

1979

# International 5.5 Metre Class Certificate of Rating

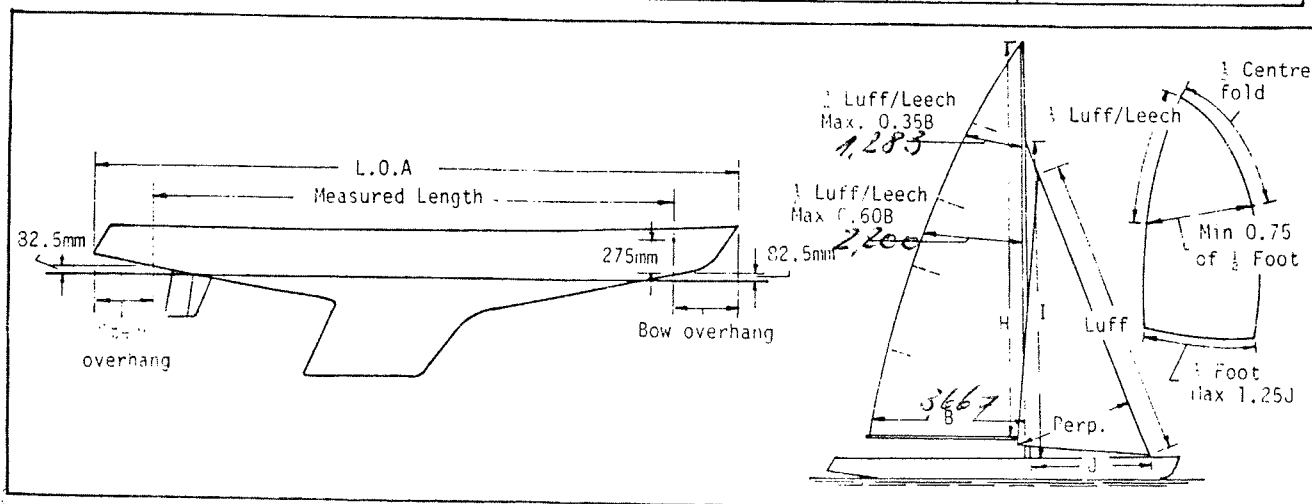
Yacht's name ..... <i>PAN</i> .....	Classification society
Sail number ..... <i>Z 147</i> .....	Expiration date of classification certificate
Owner ..... <i>H. P. Haberlin</i> .....	Measurements or partial remeasurements by N.A. Measurer, signature & date
Owner's club ..... <i>YC Sh.</i> .....	<i>21.3.1985</i> .....
Designer ..... <i>Britten Chance</i> .....	<i>USY-Velm.</i> .....
Date completed ..... <i>20.04.1985</i> .....	<i>O. Weber</i> .....
Condition of water when marks were sighted State fresh or salt ..... <i>fresh</i> .....	<i>CH-8802 Kilchberg/ZH</i> .....
Difference in immersion (class rule 5)	..... <i>0.06</i> .. (metres)
Has designer's or builder's declaration been supplied	<i>ja</i>
I declare that the particulars given on this certificate are correct at this date	Expiration date of rating certificate
Signature of measurer .....	<i>28.04.1987</i> .....
Signature of designer or builder .....	Re-rated .....
Signature of owner or representative ..... <i>Haberlin</i> ..... <i>28.3.85</i> .....	.....

Certificate authorised by ..... Date ..... for .....

(National Authority)



	Actual measures		Rule limit
<u>LENGTH L FOR RATING</u>			
Overall length L.O.A.		9.122	
Bow overhang to L <sub>1</sub>	.874		
Stern overhang to L <sub>1</sub>	.947		
Total overhang	add	1.821	
Measured length L <sub>1</sub>		subtract	
Girth at bow	.705	7.807	
Twice vertical height at bow (=0.530 m)	.156		
Bow girth difference	subtract	.165	min. 0.165 m (rule 3)
Girth at stern	1.770		
Twice vertical height at stern	1.058		
Stern girth difference	subtract		
1/3 stern girth difference	.712		
Length L for rating formula	div. by 3	.237	min. 0.234 m (rule 3)
	add	7.703	
<u>SAIL AREA FOR RATING</u>			
Largest headsail = 0.5 x _____ (luff) x _____ (perp)		9.562	min. see next page
Mainsail = 0.5 x 10.600 (H) x 3.667 (B)		19.435	min. 26.5 m <sup>2</sup> (rule 7)
Total sail area S		add	max. 29.0 m <sup>2</sup>
$\sqrt{S}$		5.385	
<u>DISPLACEMENT</u>			
Weight of yacht (date when weighed 29.3.85)		1850	
Displacement D = weight div. by 1025.21 kg/m <sup>3</sup>		1800	min. 1.7 m <sup>3</sup> (rule 7)
$\sqrt[3]{D}$		1.218	max. 2.0 m <sup>3</sup>
<u>RATING</u>			
Rating calc'd according to formula		1.498	
3 x tumble home excess		-	(rule 14)
FINAL RATING	add	1.50	



	Actual <sup>x)</sup>	Rule limits	Rule No.
<b>HULL</b>			
Immersion checked in salt/fresh water	date 29.3.85		3;27
Weight of inside ballast placed at _____	NONE	xx)	6;33
Beam	1.905	min. 1.90 m	7;9
Draft	1.525	max. 1.35 m	7
Freeboard at bow girth station	662		
" at stern girth station	616		
" at midship mark	606		
" average	1.884	min. 0.638	
Keel, ballast material	lead	lead or iron	10
" ht. of round at bottom	nil	max. 75mm	10
" width at max. section 1 metre below L.W.L.	155	min. 150mm	10
Stern angle	265	min. 1 in 5.5 = 0.182	12
Round of beams	∅	max. 7mm in 305mm	13
Tumble home	∅		14
2% of max. beam	.038		
Excess tumble home	subtract ∅	3 x excess added to rating	14
Area of deck openings	2.20	max. 2.25 m <sup>2</sup>	24
Cockpit forward of L1 mark	2.880	min. 1.75 m	25
Breadth of side decks	1.350	min. 35 cm	24
<b>SAILS &amp; RIGGING</b>			
Height of sailplan above covering board level	11.100	max. 11.10 m	16
" " boom (black band) above covering board level	1.500	max. 0.85 m	17
" " fore triangle above covering board level (1)	8.880	max. 8.88 m	16
Base of fore triangle (J) (Deck black band to be checked)	2.692	max. 0.50 x S	16
Min. headsail for measurement purposes = 0.5 x 1 x J x 80%	9.562		15
Spinnaker, halliard above forestay	1.100	max. 10 cm	20
" " out from mast	1.005	max. 3 cm	20
" breadth of half the foot	3.565	max. 1.25 x J	20
Storm spinnaker, breadth of half the foot	2.692	max. J	20
Spinnaker boom length	2.692	max. J	21
Mast diameter at 1/2 ht. of fore triangle, round mast	100 x 144	min. 11.5 cm	22
" " at deck	100 x 144	min. 10.9 cm	22
" " at jib halliards	95 x 134	min. 9.2 cm	22
" " at top	80 x 88	min. 5.8 cm	22
(The athwartships diameter 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	42	min. 40 kgs	22
Centre of gravity of mast above covering board level	43%	min. 38% of mast ht.	22
Boom depth	1.100	max. 15.2 cm	23
Boom width	669	min. 3.8 cm	23
<b>MISCELLANEOUS</b>			
Weight of anchor	13 kg	max. 13kgs min. 11kgs	26
Length of warp	30 m	min. 30 m	26
Top of 1 marks above water with yacht in racing trim	18		5