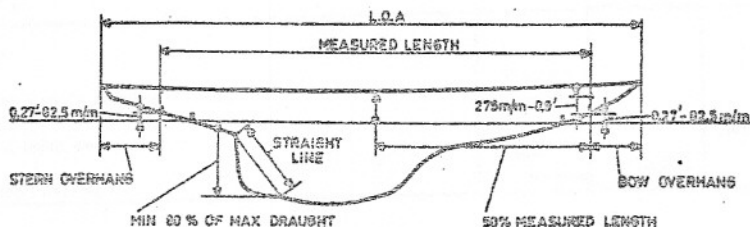
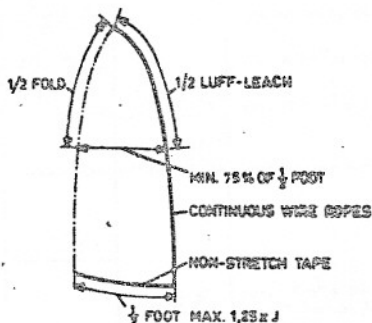
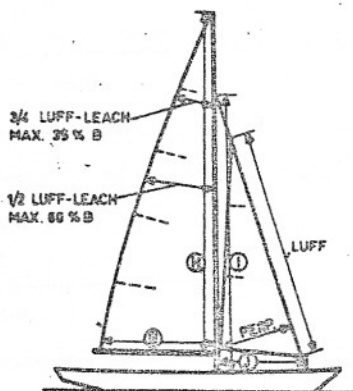


THE INTERNATIONAL 5.5 METRE CLASS CERTIFICATE OF RATING

Yacht's name	<i>Marabu II</i>	Classification society	<i>Bureau Veritas</i>
Permanent sail number	<i>234</i>	Expiration date of classification certificate	<i>4.1974 (reclassified)</i>
Owner	<i>Joh. Frei</i>	Measurements or partial remeasurements by N.A. Measurer, signature & date	
Owner's club	<i>Konwiler Segelvereinigung</i>	USY - Veritas	
Designer	<i>H. Copponex</i>	<i>C. Weber</i>	
Builder	<i>Corvus Post Guedec</i>	<i>CH 3002</i>	
Date completed	<i>1959</i>		
Condition of water when marks were sighted	<i>fresh</i>		
State fresh or salt	<i>fresh</i>		
Difference in immersion (class rule 5)	<i>5 mm</i>	(metres)	
Has designer's or builder's declaration been furnished	<i>yes</i>		
I declare that the particulars given on this certificate are correct at this date		Expiration date of rating certificate	<i>27.1.74</i>
Signature of designer or builder		Rated	
Signature of owner or his representative			
(The designer or builder is only responsible for measurements at the date they are taken)			
Certificate authorised by		for	<i>2.6.72 Fern</i> (National Authority)

Im USY-Register
eingetragen am.
5. JUNI 1972



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.		9354	
Bow overhang to L ₁	1026		
Stern overhang to L ₁	1080		
Total overhang	add	2126	
Measured length L ₁		subtract 7228	
Girth at bow	0717		
Twice vertical height at bow (=0.550 m or 1.804 ft.)	0550		
Bow girth difference	subtract	0167	min. 0.165 m or 0.541 ft. (rule 3)
Girth at stem	1732		
Twice vertical height at stem	0992		
Stern girth difference	subtract	0740	
1/3 stern girth difference	div. by 3	0247	min. 0.234 m or 0.768 ft. (rule 3)
Length L for rating formula		add	7642
SAIL AREA FOR RATING			
Largest headail = 0.5 x _____ (luff) x _____ (perp)		9568	min. see next page
Mainsail = 0.5 x 10447 (ft) x 3720 (ft)		19432	min. 26.5 m ² or 285.0 sq. ft. (rule 7)
Total sail area S		add	29000
\sqrt{S}			5385
DISPLACEMENT			
Weight of yacht (date when weighed 1964)		1824	
Displacement D = weight div. by 1025.21 kg/m ³ or 64 lbs/cu.ft.			min. 1.7 m ³ or 60.27 cu. ft. (rule 7)
$\sqrt[3]{D}$		1780	max. 2.0 m ³ or 70.62 cu. ft.
		1212	
RATING			
Rating calc'd according to formula		5477	
3 x tumble home excess		-	(rule 14)
FINAL RATING		add	5477

RULE PARTICULARS

	Actual ^(x)	Rule limits	Rule No.
HULL			
Immersion checked in salt/fresh water	date 27.5.72		5;27
Weight of inside ballast placed at <u>Midbeam on fore-hatch</u>	16 k ^x	xx)	6;33
Beam	19'10"	min. 1.90m or 6.23 ft.	7;9
Draft	1'8 1/4"	max. 1.35m or 4.43ft.	7
Freeboard at bow girth station	0.723		
" at stern girth station	0.608		
" at midship mark	0.579		
" average	0.637	min. 0.63m or 2.06ft.	
Keel, ballast material	Lead	lead or iron	10
" ht. of round at bottom	< 75	max. 75mm. or 3 in.	10
" width at max. section 1 metre below L.W.L.	112	min. 150mm. or 5.9in.	10
Stern angle	1:5.7	min. 1 in 5.5	12
Round of booms	1mm/100	max. 7mm. in 305mm.	13
Tumble home	0.060	or 00.25in. in 12in.	14
2% of max. beam	0.076		
Excess tumble home	subtract → -	3 x excess added to rating	14
Area of deck openings	2.2 m ²	max. 2.25m ² or 24.25 sq. ft.	24
Cockpit forward of L1 mark	old rule	min. 1.75m or 5.74ft.	25
Breadth of side decks	750	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	0.650	max. 0.85m or 2.795ft.	17
" " fore triangle above covering board level (1)	8.880	max. 8.88m or 29.11ft.	16
Base of fore triangle (J) (Deck black band to be checked)	2.690	max. 0.50 x 5	16
Min. headsail for measurement purposes = 0.5 x I x J x 80%	9.111		15
Spinnaker, halliard above forestay	0.100	max. 10cm or 3.9in.	20
" " out from mast	0.030	max. 3cm or 1.18in.	20
" breadth of half the foot	3.363	max. 1.25 x J	20
Storm spinnaker, breadth of half the foot	2.690	max. J	20
Spinnaker boom length	2.690	max. J	21
Mast diameter at 1/2 ht. of fore triangle, round mast	} <i>achieved in accordance to class rule</i>	min. 11.5cm or 4.52 in.	22
" " at deck " "		min. 10.9cm or 4.30in.	22
" " at jib halliards " "		min. 9.2cm or 3.62in.	22
" " at top " "		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	48 k ^g	min. 40 kgs or 88 lbs	22
Centre of gravity of mast above covering board level	1.800	min. 36% of mast ht.	22
Boom depth	< 112	max. 15.2cm or 6in.	23
Boom width	740	min. 3.8cm or 1.5in.	23
MISCELLANEOUS			
Weight of anchor	12 k ^g	max. 13kgs or 26.45lbs min. 11kgs or 24.24lbs	26
Length of warp	30m	min. 30m or 16.4 fathoms	26
Top of I marks above water with yacht in racing trim			5