

# HIGH PERFORMANCE RULE V.4h1 2015



Boat Name:	<b>PATCHES</b>
Class:	<b>TP 52</b>
Certificate:	<b>2015 Big Boat</b>
Sail Number:	<b>MEX952</b>
Issue Date:	<b>9/15/15 11:59</b>

Owner: Eduardo Porter Ludwig

Owner Signature: \_\_\_\_\_

Certificate Fee: **\$0.00**  
Change Fee: **\$100.00**

Hull	
LOA	15.849
FO	0.004
Y	1.06
Age Date	2005
BM	4.333
FF	1.496
FBI	1.291
FA	1.17
DRA	3.286
CW	1347
Dempty	7339
Pre HPR	0.000

Spars	
J	6.2
P	20.45
E	7.28
IG	19.59
ISP	22.48
BAL	0.05
BD	0.35
BAS	2.17
FSP	0.08
CPD	0.135
CPW	1
SWA	15.11
MWT	0
MCG	0
BWT	0.000
BCG	3.289

Mainsail	
HB	1.22
MGT	2.12
MGU	3.12
MGM	4.8
MGL	6.1
Meas Main	93.28
Rated Main	95.54
Jib	
Jib luff	19.87
LPG	6.260
LP	6.34
JH	0.100
JGT	0.920
JGU	1.680
JGM	3.250
JGL	4.790
Jib Area	65.477
JSA + MSA	161.02

				Reference Only	
Measured / Calculated	Meas Val	Base	Base Val	Meas - Base	PD- Percent Difference
Beam	4.333	Bmaxb	4.495	-0.162	-0.036
Meas Freeboard - FR	1.319	FRb	1.325	-0.006	-0.005
Meas Draft - DRA	3.286	DRAb	3.565	-0.279	-0.078
Meas/Calc - VCG	-0.98	VCGb	-1.157	0.177	-0.153
Meas Crew Wt - CW	1347	CWb	1155	192.0	0.166
Displ - Dempty	7339	Demptyb	7589	-250	-0.033
USA	161.022	USAb	169.8	-8.77	-0.052
Spinnaker	257.124	SPINb	275.9	-18.81	-0.068
Rig Height	22.620	RHb	23.36	-0.741	-0.032

KWT	0.0
KVCG	0.000
HCGic	0.772
HWtic	7339.0
VCG-comp	0.000
VCG-incl	-0.98

Runners	
Runners	0
Spreaders	3
TPS	8.360
TPSmax	8.986
TPS Excess	0.000

Ayso	
SLU	24.6
SLE	21.24
AMG	13.55
ASF	13.11
AYSO	257.12

0.39 62.80 = JSA min  
0.44 70.85 = JSA max

Final Calculation		
Length	L	15.8450
Age Plus Pre HPR	AGEc	0.9800
Beam	BMc	0.9983
Freeboard	FRc	1.0000
Draft	DRAc	0.9965
VCG	VCGc	0.9881
Crew Factor	CFc	1.0001
Displacement	Demptyc	1.0045
Upwind Sail Area	USAc	0.9903
Spinnaker Area	SPAc	0.9916
Rig Height	RHc	0.9945
Robust Mast	RMASTc	1.0000
Appendage	Apc	1.0000
Engine-Propeller	EPc	0.9829
Construction Cost	CCc	0.9900
Preliminary Rated Length == >		14.5715
Rated Length Lower Limit == >		13.9436
Final Rated Length ===== >		14.5715

TCF **1.0782**  
Seconds per mile **512.0**

## 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:  
 $TCF = (L/12.2)^{4.24}$   
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](http://www.hprsailing.org)

[www.offshoreracingrule.org](http://www.offshoreracingrule.org)

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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