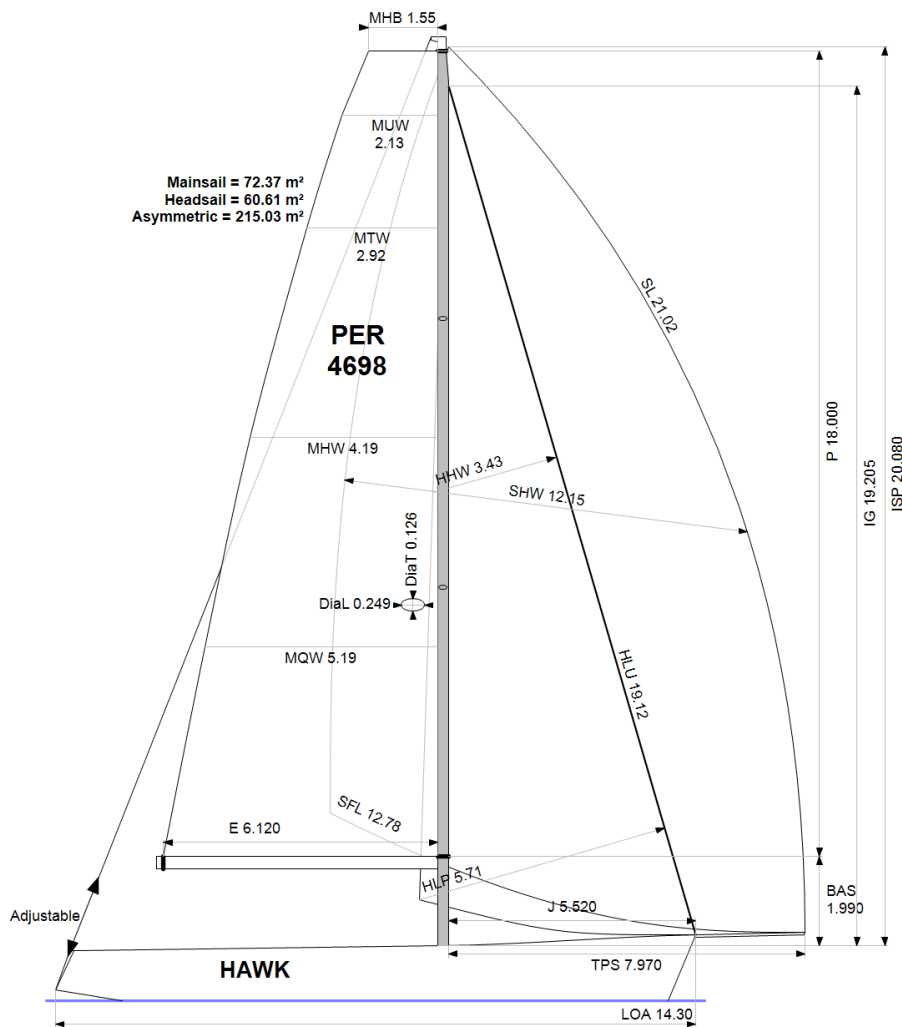


APH ToD: **462.8** CDL: **12.563**

APH ToT: **1.2965** CertNo: **PERI08**



BOAT

Class **SYDNEY 46**
Designer **MURRY/BURNS/DOVELL**
Builder **SYDNEY YACHTS, AUS**
Age date **06/1998**
Series date **06/1998**
Offset file **SYDNEY46-PER4698.off**
Data file **PER4698**

HULL

Length Overall **14.270 m**
Maximum Beam **4.054 m**
Draft **3.066 m**
Displacement **8.876 kg**
DLR **4.8275**
IMS Division **Performance**
Dynamic Allowance **0.000%**
Age Allowance **0.487%**

PROPELLER

Installation **Strut**
Type **Folding 2 blades**
Diameter **0.450m**

CREW

Maximum weight **865 kg** (declared)
Minimum weight **735 kg** *when applied
Non Manual Power **No**
Crew Arm Extension

SAIL AREAS (m²)

	Measured	Rated
Mainsail	72.37	74.16
Headsail Luffed	60.61	60.61
Headsail Flying		
Symmetric		
Asymmetric	215.03	215.03

(All asymmetric spinnakers with SHW/SFL > 85%)

STORM SAIL AREAS (m²)

Trysail **19.28**
Storm Jib **18.61**
Heavy Weather Jib **50.23**

SAIL LIMITS

Headsails **7**
Spinnakers **5**

STABILITY

Righting Moment **304.8 kg·m**
Stability Index **136.0**

COMMENTS

Modified keel and new bowsprit 07/11 modified bulb 09/15 new OFFSET

The owner and any other person in charge is responsible that boat is complying with her certificate in accordance with RRS 78.1 and ORC Rule 304.

Rated boat velocities in knots

Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt	24 kt
Beat Angles	42.3°	39.8°	37.9°	36.8°	36.6°	36.1°	35.9°	36.8°
Beat VMG	4.42	5.32	5.77	6.01	6.16	6.27	6.39	6.33
52°	6.67	7.75	8.19	8.39	8.53	8.62	8.75	8.73
60°	6.99	8.00	8.42	8.62	8.76	8.87	9.02	9.07
75°	7.21	8.14	8.61	8.90	9.10	9.25	9.49	9.62
90°	7.07	8.06	8.61	9.01	9.34	9.60	10.00	10.29
110°	6.85	8.11	8.75	9.12	9.43	9.72	10.31	11.06
120°	6.69	8.04	8.76	9.31	9.75	10.13	10.90	11.68
135°	6.01	7.53	8.43	9.06	9.70	10.41	12.10	13.60
150°	5.06	6.40	7.56	8.39	8.92	9.42	10.82	13.54
Run VMG	4.38	5.55	6.54	7.29	7.73	8.16	9.37	11.73
Gybe Angles	142.7°	145.3°	148.4°	151.6°	150.5°	148.2°	144.6°	143.9°



International
Certificate
2024

Boat
HAWK
PER 4698

Asociacion de Vela Oceánica
del Peru - AVOP
Roberto Peschiera - RO
Peschiera56@gmail.com



Time Allowances in secs/NM								
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt	24 kt
Beat VMG	813.7	677.1	623.8	599.1	584.0	573.9	563.3	568.6
52°	539.7	464.4	439.5	429.0	422.3	417.6	411.5	412.2
60°	514.8	450.1	427.7	417.8	411.0	406.0	399.2	396.8
75°	499.4	442.2	418.1	404.3	395.7	389.0	379.4	374.3
90°	509.4	446.5	418.3	399.6	385.6	375.0	359.9	350.0
110°	525.8	443.8	411.3	394.9	381.9	370.5	349.3	325.6
120°	538.1	447.9	410.9	386.6	369.2	355.4	330.2	308.2
135°	598.6	478.3	427.0	397.2	371.0	345.9	297.5	264.7
150°	711.4	562.1	476.4	429.0	403.4	382.0	332.7	265.8
Run VMG	821.4	649.1	550.2	494.0	465.7	441.1	384.2	307.0
Selected Courses								
Windward / Leeward	817.6	663.1	587.0	546.5	524.8	507.5	473.8	437.8
All purpose	631.4	524.4	476.0	450.0	433.7	420.3	396.1	374.5

Single Number Scoring Options		
Course	Time On Distance	Time On Time
Windward / Leeward	567.9	1.0564
All purpose	462.8	1.2965



Data in meters/kilograms (Metric)

HULL AND APPENDAGES (Lightship Trim)

Class	SYDNEY 46	LOA	14.270	VCGD	-0.337
Measurement	26/08/2022	Max. Beam	4.054	VCGM	-0.355
HIN		Draft	3.066	RM Rated (kg-m)	304.8
Plan review		Displacement	8,876	Limit of positive stability(°)	132.0
Hull construction	Cored	Wetted area	38.25	Stability Index	136.0
Carbon Rudder	Yes	IMS L	12.701	Default crew weight	919
Light stanchions	No	LSM0	12.250	Declared crew weight	865
Trim tab	No	Acc. length	13.175		
		Sink (kg/mm)	28.07		

PROPELLER

Propeller Type	Folding 2 blades				
Installation	Strut	PRD	0.450	EDL	1.620
Twin screw	No	PBW	0.116	ST1	0.043
Hydro generator	No	PIPA	0.0038	ST2	0.181
				ST3	0.180
				ST4	0.113
				ST5	0.270

RIG

Forestay tension	Aft	P	18.000	E	6.120
Inner stay	None Fitted	IG	19.205	J	5.520
Mast material	Carbon	ISP	20.080	BAS	1.990
Single headsail furler	No	MDT1	0.126	FSD	0.043
Mainsail furler	No	MDL1	0.249	SFJ	0.000
Articulated bowsprit	No	MDT2	0.107	SPL	
Non-circular rigging	No	MDL2	0.190	WPL	
Fiber rigging	No	TL	0.715	TPS	7.970
Adjustable mast foot	No	MW	0.211	BD	0.275
Runners/Checkstays	0	GO	0.235	MWT	
Spreaders	2			MCG	6.230
Rotating mast	No				

FLOTATION AND STABILITY

Calculation method	Poles inclining	SFFP	0.861	SAFP	13.892	W1	150.0	PD1	487.6	WD	12.740
Flotation Date	26/08/2022	FFM	1.450	FAM	1.090	W2	150.0	PD2	495.3	PLM	9000.00
		FF	1.445	FA	1.099	W3	150.0	PD3	490.9	GSA	1.0
		LCFcl	7.692	LCFsh	7.951	W4	150.0	PD4	494.1	RSA	1.0
		SG	1.0253	HBI	1.233					RM	305.9

INVENTORY

BALLAST	Id	Kind	Description	Weight	LCG	VCG	TCG
	E6,E5	Fixed	18 placas de plomo de 12kg c/u	392	6.85		
	B6,B5	Fixed	18 placas de plomo 12kg c/u	392	6.85		
	B7	Fixed	placa plomo 34x49x18cm	330	5.42	0.00	
	E7	Fixed	placa plomo 40x17x10	75	5.42	0.00	
			<i>Fixed Ballast Total</i>	1189			

TANKS	Id	Description	Sp.Wght	Capacity	Condition	LCG	VCG
	C3	PETROLEO ACERO INOX CRUJIA POPA MOTOR	0.9000	125	75	11.25	0.20
	B6	AGUA FLEXIBLE A BABOR DEBAJO PISO		150	0	6.52	0.20
	C2	TERMOTANQUE ACERO INOX		35	0	10.69	0.20
	E6	AGUA FLEXIBLE A ESTRIBOR DEBAJO PISO		150	0	6.52	0.20
			<i>Total deductible</i>			68	11.25
							0.20

OTHER ITEMS	Id	Kind	Description	Weight	LCG	VCG
	B2	Miscellaneous	BOTELLA DE GAS POPA BABOR	2	10.65	0.70
	E5	Battery	3 baterias 12 placas estribor	36	7.88	0.20
	3A	Engine	YANMAR 48hp			
			<i>Total deductible</i>	0		



MAINSAIL

<i>Id</i>	<i>MHB</i>	<i>MUW</i>	<i>MTW</i>	<i>MHW</i>	<i>MQW</i>	<i>Area</i>	<i>Meas.Date</i>	<i>Comment</i>
M1	1.55	2.13	2.92	4.19	5.19	72.37	10/05/2021	

HEADSAIL

<i>Id</i>	<i>HHB</i>	<i>HUW</i>	<i>HTW</i>	<i>HHW</i>	<i>HQW</i>	<i>HLP</i>	<i>HLU</i>	<i>Btn</i>	<i>Flying FT</i>	<i>Area</i>	<i>Meas.Date</i>	<i>Comment</i>
L/M	0.11	1.04	1.93	3.43	4.54	5.71	19.12	Yes	No	60.61	05/01/2022	USADA
M/H	0.09	1.00	1.85	3.35	4.53	5.63	19.05	Yes	No	59.39	05/01/2022	USADA
JIB	0.08	0.70	1.35	2.70	4.12	5.55	18.60	Yes	No	51.10	06/07/2022	
STAYS/	0.06	0.64	1.25	2.47	3.64	4.85	18.43	No	Inner	45.14	02/10/2013	

ASYMMETRIC SPINNAKER

<i>Id</i>	<i>SLU</i>	<i>SLE</i>	<i>SL</i>	<i>SHW</i>	<i>SFL</i>	<i>Ratio</i>	<i>Area</i>	<i>Meas.Date</i>	<i>Comment</i>
A1.5	22.63	19.41	21.02	12.15	12.78	95%	215.03	03/10/2022	
A2 MOD	22.74	18.85	20.80	12.45	12.24	102%	215.02	03/10/2022	BLANCO
A3	21.70	18.47	20.09	10.10	11.16	91%	172.60	10/05/2021	BLANCO
A5-22	20.73	17.66	19.20	7.96	9.34	85%	131.74	03/10/2022	