

# Measurement Certificate



Sail No. **457**

Issue Date January 24, 2004

Status **Approved**

Ontario \_\_\_\_\_ Colors White \_\_\_\_\_ White \_\_\_\_\_ Red/Blue  
 Builder \_\_\_\_\_ Serial Number \_\_\_\_\_ Hull \_\_\_\_\_ Deck \_\_\_\_\_ Waterline \_\_\_\_\_

**Section 3: Rudder**

(Units in mm except for weights)

**Measurement**    **Min.**    **Max.**

R3.1 HDP Rudder.....	<b>86</b>	76	89
R3.2 Rudder Trailing Edge Length.....	<b>1110</b>	1099	1111
R3.3 Rudder Leading Edge Length.....	<b>1095</b>	1092	1105
R3.4 Rudder Top.....	<b>433</b>	431	438
R3.5 Rudder Bottom.....	<b>202</b>	199	206
R3.6 Rudder Top Thickness.....	<b>71</b>	63	70
R3.7 Rudder Bottom Thickness.....	<b>27</b>	24	28
R3.8 Rudder Trailing Edge Thickness (P/F)..	<b>Pass</b>	3	
R3.9 Rudder Space (P/F).....	<b>Pass</b>		

**Comments**

- Keel grandfathered     C
- Rudder grandfathered
- Requires weighing
- Correctors by factory
- Mast is certified
- Mast not measured
- Deck not measured
- Serial number missing

**Section 4: Keel**

**Measurement**    **Min.**    **Max.**

R4.1 HDP Keel Top.....	<b>2925</b>	2925	2950
R4.2 HDP Keel Bottom.....	<b>3052</b>	3040	3064
R4.3 Keel Depth.....	<b>236</b>	230	245
R4.4 Keel Top Chord.....	<b>1027</b>	1025	1042
R4.5 Keel Top 10%.....	<b>81.2</b>	78	84
R4.6 Keel Top 20%.....	<b>102</b>	98	103
R4.7 Keel Top 40%.....	<b>113.4</b>	109	114
R4.8 Keel Top 70%.....	<b>80</b>	79	84
R4.9 Keel Bottom Chord.....	<b>657</b>	662	678
R4.10 Keel Bottom 10%.....	<b>51</b>	46	53
R4.11 Keel Bottom 20%.....	<b>68.7</b>	62	67
R4.12 Keel Bottom 40%.....	<b>76</b>	70	75
R4.13 Keel Bottom 70%.....	<b>54.1</b>	51	56
R4.14 Keel Trailing Edge Top Thick. (P/F)....	<b>Pass</b>	6.5	
R4.15 Keel Trailing Edge Bottom (P/F).....	<b>Pass</b>	3.0	
R4.16 Keel Trailing Edge Straight (P/F).....	<b>Pass</b>	P/F	
R4.17 Keel Leading Edge Straight (P/F).....	<b>Pass</b>	P/F	
R4.18 Keel Bottom Straight (P/F).....	<b>Pass</b>	P/F	
R4.19 Keel Section Maintained (P/F).....	<b>Pass</b>	P/F	

Mast tip weight measured by  
Garrad in 9/05

**Section 5: Deck****Measurement****Min.****Max.****Sail No.****Version****457**

10/5/05

R5.1 Forestay Location (P/F).....	<b>Pass</b>	135	155
R5.2 Forestay to Chainplate (P/F).....	<b>Pass</b>	2946	2997
R5.3 Chainplate to Sheerline (P/F).....	<b>Pass</b>	152	178
R5.4 Partners (P/F).....	<b>Pass</b>	206	206
R5.5 Mast Step Thickness (P/F).....	<b>Pass</b>		17
R5.6 Mast Heel Point.....	<b>725</b>	717	740

**Section 6: Spars**

R6.1 Mast Length.....	<b>10295</b>		10315
R6.2 Upper Band Height (P/F).....	<b>Pass</b>		10110
R6.3 Upper Band Width (P/F).....	<b>Pass</b>	25	
R6.4 Mast Fore and Aft (P/F).....	<b>Pass</b>	100	103
R6.5 Mast Transverse (P/F).....	<b>Pass</b>	66	72
R6.6 Spinnaker Hoist.....	<b>8375</b>		8389
R6.7 Forestay Height.....	<b>8223</b>	8223	8236
R6.8 Upper Shroud Height.....	<b>8223</b>	8223	8236
R6.9 Spar Curvature (P/F).....	<b>Pass</b>		
R6.10 Spreader Height.....	<b>4568</b>		50
R6.11 Spreader Transverse Length.....	<b>1446</b>	4555	4570
R6.12 Spreader For and Aft Length.....	<b>83</b>	1426	1486
R6.13 Lower Shroud Height.....	<b>4442</b>	71	135
R6.14 Upper Spin Pole Height.....	<b>2444</b>	4438	4451
R6.15 Lower Spin Pole Height.....	<b>2061</b>	2432	2445
R6.16 Spin Pole Projection (P/F).....	<b>Pass</b>	2042	2064
R6.17 Fore and Aft Spreader section (P/F).....	<b>Pass</b>		60
R6.18 Vertical Spreader section (P/F).....	<b>Pass</b>		
R6.19 Lower band Height (P/F).....	<b>Pass</b>	45	
R6.20 Lower Band Width. (P/F).....	<b>Pass</b>	18	
R6.21 Forestay Length (P/F).....	<b>Pass</b>	1727	
R6.22 Forestay Diameter (P/F).....	<b>Pass</b>	25	
R6.23 Shroud Diameter (P/F).....	<b>Pass</b>		
R6.24 Backstay Diameter (P/F).....	<b>Pass</b>	7848	8001
R6.25 Mast Tip Weight (kg).....	<b>10</b>	3.8	
R6.26 Boom Curvature (P/F).....	<b>Pass</b>	3.8	
R6.27 Boom Vertical section (P/F).....	<b>Pass</b>	3.0	
R6.28 Boom Transverse section (P/F).....	<b>Pass</b>	10	
R6.29 Boom Band Width (P/F).....	<b>Pass</b>		25
R6.30 Boom Band Distance (P/F).....	<b>Pass</b>	88	98
R6.31 Spin Pole Length (P/F).....	<b>Pass</b>	55	65
R6.32 Spin Pole Diameter (P/F).....	<b>Pass</b>	25	
R6.33 Whisker Pole Length (P/F).....			3404
R6.34 Whisker Pole Diameter (P/F).....		2597	2610

**Section 7: Racing Weights**

R7.1 Lifting Sling Weight (P/F).....	<b>Pass</b>	50	3kg
R7.2 Racing Weight (kg).....	<b>948.5</b>	950kg w/correctors	3100
R7.3 Corrector Forward (kg).....			64
R7.3 Corrector Sump (kg).....	<b>1.5</b>		
R7.3 Corrector Aft (kg).....			

**NOTE:**

A copy of this certificate is to be held by the owner(s) of this Sonar and presented on demand as required as class sanctioned events.

If this Sonar is no longer in your possession, please provide the name and address of the new owner below and send the original copy of this certificate to the S.C.A. secretary.

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

PHONE \_\_\_\_\_

EMAIL \_\_\_\_\_