



World Leader in Rating Technology

2016 ORC Club Certificate

Rating Office

**PATRICIO D. GUTIERREZ
C. GRIERSON Y
COSTANERASUR
Y.C.A**



Certificate

Number **199601**
Issued On **10/03/2016**
ORC Ref **ARG00002102**
VPP Ver. **2016 1.01**
Valid until **31/12/2016**

Crew Weight

Declared	580kg
Default*	799kg
Non Manual Pwr	No

Special Scoring

	ToD	ToT
Non Spin GPH	657,3	0,9128
Non Spin OSN	639,7	0,9379
N/S Perf. Line	-6,8	0,571

Sails Limitations

Headsails **6** Spinnakers **3**
Dacron Sails

Spinnaker configuration
Symmetric: **Yes** **116,40**
Asymmetric: **No**
Flying H/S: **No**
Spin. Pole: **Yes**

Class Division Length

CDL = **9,600**

Stability

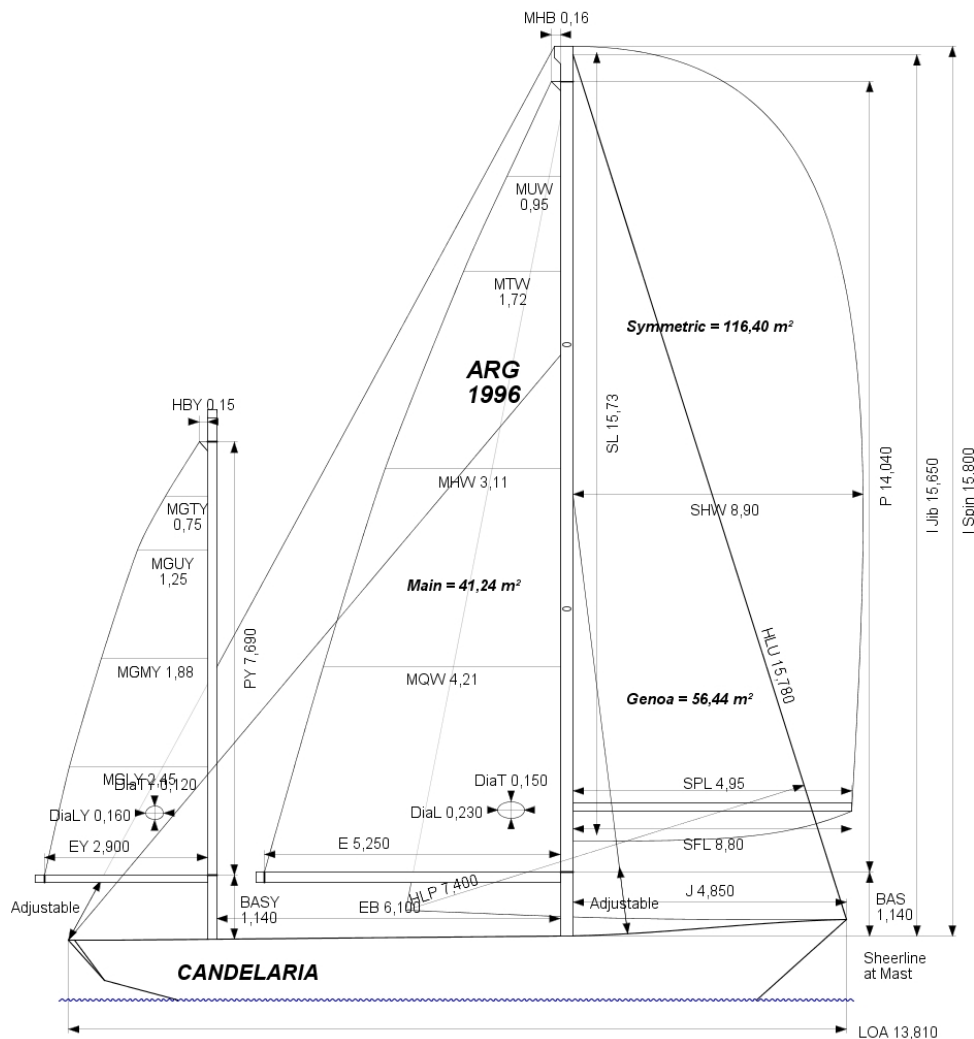
LPS (Estimated): **115,1°**
Stability Index: **124,4**
OSR Category: **N/A**

Owner

**R. FISCH / P. MENSA
E. DIAZ 102
SAN ISIDRO**

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

Signature



BOAT		GPH		HULL			
Name	CANDELARIA	635,0	Data File	ARG1996.dxt	LOA	13,810m	
Sail Nr	ARG-1996		Offset File	CASCABEL.OFF	MB	3,760m	
			Displacement	13.031kg	Draft	3,081m	
CLASS			IMS Division	Cruiser/Racer	Dynamic All.	0,440%	
Class	HOSSMANN 45		Fwd Accom.	Yes	Construction	Solid	
Designer	ROBERTO HOSSMANN		Fiber Rigging	No	Aramid Core	No	
Builder	AST. REGGE		Crew Arm Ex		Carbon Rudder	No	
Series	12/1981				Light Stanchions		
Age Date	12/1981		IMSL	11,146m	VCGD	-0,229m Sink 26,13kg/mm	
Age Allowance	0,487%		RL	8,052m	VCGM	0,008m WS 36,71m²	
COMMENTS			LSM0	11,098m	Displacement/Length ratio 9,533%		
			Water Ballast	0	Trim Tab	No	
PROPELLER			CENTERBOARD				
Installation	Shaft exposed	PRD	ECM	1,530	CBDA	0,800 CBRC 1,270	
Type	Folding 2 blades	PBW	KCDA	0,580	WCBB	CBMC 1,100	
		PIPA	WCBA	100,0	CBDB	CBTC 0,270	

	OFFSHORE COASTAL / LONG DISTANCE			INSHORE WINDWARD / LEEWARD		
	PLT	PLD		PLT	PLD	
Time On Distance	615,9			692,8		
Time On Time	0,9742			0,9743		
Performance Line	0,622	12,0		0,730	135,1	
Triple Number	Low 0,9041	Medium 1,2082	High 1,3924	Low 0,6944	Medium 0,9591	High 1,1569



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ORC Club Certificate Appendix

BOAT

Name **CANDELARIA**
Sail Nr **ARG-1996**

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TIME ALLOWANCES

Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1142,1	934,9	822,0	744,1	696,9	669,9	644,9
52°	735,5	615,8	539,9	494,8	473,8	464,2	456,3
60°	689,0	580,9	510,5	477,3	460,5	450,7	443,4
75°	651,2	549,2	490,2	464,3	447,6	435,1	424,4
90°	649,3	538,4	481,4	458,4	443,7	431,1	410,7
110°	643,1	530,8	476,3	453,0	437,3	429,5	416,3
120°	662,5	548,7	484,9	458,4	440,8	424,4	405,9
135°	734,8	603,3	518,8	476,0	454,8	438,7	407,5
150°	871,8	696,7	594,8	522,2	480,8	459,6	430,1
Run VMG	1006,7	804,5	686,8	602,0	546,9	507,9	459,7

Selected Courses

Windward / Leeward	1074,4	869,7	754,4	673,1	621,9	588,9	552,3
Circular Random	890,2	712,9	615,5	557,1	520,3	496,1	466,7
Ocean for PCS	1094,9	839,6	693,2	602,0	542,5	501,8	449,5
Non Spinnaker	927,5	740,6	637,0	574,1	533,7	506,9	474,3

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	44,6°	42,5°	41,9°	42,6°	41,8°	40,3°	39,0°
Beat VMG	3,15	3,85	4,38	4,84	5,17	5,37	5,58
52°	4,89	5,85	6,67	7,28	7,60	7,76	7,89
60°	5,23	6,20	7,05	7,54	7,82	7,99	8,12
75°	5,53	6,55	7,34	7,75	8,04	8,27	8,48
90°	5,54	6,69	7,48	7,85	8,11	8,35	8,77
110°	5,60	6,78	7,56	7,95	8,23	8,38	8,65
120°	5,43	6,56	7,42	7,85	8,17	8,48	8,87
135°	4,90	5,97	6,94	7,56	7,92	8,21	8,83
150°	4,13	5,17	6,05	6,89	7,49	7,83	8,37
Run VMG	3,58	4,47	5,24	5,98	6,58	7,09	7,83
Gybe Angles	144,1°	148,7°	149,5°	151,1°	156,9°	166,5°	179,7°