

IAMS RATING CERTIFICATE No. 19339
 Based on: FULL MEASUREMENT (Lb/Lbs)
 NOT VALID AFTER 12/1993

IAMS AMENDED TO JANUARY 1998
 Offshore Racing Council
 19 St James's Place, London
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YACHT DESCRIPTION
 Name: CHAMPOSA
 Sail No: USA-43786
 Class: none
 LOA: 49.61ft Beam(MB): 14.83ft
 Designer: NELSON/MAREK
 Builder: BETTS
 Rtg: MASTHEAD SLOOP 149% Jib
 Keel/CB: FIXED KEEL
 PropInst: EXPOSED FOLDING
 FwdAccom: NO
 HullChst: LIGHT
 Forestay: ADJUST AFT
 Spreadrs: 4 Sets
 Runners: 2 Sets
 Dates: AGE:3/1988

RATING OFFICE:
 Issued: 02/JAN/98
 Measured: 15/JUL/92
 Revalidation Authority: US SAILING
 Measurer: LAMBERS

U.S. SAILING
 P.O. BOX 1260
 15 MARITIME DRIVE
 PORTSMOUTH, RI 02871

"I CERTIFY THAT I UNDERSTAND MY RESPONSIBILITIES UNDER THE IAMS."
 OWNER: Mr. Peter Thornton
 24 WASHINGTON CIR
 HINSDALE, IL 60521

LIMITS AND REGULATIONS
 Limit of Positive Stability: MEETS RHO
 Minimum Displacement: 11261lb: MEETS RHO
 Maximum Crew Weight: 2533 lbs
 Stability Index: 120.4

Measurement Inventory: 04/MAY/92
 Accommodation Length: 48.20ft
 Accom Certification: NONE FILLED
 Plan Approval: NONE FILLED

NOTE TO OWNER: The range allowable to revise crew weight is 1372-2533 lb.

TIME ALLOWANCES IN SEC/MI BY TRUE WIND VELOCITY & ANGLE

| Wind Velocity: | 6kt | 8kt | 10kt | 12kt | 14kt | 16kt | 20kt |
|----------------|--------|--------|--------|--------|--------|--------|--------|
| BEAT ANGLES: | 45.7° | 43.0° | 40.5° | 38.8° | 37.7° | 37.2° | 37.1° |
| BEAT VMG: | 887.8 | 745.4 | 680.7 | 647.2 | 628.3 | 617.7 | 610.8 |
| | 52°: | 563.6 | 491.8 | 466.1 | 453.1 | 445.4 | 440.0 |
| R | 60°: | 523.2 | 469.4 | 449.2 | 438.0 | 431.0 | 426.3 |
| E | 75°: | 494.7 | 452.0 | 430.6 | 418.6 | 411.0 | 405.5 |
| A | 90°: | 494.9 | 451.0 | 427.4 | 410.4 | 398.0 | 389.2 |
| C | 110°: | 505.4 | 450.6 | 423.8 | 405.5 | 393.0 | 379.1 |
| H | 120°: | 529.6 | 462.3 | 431.1 | 408.6 | 390.8 | 376.8 |
| | 135°: | 627.4 | 505.2 | 456.5 | 427.6 | 404.7 | 385.3 |
| | 150°: | 763.8 | 600.4 | 513.6 | 464.7 | 435.3 | 412.1 |
| RUN VMG: | 882.0 | 693.3 | 593.1 | 528.7 | 480.8 | 448.9 | 404.1 |
| GYBE ANGLES: | 138.9° | 142.3° | 148.4° | 160.3° | 167.7° | 171.3° | 172.8° |

NOTE: To convert any time allowance above to speed in knots: Kt = 3600/TM

Performance Line Scoring -- Time Factor: 0.894 Distance Factor: 89.4

TIME ALLOWANCES FOR SELECTED COURSES

| Course | Time | Distance | Factor |
|---------------|-------|----------|--------|
| Mhd/Lwd VMG | 961.8 | 770.9 | 667.2 |
| Olympic 6-Leg | 700.2 | 728.3 | 637.1 |
| Circular Radm | 735.5 | 530.7 | 530.1 |
| Non-Spinnaker | 818.3 | 658.1 | 571.3 |
| Ocean for PCS | 851.9 | 670.2 | 568.3 |

IAMS AMENDED TO JANUARY 1998
 Cert No 19339
 Off Meas'd: 11/MAY/93
 US19339 OFF 12/MAY/93 09:58:36

CENTERBOARD AND DRAFT

| | | | | | |
|-----|-------|------|-------|---------------------|-------|
| ECM | 0.000 | CBRC | 0.000 | CBTC | 0.000 |
| WCB | 0.0 | CBDA | 0.000 | KCDA | 0.000 |
| WCB | 0.0 | CBDB | 0.000 | ENDPLATE ADJ (KEDA) | 0.000 |

PROPELLER AND INSTALLATION

| | | | | | | | | | |
|-----|--------|-----|-------|------|--------|-----|-------|-----|-------|
| PRD | 1.730 | PBW | 0.460 | PHD | 0.150 | PHL | 0.480 | BSL | 2.680 |
| ST1 | 0.100 | ST2 | 0.440 | ST3 | 0.490 | ST4 | 0.210 | ST5 | 0.500 |
| PSA | 28.500 | PSD | 0.110 | PIPA | 0.0745 | | | | |

FLOTTATION DATA

| | | | | | | | |
|------|-------|------|-------|------|-------|------|--------|
| FFPS | 4.400 | AFPS | 3.730 | SFFP | 2.726 | SAFP | 43.520 |
| FFM | 4.550 | FAM | 3.670 | FFPV | 0.000 | AFPV | 0.000 |
| FF | 4.589 | FA | 3.695 | | | SG | 1.000 |

INCLINING TESTS

| | | | | | | | |
|------|---------|------|---------|----------------|----------|------|----------|
| W1 | 74.000 | PD1 | 39.500 | PLM | 1504.600 | PL | 1500.844 |
| W2 | 148.000 | PD2 | 82.000 | GSA | 0.317 | RSA | 126.7 |
| W3 | 222.000 | PD3 | 124.000 | SMB | 27.761 | WD | 51.350 |
| W4 | 296.000 | PD4 | 164.500 | RM | 2423.3 | RMG | 2423.3 |
| RM2 | 2558.6 | RM20 | 2387.5 | RM40 | 1995.0 | RM60 | 1325.2 |
| RM90 | 540.8 | | | CREW ARM (CRA) | 5.934 | | |

CALCULATED LIMIT OF POSITIVE STABILITY: 117.3 DEGREES
RATIO STABILITY CURVE AREAS, POSITIVE/NEGATIVE 2.715

HYDROSTATICS

| | | | | |
|--------------------------------------|--------|-----------------------|--------|--------|
| KEEL DRAFT | (DHK) | 9.078 | (DHKA) | 9.222 |
| 2ND MOMENT LENGTH | (LSM0) | 39.552 | (LSM1) | 40.079 |
| DISPLACEMENT (WEIGHT) | (DSEM) | 24337 | (DSEP) | 27206 |
| WETTED SURFACE | (WSM) | 427.49 | (WSS) | 446.20 |
| VCG FROM OFFSETS DATUM (FOR CLUB RM) | (VCGD) | -0.353 | (VCGM) | -0.286 |
| VCG FROM MEASUREMENT TRIM WATERLINE | (VCGM) | -0.286 | | |
| MAXIMUM SECTION AREA | (AMS1) | 22.630 | | |
| BEAM/DEPTH RATIO | (BTR) | 4.217 | | |
| REFLECTIVE DRAFT | (D) | 7.998 | | |
| 2° HEEL (LSM2) | 40.078 | 25° HEEL (LSM3) | 39.315 | |
| SINK (LSM4) | 46.881 | AVG LENGTH (L) | 40.576 | |
| TRIM: .01ft/364.746ft-lb | | SINK: .01ft/197.315lb | | |

SAIL AREA: MAIN + FORETRIANGLE + MIZZEN (SA) 1356.39

| SAIL AREA | MAIN | FORETRIANGLE | MIZZEN |
|--------------|--------|--------------|----------------|
| MAIN | 716.9 | SPIN: 2137.9 | GENOA: 995.5 |
| FORETRIANGLE | | | MIZEN: 1356.39 |
| IG | 67.030 | SPL | 19.000 |
| MW | 0.530 | J | 18.980 |
| GO | 0.630 | LPB | 28.20 |
| ISP | 67.380 | FSP | 0.240 |
| IM | 67.385 | IP | 28.44 |
| HBI | 3.920 | SRT | 0.550 |
| MSL | 66.50 | MSMN | 34.20 |
| SL | 66.00 | SMW | 34.20 |
| SPS | 16.410 | LPIS | 0.00 |
| TH | NO | JR | 0.00 |

MIZZEN

| | | | | | | | |
|------|-------|------|-------|------|-------|------|-------|
| IY | 0.000 | PY | 0.000 | HY | 0.000 | TY | 0.000 |
| YB | 0.000 | EY | 0.000 | MY | 0.000 | MY | 0.000 |
| YD | 0.00 | ECY | 0.000 | MGY | 0.000 | MDLY | 0.000 |
| YSF | 0.00 | BASY | 0.000 | MGY | 0.000 | MDTY | 0.000 |
| YSMG | 0.00 | BALY | 0.000 | MGLY | 0.000 | MDLY | 0.000 |
| | | HBY | 0.000 | BDY | 0.000 | | |