

BOAT
Name MARGARITAESTALINDALA Sail Nr ITA-6453

GPH
664,3

HULL	
Length Overall	11,982m
Maximum Beam	3,718m
Displacement	8.626kg
Draft	2,035m
IMS Reg. Division	Cruiser/Racer
Dynamic Allowance	0,370%
Fwd Accommodation	Yes
Hull Construction	Solid
Carbon Rudder	No
Crew Arm Extension	
IMSL	9,339m VCGD -0,133m Sink 19,71kg/mm
RL	7,054m VCGM -0,032m WS 28,39m²
LSM0	9,311m Displacement/Length ratio 10,6861

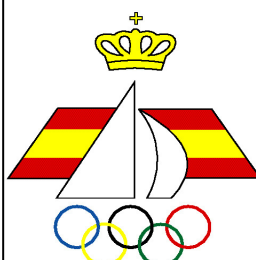


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2018
ORC International
Certificate

GENERAL
Class Proto Madera
Designer Sant Germany
Builder Sant Germany
Series 01/1972
Age 07/1973
Age Allowance 0,487%
Offset File ITA6453.off - 05/02/2015 9:29:06
Measurement by Tacha - 16/07/2010

Rating Office
R.F.E.V.
Luis de Salazar,9
28002 Madrid
crucero@rfev.es



SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	645,4			723,4		
Time on Time	0,9297			0,9331		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	761,9	587,5	530,0	977,3	727,9	637,0
Time on Time	0,8859	1,1489	1,2737	0,6907	0,9273	1,0597

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1129,5	944,3	844,3	795,0	774,3	765,5	770,0
52°	742,0	628,7	561,3	533,8	523,6	518,8	516,6
60°	705,6	596,9	539,3	517,1	506,9	502,1	498,8
75°	679,5	573,7	524,5	504,2	491,8	483,0	474,4
90°	685,9	577,6	522,9	500,8	485,7	473,7	455,1
110°	679,3	556,9	507,1	484,4	470,3	461,5	446,9
120°	694,1	568,3	510,7	484,7	464,3	447,3	431,0
135°	754,9	617,2	534,1	499,0	476,4	455,4	420,7
150°	883,6	705,5	597,9	530,4	499,2	478,3	440,2
Run VMG	1020,3	814,7	690,3	605,8	549,1	510,6	468,8

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Number 645301
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VPP Ver. 2018 1.00
Valid until 31/12/2018

Selected Courses							
Windward / Leeward	1074,9	879,5	767,3	700,4	661,7	638,1	619,4
Circular Random	913,7	738,0	644,2	590,6	558,8	539,3	518,3
Coastal / Long Distance	1069,5	826,0	689,3	609,3	567,8	536,8	491,4
Non Spinnaker	978,9	784,3	678,6	616,7	579,0	555,3	528,7

Crew Weight	
Default	622kg
Maximum	640kg
Minimum*	480kg
*when applied by the NoR and SI	
Non Manual Pwr	No

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	43,3°	41,5°	42,0°	42,6°	42,2°	42,1°	43,0°
Beat VMG	3,19	3,81	4,26	4,53	4,65	4,70	4,68
52°	4,85	5,73	6,41	6,74	6,88	6,94	6,97
60°	5,10	6,03	6,68	6,96	7,10	7,17	7,22
75°	5,30	6,28	6,86	7,14	7,32	7,45	7,59
90°	5,25	6,23	6,88	7,19	7,41	7,60	7,91
110°	5,30	6,46	7,10	7,43	7,66	7,80	8,06
120°	5,19	6,33	7,05	7,43	7,75	8,05	8,35
135°	4,77	5,83	6,74	7,21	7,56	7,91	8,56
150°	4,07	5,10	6,02	6,79	7,21	7,53	8,18
Run VMG	3,53	4,42	5,22	5,94	6,56	7,05	7,68
Gybe Angles	146,6°	150,7°	150,2°	155,9°	173,4°	180,0°	180,0°

Special Scoring	
ToD	ToT
Double H.GPH 668,1	0,8981
Double H.OSN 650,9	0,9218
Non Spin GPH 700,5	0,8565
Non Spin OSN 679,4	0,8832

Sails Limitations	
Headsails	Spinnakers
1	3
Dacron Sails	

Class Division Length
CDL = 8,197

Storm Sails Areas	
Heavy Weather Jib	37,07
Storm Jib (JL=10,77)	13,73
Storm Trysail	10,14

Owner

BOAT	
Name MARGARITAESTALIN	Sail Nr ITA-6453
File ITA6453	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS			
Inclining Test Current Inclining			
Flotation date 15/07/2010		SG 1,0260	
FFM 1,314	FF 1,357	SFFP 0,800	
FAM 0,995	FA 0,975	SAFP 11,670	
W1 70,8	PD1 472,3	WD 12,400	
W2 70,8	PD2 480,3	GSA 1,0	
W3 70,8	PD3 481,1	RSA 1,0	
W4 70,8	PD4 478,5	PLM 9000,0	
LCF from stem on CL / on sheer		6,751 / 6,983	
Maximum beam station from stem		7,320	
RM Measured		144,6kg·m	
RM Default		138,3kg·m	
Limit of positive stability / Stab.Index		120,6° / 126,2	
Freeboard at mast at 5,230		1,148	



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IMS Measurement Certificate

RIG			
Forestay Tension Aft	Spreaders 1		
Inner Stay None Fitted	Runners 0		
Carbon Mast No	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 15,250	E 3,800	MDT1 0,160	MW 0,220
IG 16,570	J 5,230	MDL1 0,260	GO 0,220
ISP 16,570	SFJ	MDT2 0,160	BD 0,130
BAS 1,320	SPL 5,230	MDL2 0,220	MWT
FSP 0,072	TPS	TL 1,200	MCG

Certificate

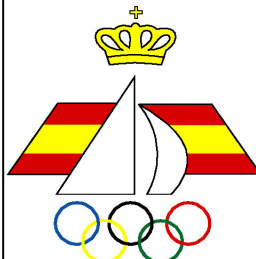
Number **645301**

ORC Ref **ESP00027851**

Issued On **16/02/2018**

VPP Ver. **2018 1.00**

Valid until **31/12/2018**



MIZZEN RIG AND SAILS	
N/A	

PROPELLER			
Installation Shaft exposed	PRD 0,440		
Type Solid 3 blades	PBW		
Twin Screw No	PIPA 0,0279		
PSA 23,690	PHL 0,105	ST3 0,092	ESL 0,980
PSD 0,035	ST1 0,035	ST4 0,078	
PHD 0,140	ST2 0,092	ST5 0,195	

COMMENTS	

MOVABLE BALLAST	
N/A	

CENTERBOARD	
N/A	

SAILS (Maximum Areas)									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	0,195	0,00	1,33	2,30	3,08	33,74	34,03	P/8 · (E + 2·MQW + 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
Symmetric	SLU	SLE	SL	SHW	SFL				
	16,52	16,52	16,52	9,42	9,36	129,52		SL · (SFL + 4·SHW) / 6	
Asymmetric	Not Available								

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
0,09	0,76	1,48	3,03	4,77	6,78		55,56				Unknow	

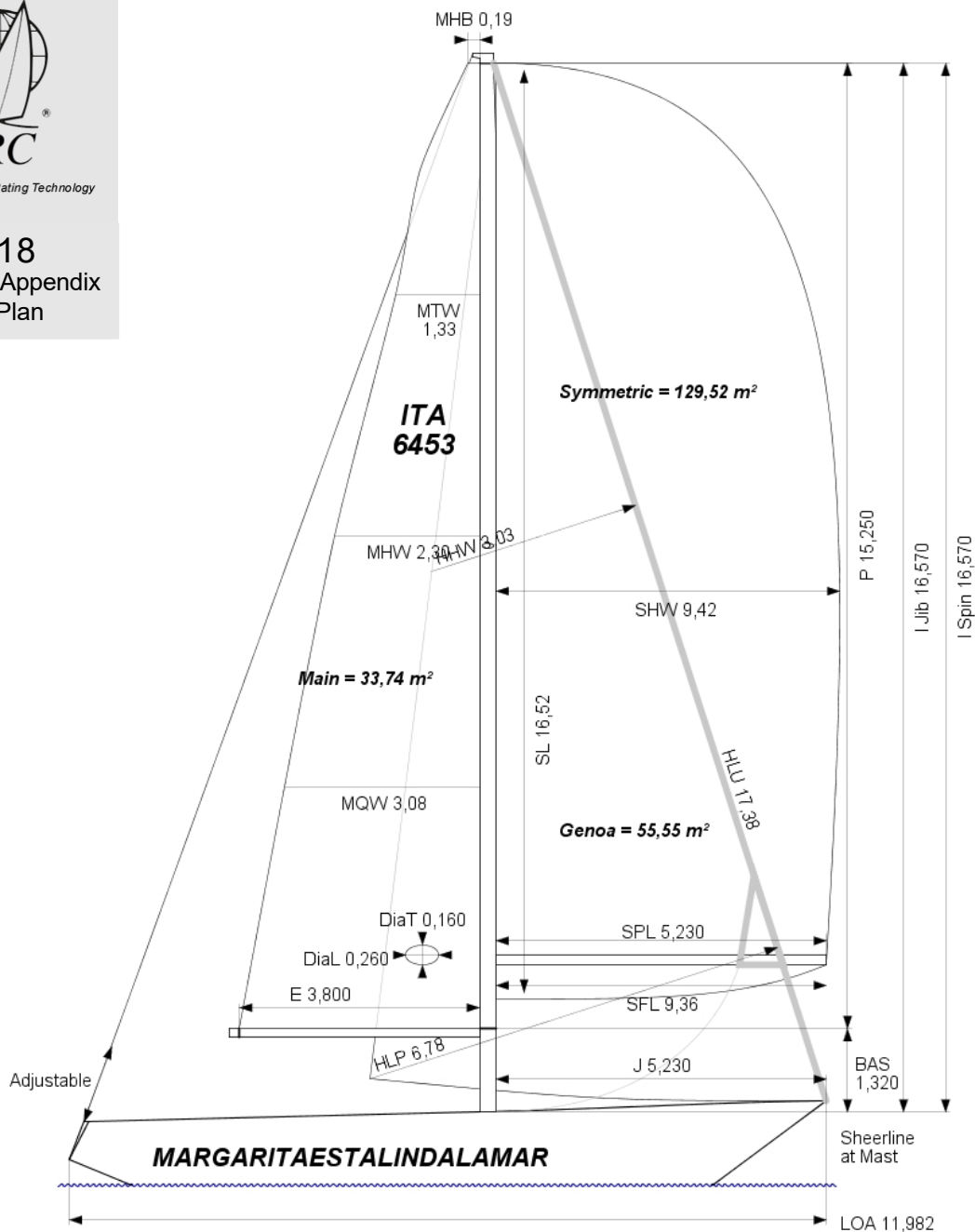
MEASUREMENT INVENTORY				
Measurer Tacha Montaner ESP-222				
Date 15/07/2010				
Comment				
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>
4	Anchor	80,0	4,30	ANCLA+
4	Tools	10,0	5,30	Caja-
<i>Id</i>	<i>Item</i>	<i>Maker</i>	<i>Model</i>	
1	Engine			
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Description</i>	
4	Deck-Gear	20,0	a-pie-de-pate	

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>
1	Tank	gasoil			6,58			70,0
1	Tank	H2O			6,58			0,0
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>				
2	Battery		6,58	2 batt				
1	Misc		1,30	Molinete				



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Certificate Appendix
Sail Plan



SAILS INVENTORY

MAINSAIL (1)

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
1	0,195		1,33	2,30	3,08	33,55	Eva	27/09/2011		Dacron	

HEADSAILS (1)

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
2	0,09	0,76	1,48	3,03	4,77	6,78		130%	55,56							Unknow

SYMMETRIC SPINNAKERS (1)

Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment
S1	16,52	16,52	16,52	9,42	9,36	129,52	Eva	11/01/2011		Unknown	

ASYMMETRIC SPINNAKERS (0)

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