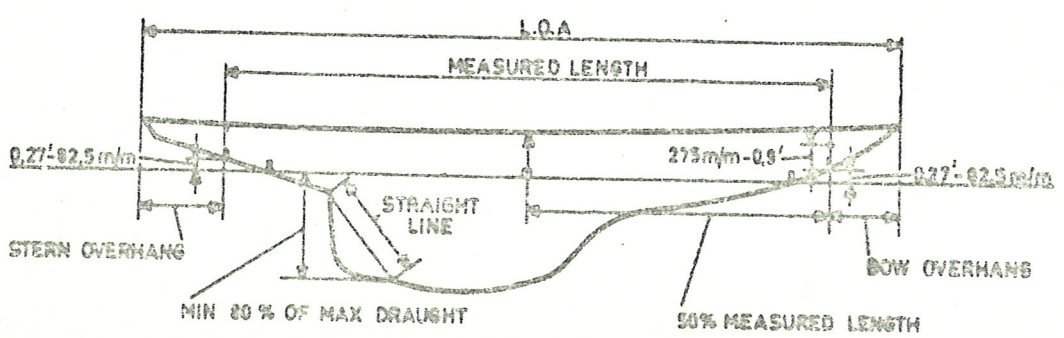
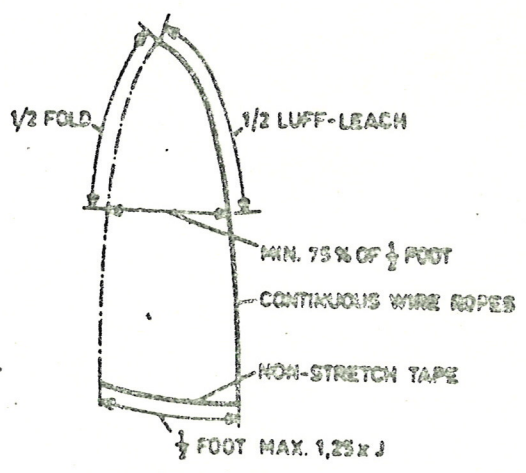
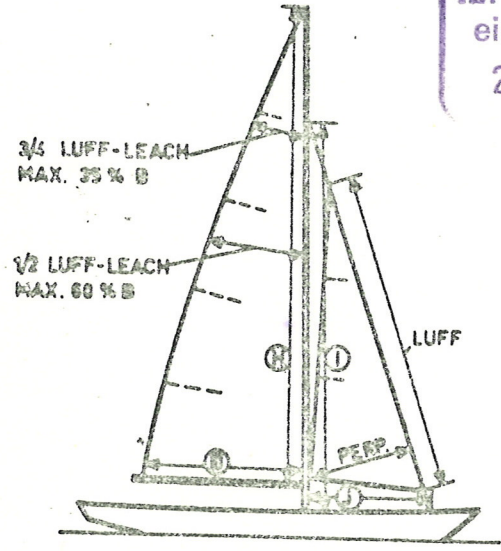


THE INTERNATIONAL 5.5 METRE CLASS CERTIFICATE OF RATING

Yacht's name <i>"Gralatea"</i>	Classification society <i>Noiske Veritas N.733</i>
Permanent sail number <i>Z 101</i>	Expiration date of classification certificate <i>replaced by Bureau Veritas, Paris</i>
Owner <i>J. Toller</i>	Measurements or partial remeasurements by N.A. Measurer, signature & date
Owner's club <i>V.C. Rapperswil</i>	<i>Measurements</i> <i>Lars Bergström</i>
Designer <i>Britton-Chance, jr</i>	<i>19.6.70</i>
Builder <i>Jan Gustavsson, Rosätra</i>	<i>remeasured</i> <i>O. Weber</i>
Date completed <i>4.5.1968</i>	<i>7.4.72</i>
Condition of water when marks were sighted State fresh or salt <i>first measurement: salt/fresh</i>	<i>CH-8802 Kilchberg/ZH</i>
Difference in immersion (class rule 5) <i>7 mm</i>	<i>5.500</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>19.6.74</i>
Signature of designer or builder	
Signature of owner or his representative	Rerated
(The designer or builder is only responsible for measurements at the date they are taken)	
Certificate authorised by	for (National Authority)

24.4.72
 Im USY-Register
 eingetragen am
 24. APR. 1972



RATING FORMULA : $0.9 \left(\frac{L\sqrt{S}}{12\sqrt[3]{D}} + \frac{L+\sqrt{S}}{4} \right)$ not to exceed 5.5 m or 18.04 ft.

	Actual measures		Rule limits
LENGTH L FOR RATING			
Overall length L.O.A.		9,349	
Bow overhang to L ₁	1,037		
Stem overhang to L ₁	0,855		
Total overhang	add	1,892	
Measured length L ₁		subtract 7,457	
Girth at bow	0,720		
Twice vertical height at bow (=0.550 m or 1.804 ft.)	0,550		
Bow girth difference	subtract	0,170	min. 0.165 m or 0.541 ft. (rule 3)
Girth at stem	1,568		
Twice vertical height at stem	1,024		
Stern girth difference	subtract	0,544	
1/3 stern girth difference	div. by 3	0,234	min. 0.234 m or 0.768 ft. (rule 3)
Length L for rating formula		add	7,861
SAIL AREA FOR RATING			
Largest headsail = 0.5 x _____ (luff) x _____ (perp)		9,585	min. see next page
Mainsail = 0.5 x <u>10,595</u> (H) x <u>3,665</u> (B)		19,415	min. 26.5 m ² or 285.0 sq. ft. (rule 7)
Total sail area S		add	29,000
\sqrt{S}			5,385
DISPLACEMENT			
Weight of yacht (date when weighed <u>4.5.68</u>)		2050	
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) max. 2.0 m ³ or 70.62 cu.ft.
$\sqrt[3]{D}$			1,260
RATING			
Rating calc'd according to formula		5,500	
3 x tumble home excess		-	(rule 14)
FINAL RATING		add	5,500

RULE PARTICULARS

	Actual ^{x)}	Rule limits	Rule No.
HULL			
Immersion checked in salt/fresh water	date 7.4.72		5;27
Weight of inside ballast placed at	40	xx)	6;33
Beam	1.920	min. 1.90m or 6.23 ft.	7;9
Draft	1.350	max. 1.35m or 4.43ft.	7
Freeboard at bow girth station	0.712		
" at stern girth station	0.592		
" at midship mark	0.600		
" average	0.635	min. 0.63m or 2.06ft.	
Keel, ballast material	lead	lead or iron	10
" ht. of round at bottom	65	max. 75mm. or 3 in.	10
" width at max. section 1 metre below L.W.L.	> No	min. 150mm. or 5.9in.	10
Stern angle	1.325	min. 1 in 5.5	12
Round of beams	Ø	max. 7mm. in 305mm.	13
Tumble home	0.058	or 0.25in. in 12in.	14
2% of max. beam	0.058		
Excess tumble home	subtract → Ø	3 x excess added to rating	14
Area of deck openings	2.20 m ²	max. 2.25m ² or 24.25 sq. ft.	24
Cockpit forward of L1 mark	2.105	min. 1.75m or 5.74ft.	25
Breadth of side decks	0.575	min. 35cm or 1.15ft.	24
SAILS & RIGGING			
Height of sailplan above covering board level	11.700	max. 11.10m or 36.4ft.	16
" " boom (black band) above covering board level	0.505	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)	2.692	max. 0.50 x 5	16
Min. headsail for measurement purposes = 0.5 x l x J x 80%	9.562		15
Spinnaker, halliard above forestay	100	max. 10cm or 3.9in.	20
" " out from mast	28	max. 3cm or 1.18in.	20
" breadth of halt the foot	3.365	max. 1.25 x J	20
Storm spinnaker, breadth of halt the foot	2.692	max. J	20
Spinnaker boom length	2.692	max. J	21
Mast diameter at 1/2 ht. of fore triangle, oval round mast	130 x 110	min. 11.5cm or 4.52 in.	22
" " at deck " "	130 x 110	min. 10.9cm or 4.30in.	22
" " at jib halliards " "	105 x 92	min. 9.2cm or 3.62in.	22
" " at top " "	68 x 53	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	44	min. 40 kgs or 88 lbs	22
Centre of gravity of mast above covering board level	4.540	min. 38% of mast ht.	22
Boom depth	< 11.2	max. 15.2cm or 6in.	23
Boom width	> 50	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	30 m	min. 30m or 16.4 fathoms	26
Top of l marks above water with yacht in racing trim			5