



World Leader in Rating Technology

2017 ORC Club Certificate

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

Certificate
 Number **001104**
 Issued On **16/4/2017**
 ORC Ref **GRE01007204**
 VPP Ver. **2017 1.00**
 Valid until **28/2/2018**

Crew Weight
 Declared **658kg**
 Default* **658kg**
 Non Manual Pwr **No**

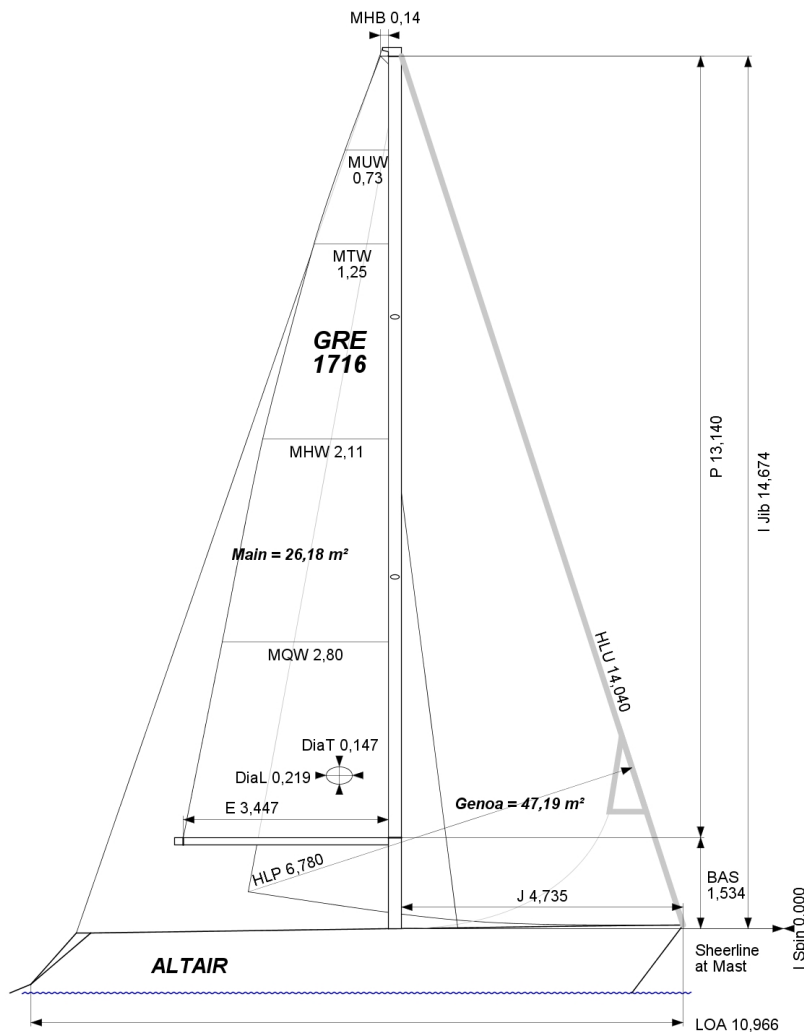
Special Scoring
 ToD ToT
 Non Spin GPH **735,3 0,8160**
 Non Spin OSN **710,8 0,8441**

Sails Limitations
 Headsails **1** Spinnakers **0**
Dacron Sails
 Spinnaker configuration
 Symmetric: **No**
 Asymmetric: **No**
 Flying H/S: **No**
 Spin. Pole: **No**

Class Division Length
 CDL = **7,880**

Stability (Estimated)
 Limit Positive Stab.: **117,8°**
 Stability Index: **121,0**

Owner



BOAT Name ALTAIR Sail Nr GRE-1716		GPH 735,3	HULL Data File GR1716 LOA 10,966m Offset File G1072.BOF MB 3,840m Displacement 7.930kg Draft 1,989m			
CLASS Class JOUET 37 Designer TORTAROLO Builder YACHTIING FRANCE Series 01/1976 Age Date 01/1978 Age Allowance 0,487%			IMS Division Cruiser/Racer Dynamic All. 0,612% Fwd Accom. Yes Construction Solid Fiber Rigging No Aramid Core No Crew Arm Ex Carbon Rudder No Light Stanchions No			
COMMENTS Builder's declared displacement.			IMSL 9,277m VCGD -0,097m Sink 18,70kg/mm RL 6,482m VCGM -0,028m WS 27,72m² LSM0 9,693m Displacement/Length ratio 8,7076			
PROPELLER Installation Shaft exposed PRD 0,400 Type Solid 2 blades PIPA 0,0167			CENTERBOARD N/A			
SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time On Distance	710,8			793,5		
Time On Time	0,8441			0,8506		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	878,0	644,0	549,9	1148,7	806,3	658,2
Time on Time	0,7688	1,0482	1,2274	0,5876	0,8372	1,0255

BOAT	
Name ALTAR	Sail Nr GRE-1716
File GR1716	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS			
Inclining Test Club Estimated VCG			
Flotation date 15/03/2015		SG	
FFM	FF 1,135	SFFP	0,726
FAM	FA 1,013	SAFP	9,955
LCF from stem on CL / on sheer		5,780 / 6,024	
Maximum beam station from stem		6,525	
RM Measured		127,6kg·m	
RM Default		123,9kg·m	
Limit of positive stability / Stab.Index		117,8° / 121,0	
Freeboard at mast at 4,735		1,083	

RIG			
Forestay Tension Fixed	Spreaders 2		
Inner Stay Fixed	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 13,140	E 3,447	MDT1 0,147	MW
IG 14,674	J 4,735	MDL1 0,219	GO
ISP	SFJ 0,000	MDT2	BD
BAS 1,534	SPL	MDL2	MWT
FSP 0,080	TPS	TL -3,000	MCG



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2017 Measurements Datasheet

MIZZEN RIG AND SAILS	
N/A	

PROPELLER			
Installation	Shaft exposed	PRD	0,400
Type	Solid 2 blades	PBW	
Twin Screw	No	PIPA	0,0167
PSA	PHL	ST3	ESL
PSD	ST1	ST4	
PHD	ST2	ST5	

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COMMENTS	
Builder's declared displacement.	

MOVEABLE BALLAST	
N/A	

CENTERBOARD	
N/A	

SAILS INVENTORY																
MAINSAIL (1)																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
1	0,138	0,73	1,25	2,11	2,80	26,18	KALATZIS	15/03/2015	KAKITSIS	Dacron						
HEADSAILS (2)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
1	0,06	0,81	1,63	3,33	5,07	6,78	14,04	143%	47,20			KALATZIS	08/09/2016	KAKITSIS	Dacron	
2	0,04	0,51	1,01	2,09		4,49	13,13	95%	28,76			KALATZIS	15/03/2015	KAKITSIS	Dacron	HEAVY WEATHER
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				



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ORC Club Certificate Appendix

BOAT	
Name	ALTAIR
Sail Nr	GRE-1716
Certificate Number	001104
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TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1242,2	1022,3	907,1	829,4	778,0	751,8	730,9
52°	800,3	671,9	593,3	549,6	528,6	517,1	508,2
60°	749,4	632,6	561,2	530,0	513,1	501,8	490,6
75°	709,1	598,5	539,7	515,3	499,5	486,7	466,2
90°	711,1	601,5	539,6	513,7	497,7	483,5	459,4
110°	799,9	659,5	572,0	528,3	505,7	488,9	457,4
120°	853,4	696,8	601,9	542,1	513,9	495,7	464,4
135°	977,9	772,7	662,9	585,0	537,7	513,1	481,2
150°	1158,0	889,3	742,9	651,7	582,7	538,9	498,0
Run VMG	1325,8	1004,4	823,2	712,1	633,9	573,2	513,2

Selected Courses							
Windward / Leeward	1284,1	1013,4	865,1	770,8	706,0	662,5	622,1
Circular Random	1044,3	830,5	711,9	640,1	594,4	564,2	528,3
Ocean for PCS	1297,2	982,4	802,8	691,8	619,6	570,3	506,6
Non Spinnaker	1044,3	830,5	711,9	640,1	594,4	564,2	528,3

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	44,4°	42,5°	42,2°	43,4°	42,2°	41,3°	40,4°
Beat VMG	2,90	3,52	3,97	4,34	4,63	4,79	4,93
52°	4,50	5,36	6,07	6,55	6,81	6,96	7,08
60°	4,80	5,69	6,42	6,79	7,02	7,17	7,34
75°	5,08	6,02	6,67	6,99	7,21	7,40	7,72
90°	5,06	5,99	6,67	7,01	7,23	7,45	7,84
110°	4,50	5,46	6,29	6,81	7,12	7,36	7,87
120°	4,22	5,17	5,98	6,64	7,01	7,26	7,75
135°	3,68	4,66	5,43	6,15	6,69	7,02	7,48
150°	3,11	4,05	4,85	5,52	6,18	6,68	7,23
Run VMG	2,72	3,58	4,37	5,06	5,68	6,28	7,01
Gybe Angles	167,9°	168,5°	169,6°	170,6°	170,7°	171,7°	175,6°