

HIGH PERFORMANCE RULE V.4h1 2015



Boat Name:	ROCK & ROLL
Class:	Farr 400
Certificate:	2015 Big Boat
Sail Number:	USA400
Issue Date:	9/9/15 10:18

Owner: **Bernard Girod**

Owner Signature: _____

Certificate Fee: **\$244.00** (\$20.00/m LOA)
Change Fee: **\$0.00**

Hull	
LOA	12.200
FO	0.038
Y	0.07
Age Date	2011
BM	3.410
FF	1.375
FBI	1.299
FA	0.924
DRA	2.894
CW	825
Dempty	3991
Pre HPR	0.030

Spars	
J	4.47
P	16.15
E	5.8
IG	15.569
ISP	17.862
BAL	0
BD	0
BAS	1.595
FSP	0.071
CPD	0.135
CPW	1
SWA	15.11
MWT	166.5
MCG	5.355
BWT	0.000
BCG	2.594

Mainsail	
HB	1
MGT	1.71
MGU	2.55
MGM	3.86
MGL	4.89
Meas Main	59.22
Rated Main	60.75
Jib	
Jib luff	15.98
LPG	4.490
LP	4.561
JH	0.120
JGT	0.740
JGU	1.310
JGM	2.450
JGL	3.440
Jib Area	38.890
JSA + MSA	99.64

0.39 38.86 = JSA min
0.44 43.84 = JSA max

Ayso	
SLU	20.5
SLE	17.7
AMG	12.26
ASF	12.21
AYSO	194.98

15.1096 **MGMH** 8.420 < ORC-RS 109.1
MGLH 4.224 "
MGUH 12.594 "
MGTH 14.684 "

				Reference Only	
Measured / Calculated	Meas Val	Base	Base Val	Meas - Base	PD- Percent Difference
Beam	3.410	Bmaxb	3.792	-0.382	-0.101
Meas Freeboard - FR	1.199	FRb	1.158	0.041	0.035
Meas Draft - DRA	2.894	DRAb	2.843	0.051	0.018
Meas/Calc - VCG	-0.627	VCGb	-0.796	0.169	-0.212
Meas Crew Wt - CW	825	CWb	761	64.0	0.084
Displ - Dempty	3991	Demptyb	3981	10	0.003
USA	99.641	USAb	106.4	-6.77	-0.064
Spinnaker	194.979	SPINb	182.9	12.05	0.066
Rig Height	17.862	RHb	18.55	-0.688	-0.037

Final Calculation		
Length	L	12.1620
Age Plus Pre HPR	AGEc	0.9620
Beam	BMc	0.9952
Freeboard	FRc	0.9979
Draft	DRAc	1.0008
VCG	VCGc	0.9865
Crew Factor	CFc	1.0027
Displacement	Demptyc	0.9997
Upwind Sail Area	USAc	0.9902
Spinnaker Area	SPAc	1.0065
Rig Height	RHc	0.9951
Robust Mast	RMASAc	1.0000
Appendage	Apc	1.0000
Engine-Propeller	EPc	0.9829
Construction Cost	CCc	0.9900
Preliminary Rated Length == >		11.0967
Rated Length Lower Limit == >		10.7026
Final Rated Length ===== >		11.0967

TCF **0.9606**
Seconds per mile **574.6**

RULE WARNINGS / FAILURES

IG	
LP	
TPS	
MIN RATED LENGTH	
VCG SOURCE	OFFSETS FILE / INCLINATION
	NO BOOM WGT: SMALL RATED LENGTH PENALTY

Final Rating is in Units of Length
TCF is calculated from the Final Rating by the formula:
 $TCF = (L/12.2)^{.424}$
A boat with Rated Length 12.2m will have a TCF of 1.000
Seconds per mile = 552 / TCF

1+.002*age
.002*age

Website: www.hprsailing.org

www.offshoreracingrule.org

Contacts: Bill Lee (Rule, Primary Contact)

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Bill's color code	
Inputs	1-7
Intermediate Calculations	2-1
Base or Max	1-10
Correctors	1-3
Final Rating	1-9

Corrector Guide

1.000 - Measured Value Equals Base Value
> 1.0000 - Measured Value is slower than Base Value
<1.0000 - Measured Value is faster than Base Value

L value = Yellow indicates AGE applies