

BOAT Name BANZAI Sail Nr ARG-4056	GPH 653,6	HULL Length Overall 9,500m Maximum Beam 3,290m Displacement 3.814kg Draft 1,922m IMS Reg. Division Cruiser/Racer Dynamic Allowance 0,099% Fwd Accommodation Yes Hull Construction Solid Carbon Rudder No Crew Arm Extension
GENERAL Class PANDORA 31 Designer GERMAN FRERS Builder AST. MARCO Series 06/1994 Age 06/1994 Age Allowance 0,487% Offset File ARG4056.OFF - 08/09/2011 02:33:04 Measurement by JC MACULAN - 06/11/2014		IMSL 8,833m VCGD 0,058m Sink 14,67kg/mm RL 7,890m VCGM 0,086m WS 19,79m² LSMO 8,780m Displacement/Length ratio 5,6350



2016
ORC International
Certificate

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



	OFFSHORE COASTAL / LONG DISTANCE			INSHORE WINDWARD / LEEWARD		
	PLT	PLD		PLT	PLD	
Time On Distance	636,0			707,5		
Time On Time	0,9434			0,9541		
Performance Line	0,650	44,6		0,814	208,3	
Triple Number	Low 0,9014	Medium 1,1652	High 1,3111	Low 0,6951	Medium 0,9480	High 1,1002

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1088,2	907,1	802,6	751,7	727,9	714,9	706,1
52°	710,9	598,5	545,2	525,1	516,9	512,4	508,8
60°	669,3	569,1	529,3	511,4	502,4	497,3	493,0
75°	635,2	548,8	517,3	497,9	482,4	471,5	463,1
90°	639,4	551,2	517,1	498,3	479,5	461,5	437,4
110°	670,6	557,5	515,3	488,5	462,8	448,2	426,8
120°	694,0	572,0	522,3	495,4	469,3	442,7	408,7
135°	770,7	627,4	548,1	513,8	489,1	463,6	413,6
150°	913,5	722,2	610,7	544,3	513,2	489,9	442,4
Run VMG	1054,8	834,0	703,6	616,3	555,8	520,8	474,7

Certificate
Number **405601**
ORC Ref **ARG00002101**
Issued On **10/03/2016**
VPP Ver. **2016 1.01**
Valid until **31/12/2016**

Crew Weight
Declared **520kg**
Default* **572kg**
Non Manual Pwr **No**

Special Scoring
ToD ToT
Non Spin GPH **677,4 0,8857**
Non Spin OSN **658,0 0,9119**
N/S Perf. Line **25,2 0,598**

Selected Courses							
Windward / Leeward	1071,5	870,6	753,1	684,0	641,9	617,8	590,4
Circular Random	899,4	726,8	634,2	580,4	547,1	525,1	496,9
Ocean for PCS	1105,1	853,7	712,2	625,8	569,7	530,5	475,9
Non Spinnaker	942,1	756,9	656,7	597,9	561,5	537,4	506,2

Sails Limitations
Headsails **6** | Spinnakers **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	43,2°	42,1°	41,7°	39,7°	38,5°	38,0°	37,8°
Beat VMG	3,31	3,97	4,49	4,79	4,95	5,04	5,10
52°	5,06	6,02	6,60	6,86	6,96	7,03	7,08
60°	5,38	6,33	6,80	7,04	7,17	7,24	7,30
75°	5,67	6,56	6,96	7,23	7,46	7,63	7,77
90°	5,63	6,53	6,96	7,22	7,51	7,80	8,23
110°	5,37	6,46	6,99	7,37	7,78	8,03	8,44
120°	5,19	6,29	6,89	7,27	7,67	8,13	8,81
135°	4,67	5,74	6,57	7,01	7,36	7,76	8,70
150°	3,94	4,98	5,89	6,61	7,01	7,35	8,14
Run VMG	3,41	4,32	5,12	5,84	6,48	6,91	7,58
Gybe Angles	146,0°	150,8°	152,2°	159,5°	180,0°	180,0°	180,0°

Class Division Length
CDL = **8,362**

Storm Sails Areas
Heavy Weather Jib **19,05**
Storm Jib (JL=7,72) **7,06**
Storm Trysail **8,98**

Owner
ESCALANTE


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

Signature

BOAT	
Name BANZA	Sail Nr ARG-4056
File BANZA.dxt	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS		
Inclining Test Boom Inclining		
Flotation date 06/11/2014	SG 1,000	
FFM 1,204	FF 1,212	SFFP 0,170
FAM 0,939	FA 0,944	SAFP 8,749
W1 61,900	PD1 639,7	WD 8,520
W2 61,900	PD2 640,4	GSA 1,0
W3 61,900	PD3 645,9	RSA 1,0
W4 61,900	PD4 643,2	PLM 9000,0
LCF from stem on CL / on sheer		5,306 / 5,538
Maximum beam station from stem		5,989
RM Measured		64,7kg·m
RM Default		76,5kg·m
Limit of positive stability / Stab.Index		113,9° / 111,5
Freeboard at mast at 3,470		1,038


RIG			
Forestay Tension Aft	Spreaders 2		
Inner Stay None Fitted	Runners 1		
Carbon Mast No	Jumper Struts None		
Taper Hollows No	Jib Furler No		
Fiber Rigging No	Main Furler No		
Lenticular Rigging	Without Backstay No		
Articulated Bowsprit No			
P 11,940	E 4,300	MDT1 0,104	MW 0,155
IG 11,880	J 3,470	MDL1 0,155	GO 0,155
ISP 12,000	SFJ 0,000	MDT2 0,104	BD 0,140
BAS 1,620	SPL 3,530	MDL2 0,110	MWT
FSP 0,060	TPS	TL 1,000	MCG



2016
IMS Measurement
Certificate

World Leader in Rating Technology

Number **405601**
ORC Ref **ARG00002101**
Issued On **10/03/2016**
VPP Ver. **2016 1.01**
Valid until **31/12/2016**



MIZZEN RIG AND SAILS	
N/A	

PROPELLER		
Installation Strut	PRD 0,405	
Type Folding 2 blades	PBW 0,100	
Twin Screw No	PIPA 0,0032	
ST1 0,042	ST3 0,180	ST5 0,270
ST2 0,180	ST4 0,112	EDL 2,000

COMMENTS	

MOVEABLE BALLAST	
N/A	

CENTERBOARD	
N/A	

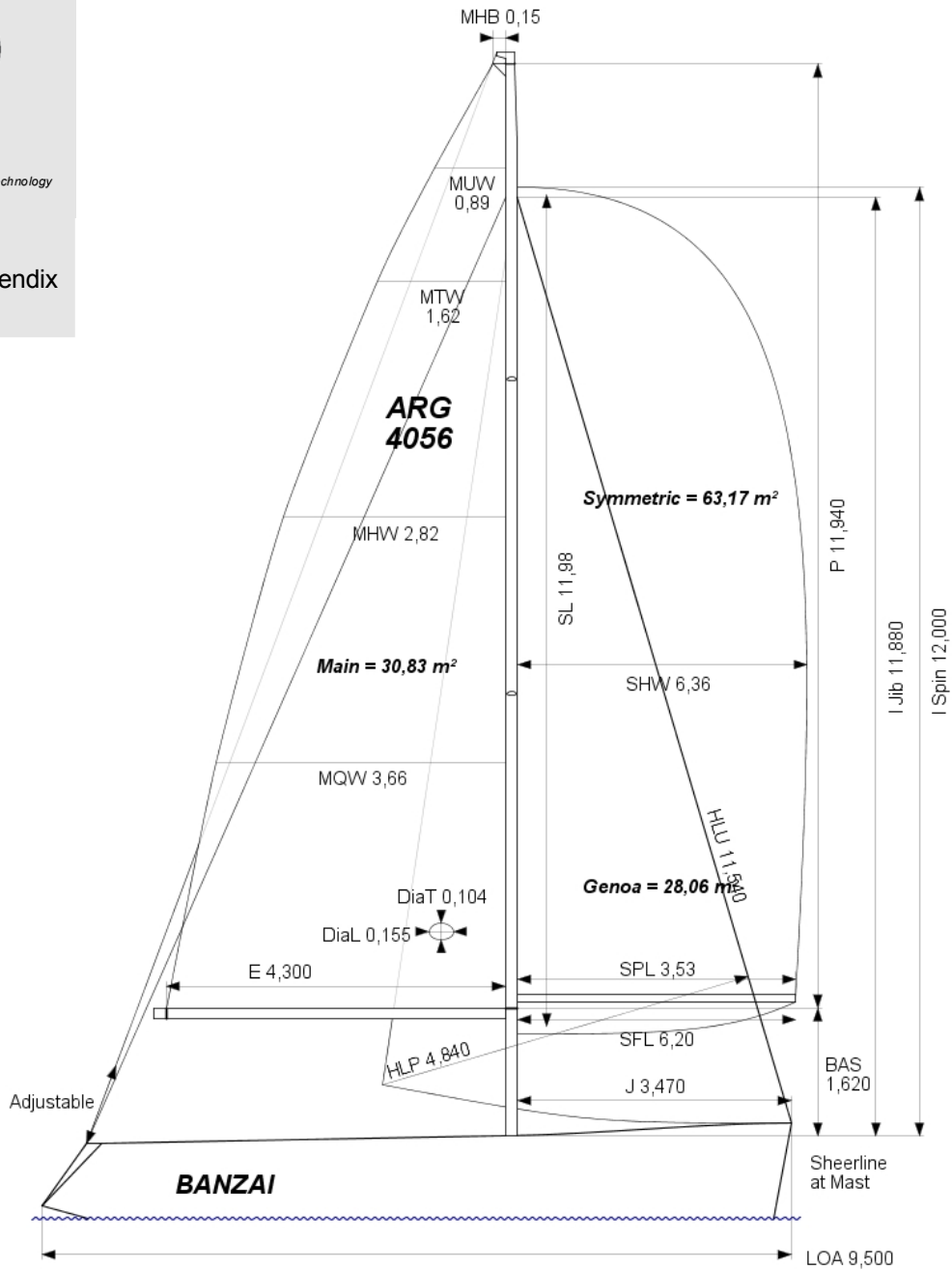
SAILS (Maximum Areas)									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	0,150	0,89	1,62	2,82	3,66	30,83	31,51	P/8 · (E + 2·MQW+ 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
Symmetric	SLU	SLE	SL	SHW	SFL				
	11,98	11,98	11,98	6,36	6,20	63,17		SL · (SFL + 4·SHW) / 6	
Asymmetric									
Not Available									

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
0,07	0,63	1,21	2,42	3,65	4,84	11,54	28,06			07/11/2014	Kevlar	
					3,64	11,67	21,62					* Copied from legacy *



World Leader in Rating Technology

2016
Certificate Appendix
Sail Plan



SAILS INVENTORY

MAINSAIL

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
M2	0,150	0,89	1,62	2,82	3,66	30,83	NP	07/11/2014	NORTH	Kevlar	

HEADSAILS

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
G1 M	0,07	0,63	1,21	2,42	3,65	4,84	11,54	139%	28,06			NP	07/11/2014	NORTH	Kevlar	
G3						3,64	11,67	105%	21,62							* Copied from legacy *

SYMMETRIC SPINNAKERS

Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment
S2	11,98	11,98	11,98	6,36	6,20	63,17	NP	07/11/2014	NORTH	Nylon	* Copied from legacy *

ASYMMETRIC SPINNAKERS

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