100.3	PD2	518.2	GSA	1.0
W3	100.3	PD3	518.2	RSA	1.0
W4	100.3	PD4	518.2	PLM	9000.0
LCF from stem on CL / on sheer				6.710 / 6.957	
Maximum beam station from stem				7.924	
RM Measured				182.6kg-m	
RM Default				170.6kg-m	
Limit of positive stability / Stab.Index				113.0° / 114.4	
Freeboard at mast at 4.795				1.109	



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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				
P	15.242	E	5.050	MDT1	0.120
IG	15.611	J	4.675	MDL1	0.232
ISP	17.001	SFJ	0.120	MDT2	0.113
BAS	1.536	SPL	0.000	MDL2	0.183
FSP	0.080	TPS	6.525	TL	1.942
				MW	0.215
				GO	0.239
				BD	0.228
				MWT	
				MCG	

MIZZEN RIG AND SAILS	
N/A	

PROPELLER			
Installation	Strut	PRD	0.428
Type	Folding 3 blades	PBW	0.140
Twin Screw		PIPA	0.0094
ST1	0.130	ST3	0.620
ST2	0.600	ST4	0.360
		ST5	0.840
		EDL	2.134

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COMMENTS

MOVABLE BALLAST	
N/A	

CENTERBOARD	
N/A	



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SAILS (Maximum Areas)									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	0.500	1.24	1.98	3.20	4.20	46.30	47.14	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	Area	Formula		
	19.00	15.30	17.15	10.60	10.60	151.49	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	1.43	2.65	3.82	4.94	15.17	39.33	Y	N			re-cut 2018 headsail

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

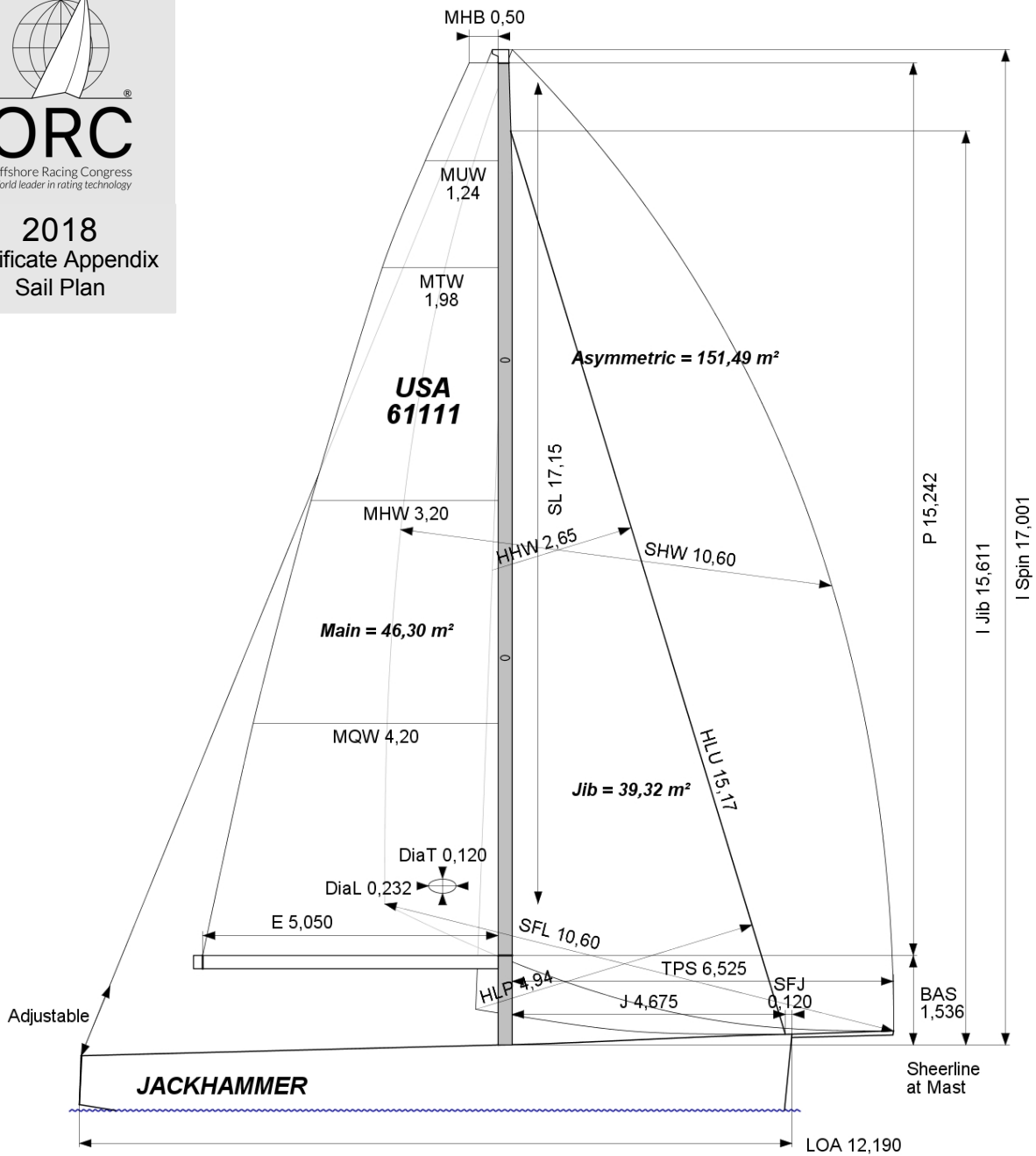
MEASUREMENT INVENTORY									
Id	Item	Tank	Use	Tank Type	Capcty	Dist.	VCG	Condtn	Description
	Tank					0.00	0.00	0-0	
Id	Item	Weight	Distance	VCG Description					



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Sail Plan



SAILS INVENTORY

MAINSAIL (1)

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
1829884	0.50	1.24	1.98	3.20	4.20	46.32			Barry Hayes		Main 2018

HEADSAILS (1)

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
2023949	0.10	0.77	1.43	2.65	3.82	4.94	15.17	106%	39.33	Y	N			Barry		re-cut 2018 headsail

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
1829902	19.00	15.30	17.15	10.60	10.60	151.50	asym			Barry Hayes		A2 2018