



Rating Office
TRICIO D. GUTIERREZ
C. GRIERSON Y
COSTANERASUR
Y C A



Number **456301**
Issued On **22/09/2017**
ORC Ref **ARG00005342**
VPP Ver. **2017 1.00**
Valid until **31/12/2017**

Declared	570kg
Default*	566kg
Non Manual Pwr	No

	ToD	ToT
Non Spin GPH	681,5	0,8804
Non Spin OSN	663.3	0.9045

Headsails **5** Spinnakers **3**

Symmetric:	Yes	80,60
Asymmetric:	No	
Flying H/S:	No	
Spin, Pole:	Yes	

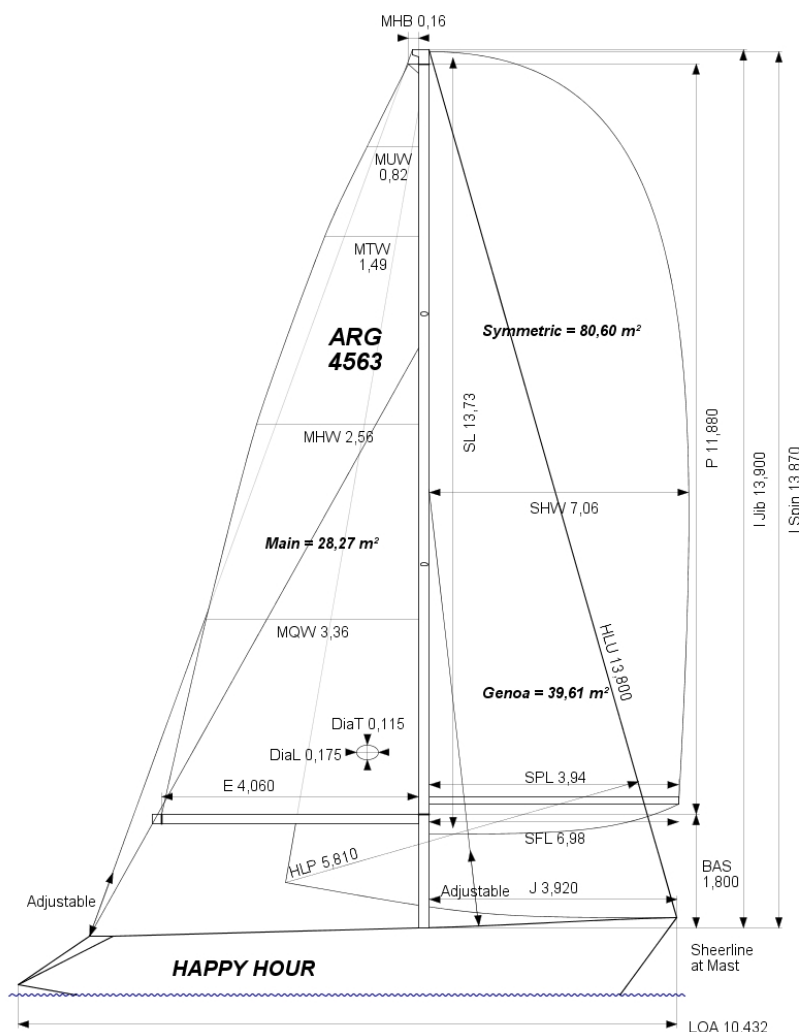
CDL = 8,201

Limit Positive Stab.: **114,0°**
Stability Index: **112,5**

VICENTE RAGOGNETTI
BUENOS AIRES

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

Signature _____



BOAT Name HAPPY HOUR Sail Nr ARG-4563		GPH 656,7		HULL Data File ARG4563 LOA 10,432m Offset File ARG4563NH.off MB 3,514m Displacement 4.793kg Draft 1,773m	
CLASS Class PANDORA34 Designer N. VOLKER Builder AST. MARCO Series 03/1992 Age Date 03/1992 Age Allowance 0,487%		IMS Division Cruiser/Racer Dynamic All. 0,054% Fwd Accom. Yes Construction Solid Fiber Rigging No Aramid Core No Crew Arm Ex Carbon Rudder No Light Stanchions		IMSL 8,857m VCGD 0,104m Sink 16,33kg/mm RL 7,543m VCGM 0,024m WS 22,25m	
COMMENTS 		LSM0 8,718m Displacement/Length ratio 7,2336		Water Ballast 0 Trim Tab No	
PROPELLER Installation Strut PRD 0,432 Type Folding 2 blades PBW 0,105 PIPA 0,0029		CENTERBOARD N/A			

	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time On Distance	639,8			713,0		
Time On Time	0,9378			0,9467		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	748,7	583,3	519,8	968,0	718,7	620,8
Time on Time	0,9016	1,1573	1,2985	0,6973	0,9392	1,0873

BOAT Name HAPPY HOUR Sail Nr ARG-4563 File ARG4563 Data in meters/kilograms		INCLINING TEST AND FREEBOARDS Inclining Test Club Estimated VCG Flotation date 31/08/2017 SG 1,0000 FFM 1,197 FF 1,205 SFFP 0,878 FAM 0,923 FA 0,931 SAFF 8,922 LCF from stem on CL / on sheer 5,711 / 5,970 Maximum beam station from stem 6,268 RM Measured 99,6kg-m RM Default 96,7kg-m Limit of positive stability / Stab.Index 114,0° / 112,5 Freeboard at mast at 3,920 1,054	
RIG Forestay Tension Aft Spreaders 2 Inner Stay Adjustable Runners 1 Carbon Mast No Jumper Struts None Taper Hollows No Jib Furler No Fiber Rigging No Main Furler No Lenticular Rigging No Without Backstay No Articulated Bowsprit No P 11,880 E 4,060 MDT1 0,115 MW 0,175 IG 13,900 J 3,920 MDL1 0,175 GO 0,185 ISP 13,870 SFJ 0,000 MDT2 0,115 BD 0,142 BAS 1,800 SPL 3,940 MDL2 0,175 MWT FSP 0,070 TPS TL 0,000 MCG		PROPELLER Installation Strut PRD 0,432 Type Folding 2 blades PBW 0,105 Twin Screw No PIPA 0,0029 ST1 0,045 ST3 0,170 ST5 0,280 ST2 0,170 ST4 0,095 EDL 2,050	
MIZZEN RIG AND SAILS N/A		MOVEABLE BALLAST N/A	
COMMENTS 		CENTERBOARD N/A	

SAILS INVENTORY																
MAINSAIL (1)																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
M2	0,160	0,82	1,49	2,56	3,36	28,27	JCM	31/08/2017	NORTH	Kevlar						
HEADSAILS (4)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
G1m	0,08	0,73	1,42	2,82	4,29	5,81	13,80	148%	39,61			JCM	31/08/2017	NORTH	Kevlar	NUEVO
G1	0,08	0,70	1,37	2,74	4,15	5,66	13,74	144%	38,26			PG	10/01/2014	NORTH	Kevlar	
G2	0,10	0,66	1,25	2,57	3,93	5,40	13,30	138%	34,99				15/08/2012	NORTH	Kevlar	
G3	0,08	0,50	0,95	1,88	2,87	3,88	13,98	99%	26,85				09/03/2012	NORTH	Kevlar	
SYMMETRIC SPINNAKERS (3)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
S1,5	13,73	13,73	13,73	7,06	6,98	80,60		03/07/2013	NORTH	Nylon						
S1	13,63	13,63	13,63	7,05	6,94	79,83	EC	27/10/2011	NORTH	Nylon	* Copied from legacy *					
S5	13,68	13,68	13,68	6,54	6,72	74,97		19/03/2012	NORTH	Nylon						
ASYMMETRIC SPINNAKERS (0)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				



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Measurements

Datasheet



MEASUREMENT INVENTORY									
Measurer JC MACULAN JCM Date 31/08/2017 Comment									
Id	Item	Weight	Distance	VCG	Description				
Id	Item	Maker	Model						
C5	Engine	VOLVO	28 HP						
Id	Item	Weight	Distance	VCG	Description				
C4	Tank	GAS OIL	INOX	60,0	7,92	0,00	40,0		
B6	Tank	AGUA	INOX	100,0	5,00	0,00	0,0		
Id	Item	Weight	Distance	VCG	Description				
C6	Ballast	148,0	5,50	-0,30	16 PANES DE PLOMO				
B4	Battery	32,0	8,15	0,00	2 X 12 V - 75 AMP				



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ORC Club Certificate Appendix

BOAT

Name **HAPPY HOUR**
Sail Nr **ARG-4563**

Certificate Number **456301**
Issued On **22/09/2017**

TIME ALLOWANCES

Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1093,7	919,6	821,4	768,8	742,1	727,9	720,2
52°	712,7	603,1	549,9	528,5	519,0	513,7	509,4
60°	671,5	572,0	533,0	514,6	503,9	497,8	492,5
75°	637,4	551,3	520,3	501,7	486,6	474,2	462,7
90°	637,4	549,7	517,4	498,5	481,8	465,7	441,6
110°	678,1	561,1	516,7	491,2	467,6	451,0	433,4
120°	697,6	574,2	522,5	496,3	472,2	449,0	417,1
135°	766,1	624,9	546,1	512,3	488,9	465,7	423,5
150°	896,5	713,3	606,2	542,0	511,8	489,9	447,5
Run VMG	1035,2	823,6	698,4	614,5	555,5	520,4	477,3

Selected Courses

Windward / Leeward	1064,4	871,6	759,9	691,7	648,8	624,2	598,7
Circular Random	900,2	729,1	637,5	584,3	551,5	530,0	503,3
Ocean for PCS	1103,0	855,3	715,7	630,1	574,3	535,3	480,9
Non Spinnaker	944,1	760,3	661,0	602,6	566,4	542,6	512,6

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	43,7°	43,0°	43,0°	41,5°	40,3°	39,5°	39,4°
Beat VMG	3,29	3,91	4,38	4,68	4,85	4,95	5,00
52°	5,05	5,97	6,55	6,81	6,94	7,01	7,07
60°	5,36	6,29	6,75	7,00	7,14	7,23	7,31
75°	5,65	6,53	6,92	7,18	7,40	7,59	7,78
90°	5,65	6,55	6,96	7,22	7,47	7,73	8,15
110°	5,31	6,42	6,97	7,33	7,70	7,98	8,31
120°	5,16	6,27	6,89	7,25	7,62	8,02	8,63
135°	4,70	5,76	6,59	7,03	7,36	7,73	8,50
150°	4,02	5,05	5,94	6,64	7,03	7,35	8,04
Run VMG	3,48	4,37	5,15	5,86	6,48	6,92	7,54
Gybe Angles	146,6°	150,8°	152,1°	158,4°	180,0°	180,0°	180,0°