



ORC

Offshore Racing Congress
World leader in rating technology

**2020
ORC Club
Certificate**

Rating Office
Hellenic Sailing Federation
Offshore Committee
Επιτροπή
Ανοικτής Θαλάσσης
Ελληνικής
Ιστιοπλοϊκής Ομοσπονδίας



Certificate

Number **01290**
Issued On **13/10/2020**
ORC Ref **03420000RT4**
VPP Ver. **2020 1.02**
Valid until **28/02/2021**

Crew Weight

Default **1,077kg**
Maximum **808kg**
Minimum* **606kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Non Spin GPH	702.1	0.8546
Non Spin OSN	675.8	0.8879

Sails Limitations

Headsails **1** Spinnakers **0**
Woven Polyester

Spinnaker configuration
Symmetric: **No**
Asymmetric: **No**
Flying H/S: **No**
Spin. Pole: **No**

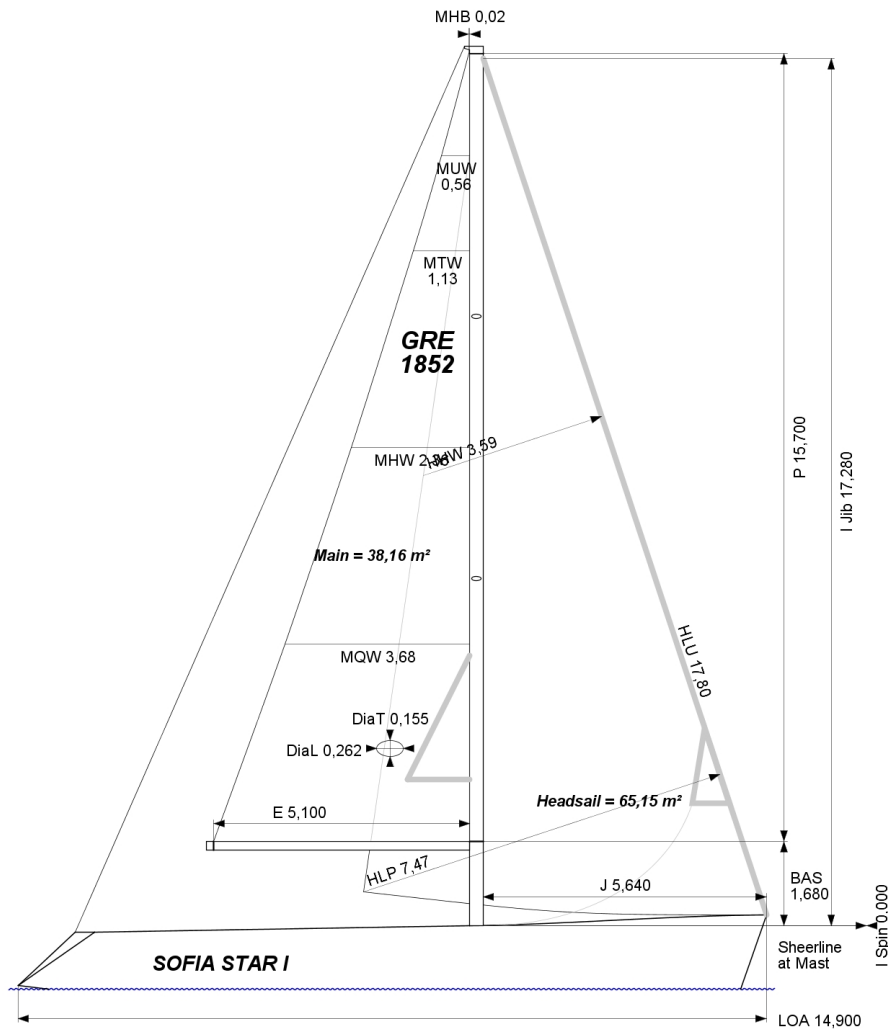
Class Division Length

CDL = 10.481

Stability (Estimated)

Limit Positive Stab.: **102.0°**
Stability Index: **110.9**

Owner



BOAT		GPH	HULL			
Name SOFIA STAR I Sail Nr GRE-1852		702.1	Data File GR1852	LOA 14.900m		
			Offset File Ocs512.off	MB 4.540m		
			Displacement 15,701kg	Draft 1.946m		
			IMS Division Cruiser/Racer	Dynamic All. 0.423%		
			Plan Review	Construction Solid		
			Fiber Rigging No	Aramid Core No		
			Crew Arm Ex	Carbon Rudder No		
				Light Stanchions No		
			IMSL 13.777m	VCGD 0.145m	Sink 37.41kg/mm	
			RL 7.183m	VCGM 0.244m	WS 48.76m²	
			LSM0 13.684m	Displacement/Length ratio 6.1276		
			Water Ballast 0	Trim Tab No		
			BLR Index 0.0000			
COMMENTS Builder's displacement.		CENTERBOARD NA				
PROPELLER Installation Shaft exposed PRD 0.480 Type Solid 3 blades PIPA 0.0287						
SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	675.8			764.2		
Time on Time	0.8879			0.8832		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	877.5	607.7	494.4	1166.0	778.0	608.4
Time on Time	0.7692	1.1108	1.3654	0.5789	0.8676	1.1094

BOAT			
Name	SOFIA STAR I	Sail Nr	GRE-1852
File	GR1852	Data in	meters/kilograms
RIG			
Forestay Tension	Fixed	Spreaders	2
Inner Stay	None Fitted	Runners/Checkstays	0
Carbon Mast	No	Jib Furler	Yes
Fiber Rigging	No	Main Furler	Yes
Non-Circular Rigging	No		
Articulated Bowsprit	No		
P	15.700	E	5.100
IG	17.280	J	5.640
ISP		SFJ	
BAS	1.680	SPL	
FSD	-3.000	TPS	
MDT1	0.155	MW	
MDL1	0.262	GO	
MDT2		BD	
MDL2		MWT	
TL	-3.000	MCG	

INCLINING TEST AND FREEBOARDS			
Inclining Test Club Estimated VCG			
Flotation date	30/04/2018	SG	1.0248
FFM	1.473	FF	1.473
FAM	1.081	FA	1.081
SFFP	0.500	SAFP	13.376
LCF from stem on CL / on sheer	8.127 / 8.446		
Maximum beam station from stem	8.340		
RM Measured	387.3kg-m		
RM Default	380.5kg-m		
Limit of positive stability / Stab.Index	102.0° / 110.9		
Freeboard at mast at 5.640	1.266		



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2020
Measurements
Datasheet

MIZZEN RIG AND SAILS			
N/A			

PROPELLER			
Installation	Shaft exposed	PRD	0.480
Type	Solid 3 blades	PBW	
Twin Screw	No	PIPA	0.0287
PSA	PHL	ST3	ESL
PSD	ST1	ST4	
PHD	ST2	ST5	

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COMMENTS			
Builder's displacement.			

MOVABLE BALLAST			
N/A			

CENTERBOARD			
N/A			

SAILS INVENTORY																
MAINSAIL (1)																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
1	0.02	0.56	1.13	2.36	3.68	38.17		27/04/2018	ELVSTROM	Dacron						
HEADSAILS (1)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Flying	Measurer	Meas.Date	Manufacture	Material	Comment
2	0.03	0.87	1.73	3.59	5.54	7.47	17.80	132%	65.15		No		27/04/2018	ELVSTROM	Dacron	
SYMMETRIC SPINNAKERS (0)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
ASYMMETRIC SPINNAKERS (0)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				

MEASUREMENT INVENTORY				
Measurer GRE-33				
Date 30/04/2018				
Comment				
Internal Ballast total = 0.0				
Id	Item	Weight	Distance	VCG Description
4	Anchor			GQR-16KGR
2	Chain			120m x 10mm
Id	Item	Maker	Model	
4	Engine	YANMAR	4JH 3HTE	
Id	Item	Weight Description		

MEASUREMENT INVENTORY						
Id	Item	Tank Use	Tank Type	Capcty	Dist.	VCG Condtn Description
5D	Tank	WATER	INOX	300.0		
5C	Tank	WATER	INOX	300.0		
5B	Tank	WATER	INOX	300.0		
5A	Tank	FUEL	INOX	460.0		FULL
Id	Item	Weight	Distance	VCG Description		
3E	Battery			2 x 180Ah (Bowthruster)		
3D	Battery			2 x 180Ah (Service)		
3C	Battery			75Ah (Engine start)		
3B	Battery			75Ah (GPS)		
6N	Misc	30.0		SATELITE ANTENNA		
6M	Misc	150.0		INOX ANTENNA STANTIONS		
6L	Misc	15.0		BOWTHRUSTER		
6K	Misc	15.0		ANCHOR WINDLASS		

2020

ORC Club Certificate Appendix

BOAT			
Name	SOFIA STAR I	Certificate Number	01290
Sail Nr	GRE-1852	Issued On	13/10/2020

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1298.8	1024.8	878.5	787.9	726.4	688.4	663.3
52°	810.5	649.5	566.2	512.7	474.9	454.8	442.2
60°	739.5	603.6	531.4	482.7	452.9	437.1	425.7
75°	691.2	571.3	504.1	460.5	437.1	423.7	408.4
90°	702.0	574.9	505.2	459.2	434.5	420.1	400.0
110°	788.3	623.0	535.1	477.6	442.6	423.1	398.5
120°	851.4	665.9	565.7	500.7	455.9	430.7	403.2
135°	988.6	756.6	629.6	551.4	496.2	456.4	417.4
150°	1171.9	885.0	721.7	619.6	551.1	500.2	436.8
Run VMG	1336.7	1003.4	810.0	687.1	604.0	544.2	462.3
Selected Courses							
Windward / Leeward	1317.8	1014.1	844.3	737.5	665.2	616.3	562.8
Circular Random	1033.6	806.5	677.6	597.6	545.4	510.3	468.5
Coastal / Long Distance	1319.6	947.7	750.0	625.8	553.1	503.7	443.5
Non Spinnaker	1033.6	806.5	677.6	597.6	545.4	510.3	468.5

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	48.0°	46.3°	45.0°	43.7°	43.5°	43.5°	43.1°
Beat VMG	2.77	3.51	4.10	4.57	4.96	5.23	5.43
52°	4.44	5.54	6.36	7.02	7.58	7.92	8.14
60°	4.87	5.96	6.77	7.46	7.95	8.24	8.46
75°	5.21	6.30	7.14	7.82	8.24	8.50	8.81
90°	5.13	6.26	7.13	7.84	8.29	8.57	9.00
110°	4.57	5.78	6.73	7.54	8.13	8.51	9.03
120°	4.23	5.41	6.36	7.19	7.90	8.36	8.93
135°	3.64	4.76	5.72	6.53	7.26	7.89	8.62
150°	3.07	4.07	4.99	5.81	6.53	7.20	8.24
Run VMG	2.69	3.59	4.44	5.24	5.96	6.61	7.79
Gybe Angles	168.0°	168.0°	168.0°	169.0°	170.0°	170.0°	172.0°