

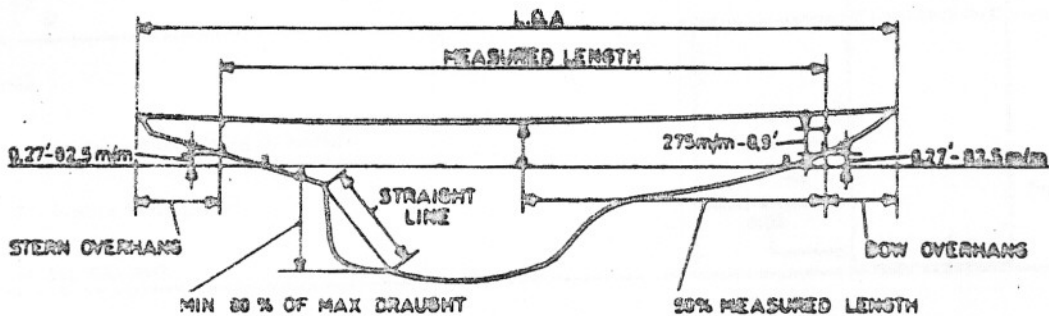
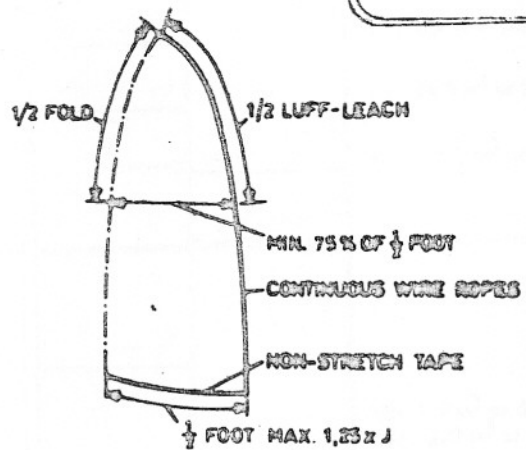
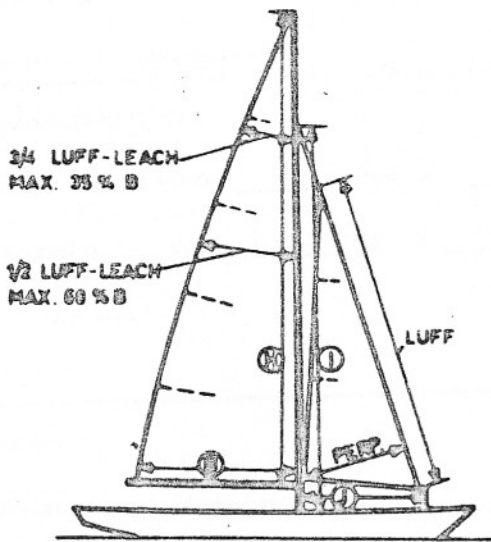
THE INTERNATIONAL 5.5 METRE CLASS CERTIFICATE OF RATING

86

No 900491

Yacht's name <i>Leopold</i>	Classification society <i>Bonner Yacht Club, Bonn</i>
Permanent sail number <i>Z 36</i>	Expiration date of classification certificate
Owner <i>P. Meyer</i>	Measurements or partial remeasurements by N.A. Measurer, signature & date USY - Verm.
Owner's club <i>M.Y.</i>	O. Weber
Designer <i>Chlson</i>	CH-8802 Kilchberg/ZH
Builder <i>Handels Yacht Yard</i>	
Date completed <i>1964</i>	
Condition of water when marks were sighted State fresh or salt Difference in immersion (class rule 5) <i>fresh</i> <i>1.497</i> (metres)	
Has designer's or builder's declaration been furnished <i>no</i>	
I declare that the particulars given on this certificate are correct at this date	Expiration date of rating certificate <i>24 77</i>
Signature of designer or builder	
Signature of owner or his representative	Rated <i>23 4 75</i>
(The designer or builder is only responsible for measurements at the date they are taken)	<i>Friedrichshafen 20.10.70</i>
Certificate authorised by <i>USY</i>	for (National Authority)

Im USY-Register
eingetragen am
23. APR. 1975



RATING FORMULA: $0.9 \left(\frac{L\sqrt{S}}{12\sqrt{D}} + \frac{L+\sqrt{S}}{4} \right)$ not to exceed 5.5 m or 18.04 ft.

	Actual measures		Rule limits
LENGTH L FOR RATING			
Overall length L.O.A.		19.874	
Bow overhang to L ₁	1.077		
Stern overhang to L ₁	0.966		
Total overhang	add	1.925	
Measured length L ₁		subtract 7.454	
Girth at bow	0.683		
Twice vertical height at bow (=0.550 m or 1.804 ft.)	0.675		
Bow girth difference	subtract 0.010	0.445	min. 0.165 m or 0.541 ft. (rule 3)
Girth at stern	0.608		
Twice vertical height at stern	0.938		
Stern girth difference	subtract 0.670		
1/3 stern girth difference	div. by 3 0.223	0.234	min. 0.234 m or 0.768 ft. (rule 3)
Length L for rating formula	add	7.835	
SAIL AREA FOR RATING			
Largest headsail = 0.5 x _____ (luff) x _____ (poop)		4.598	min. see next page
Mainsail = 0.5 x <u>16.170</u> (M) x <u>3.618</u> (B)		19.407	min. 26.5 m ² or 285.0 sq. ft. (rule 7)
Total sail area S	add	28.999	max. 29.0 m ² or 312.0 sq. ft.
\sqrt{S}		5.385	
DISPLACEMENT			
Weight of yacht (date when weighed _____)		2047	
Displacement D = weight div. by 1025.21 kg/m ³ or 64 lbs/cu. ft.		1.997	min. 1.7 m ³ or 60.27 cu. ft. (rule 7) max. 2.0 m ³ or 70.62 cu. ft.
$\sqrt[3]{D}$		1.259	
RATING			
Rating calc'd according to formula		5.497	
3 x tumble home excess		-	(rule 14)
FINAL RATING	add	5.497	

ARTICULARS

	Actual ^(x)	Rule limits	Rule No.
HULL			
Immersion checked in salt/fresh water	date		5;27
Weight of inside ballast placed at	—	xx)	6;33
Beam	1.969	min. 1.90m or 6.23 ft.	7;9
Draft	1.334	max. 1.35m or 4.43ft.	7
Freeboard at bow girth station	fresh water 1.540		
" at stern girth station	1.615		
" at midship mark	1.537		
" average	1.421	min. 0.63m or 2.06ft.	
Keel, ballast material	lead	lead or iron	10
" ht. of round at bottom	1.670	max. 75mm. or 3 in.	10
" width at max. section 1 metre below L.W.L.	0.179	min. 150mm. or 5.9in.	10
Stern angle	1.42	min. 1 in 5.5	12
Round of beams	2	max. 7mm. in 305mm.	13
Tumble home	VB	or 00.25in. in 12in.	14
2% of max. beam	2 x 0.118 = 76		
Excess tumble home	subtract →	3 x excess added to rating	14
Area of dock openings	7.2	max. 2.25m ² or 24.25 sq. ft.	24
Cockpit forward of L1 mark	7.17	min. 1.75m or 5.74ft.	25
Breadth of side decks	0.170	min. 35cm or 1.15ft.	24
SAILS & RIGGING			
Height of sailplan above covering board level	11.100	max. 11.10m or 36.4ft.	16
" " boom (black band) above covering board level	0.570	max. 0.85m or 2.795ft.	17
" " fore triangle above covering board level (1)	8.890	max. 8.88m or 29.11ft.	16
Base of fore triangle (J) (Deck black band to be checked)	2.675	max. 0.50 x 5	16
Min. hoedail for measurement purposes = 0.5 x 1 x J x 80%	0.160		15
Spinnaker, halliard above forestay	0.100	max. 10cm or 3.9in.	20
" " out from mast	0.015	max. 3cm or 1.18in.	20
" breadth of half the foot	5.165	max. 1.25 x J	20
Storm spinnaker, breadth of half the foot	2.642	max. J	20
Spinnaker boom length	2.642	max. J	21
Mast diameter at 1/2 ht. of fore triangle, round mast	103 x 141	min. 11.5cm or 4.52 in.	22
" " at dock	103 x 141	min. 10.9cm or 4.30in.	22
" " at jib halliards	103 x 141	min. 9.2cm or 3.62in.	22
" " at top	70 x 70	min. 5.8cm or 2.26in.	22
(The athwartship diameters of oval masts may be reduced by 10% of the above, but the sectional areas shall not be less)			
Weight of mast with fixed fittings	18 kg	min. 40 kgs or 88 lbs	22
Centre of gravity of mast above covering board level	4.60	min. 30% of mast ht.	22
Boom depth	5.10	max. 15.2cm or 6in.	23
Boom width	71	min. 3.8cm or 1.5in.	23
MISCELLANEOUS			
Weight of anchor	12 kg	max. 13kgs or 26.45lbs min. 11kgs or 24.24lbs	26
Length of warp		min. 30m or 16.4 fathoms	26
Top of 1 mark above water with yacht in racing trim			5