

HIGH PERFORMANCE RULE V.4h1 2015



| | |
|--------------|---------------|
| Boat Name: | VOLPE |
| Class: | Kernan 44 |
| Certificate: | 2015 Big Boat |
| Sail Number: | USA55544 |
| Issue Date: | 9/9/15 10:35 |

Owner: **Donald Payan**

Owner Signature: _____

Certificate Fee: **\$352.01** (\$26.25/m LOA)
Change Fee: **\$0.00**

| Hull | |
|----------|--------|
| LOA | 13.410 |
| FO | 0.06 |
| Y | 0.08 |
| Age Date | 2009 |
| BM | 3.660 |
| FF | 1.276 |
| FBI | 1.085 |
| FA | 0.866 |
| DRA | 3.067 |
| CW | 1089 |
| Dempty | 6186 |
| Pre HPR | 0.023 |

| Spars | |
|-------|--------|
| J | 4.86 |
| P | 17.241 |
| E | 6.37 |
| IG | 17.842 |
| ISP | 19.342 |
| BAL | 0.1 |
| BD | 0.3 |
| BAS | 1.792 |
| FSP | 0.067 |
| CPD | 0.135 |
| CPW | 1 |
| SWA | 15.11 |
| MWT | 248 |
| MCG | 6.126 |
| BWT | 36.500 |
| BCG | 2.668 |

| Mainsail | |
|------------|--------|
| HB | 1.2 |
| MGT | 1.82 |
| MGU | 2.66 |
| MGM | 4.11 |
| MGL | 5.31 |
| Meas Main | 68.15 |
| Rated Main | 69.77 |
| Jib | |
| Jib luff | 18.18 |
| LPG | 5.100 |
| LP | 5.167 |
| JH | 0.150 |
| JGT | 0.830 |
| JGU | 1.450 |
| JGM | 2.640 |
| JGL | 3.860 |
| Jib Area | 49.117 |
| JSA + MSA | 118.89 |

| | | | | Reference Only | |
|-----------------------|----------|---------|----------|----------------|------------------------|
| Measured / Calculated | Meas Val | Base | Base Val | Meas - Base | PD- Percent Difference |
| Beam | 3.660 | Bmaxb | 4.019 | -0.359 | -0.089 |
| Meas Freeboard - FR | 1.076 | FRb | 1.212 | -0.136 | -0.113 |
| Meas Draft - DRA | 3.067 | DRAb | 3.076 | -0.009 | -0.003 |
| Meas/Calc - VCG | -0.61243 | VCGb | -0.915 | 0.303 | -0.331 |
| Meas Crew Wt - CW | 1089 | CWb | 889 | 200.0 | 0.225 |
| Displ - Dempty | 6186 | Demptyb | 5014 | 1172 | 0.234 |
| USA | 118.888 | USAb | 125.5 | -6.66 | -0.053 |
| Spinnaker | 209.678 | SPINb | 211.1 | -1.44 | -0.007 |
| Rig Height | 19.342 | RHb | 20.13 | -0.787 | -0.039 |

| | |
|----------|--------|
| KWT | 3021.5 |
| KVCG | -2.683 |
| HCGic | 0.629 |
| HWtic | 2880.0 |
| VCG-comp | -0.641 |
| VCG-incl | -0.584 |

| Runners | |
|------------|-------|
| Runners | 1 |
| Spreaders | 2 |
| TPS | 7.459 |
| TPSmax | 7.931 |
| TPS Excess | 0.000 |

| Ayso | |
|------|--------|
| SLU | 21.72 |
| SLE | 19.4 |
| AMG | 12.08 |
| ASF | 12.87 |
| AYSO | 209.68 |

0.39 46.37 = JSA min
0.44 52.31 = JSA max

| Final Calculation | | |
|-------------------------------|---------|---------|
| Length | L | 13.3500 |
| Age Plus Pre HPR | AGEc | 0.9647 |
| Beam | BMc | 0.9958 |
| Freeboard | FRc | 1.0000 |
| Draft | DRAc | 0.9999 |
| VCG | VCGc | 0.9773 |
| Crew Factor | CFc | 1.0079 |
| Displacement | Demptyc | 0.9703 |
| Upwind Sail Area | USAc | 0.9912 |
| Spinnaker Area | SPAc | 0.9993 |
| Rig Height | RHc | 0.9944 |
| Robust Mast | RMASAc | 1.0000 |
| Appendage | Apc | 1.0000 |
| Engine-Propeller | EPc | 0.9829 |
| Construction Cost | CCc | 1.0000 |
| Preliminary Rated Length == > | | 11.8639 |
| Rated Length Lower Limit == > | | 11.7480 |
| Final Rated Length ===== > | | 11.8639 |

TCF **0.9882**
Seconds per mile **558.6**

RULE WARNINGS / FAILURES

| | |
|------------------|--|
| IG | |
| LP | |
| TPS | |
| MIN RATED LENGTH | |
| VCG SOURCE | AVERAGE OF COMPONENT WEIGHTS AND INCLINATION |

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)

Jim Teeters (Technical)

Bjorn Johnson (Communications)

wizard@fastisfun.com

jim@tytech.org

JohnsonBjornR@gmail.com



| 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