

Rpt. C.11 (Comp.)

J.H.F.

For LONDON OFFICE ONLY

# LLOYD'S REGISTER OF SHIPPING

## SURVEYS FOR FREEBOARD

(COMPUTATION FOR STEAMER, ~~SAILING SHIP~~, ~~TANKER~~)

Received .....

Index No. ....

Govt. Copy .....

Owners C11 .....

Ship's Name  m.s. "NYON"	Official Number	Nationality and Port of Registry  Swiss Bâle	Gross Tonnage	Date of Build  1952/ 59	Port of Survey ROTTERDAM
LENGTHENED					Date of Survey
Moulded Dimensions: Length ..... Breadth 17462 ..... Depth 8549					Surveyor's Signature <i>K.v. Duffelen.</i>
Freeboard Length ..... 133438					Particulars of Classification *100A1
Moulded displacement at moulded draught = 85 per cent. of moulded depth ..... 12596 M3					
Coefficient of fineness for use with Tables ..... 744					

DEPTH FOR FREEBOARD (D).	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth ... 8549	(a) Where D is greater than Table depth (D-Table depth) R =	Moulded Breadth (B) 17462
Stringer plate ... 10	(b) Where D is less than Table depth (if allowed) (Table depth-D) R =	Standard Round of Beam = $\frac{B \times 25}{50} = 349$
Wood Sheathing on exposed deck	8.33(8.896-8.559)30 = -84 mm.	Ship's Round of Beam = 350
$T \left( \frac{L-S}{L} \right) =$	.337	Difference 1
Depth for Freeboard (D) = 8559	If restricted by superstructures --	Restricted to
		Correction = $\frac{\text{Diff}}{4} \times \left( 1 - \frac{S}{L} \right) = \text{nil.}$

DEDUCTION FOR SUPERSTRUCTURES.					
	Mean Covered Length (S)	Equivalent Enclosed Length (S)	Height	Height Correction	Effective Length (E)
Poop enclosed	7320	7320		--	7320
" overhang					
R.Q.D. enclosed					
" overhang					
Bridge enclosed	124288	124288	2743	--	124288
" overhang aft	430	323		--	323
" overhang forward					
Fore enclosed					
" overhang					
Trunk aft					
" forward		max. 5 diff.			
Tonnage opening aft	1400	753		--	753
" forward					
Total	133438	132684			132684

Standard Height of Superstructure 2.29 m.

" " R.Q.D. --

Deduction for complete superstructure 1067

Percentage covered  $\frac{S}{L} = 100\%$

" "  $\frac{S_1}{L} = 99.43\%$

" "  $\frac{E}{L} = 99.41\%$

Percentage from Table, Line A. & B 99.30

(corrected for absence of forecastle (if required))

Percentage from Table, Line B.

(corrected for absence of forecastle (if required))

Interpolation for bridge less than 2L (if required)

Deduction = 1067 x .9926 = 1059 mm.

SHEER CORRECTION.							
Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P.	1367	1	1365	1372	1825	1	1825
1/2 L from A.P.	607	4	2428		812	4	3248
3/4 L	152	2	304		201	2	402
Amidships	0	4	0	0	0	4	0
3/4 L from F.P.	304	2	606		352	2	704
1/2 L	1214	4	4852		1423	4	5692
F.P.	2734	1	2731	2745	3198	1	3198
Total			12303	+ 453			15069

Actual tweendeck height = 2743

Standard tweendeck height = 2290

453 mm.

Mean actual sheer aft = >1

Mean standard sheer aft = >1

Mean actual sheer forward = >1

Mean standard sheer forward = >1

Length of enclosed superstructure forward of amidships = C.S.S./T.O.

" " aft of " =

Correction = Difference between sums of products  $\left( .75 - \frac{S}{2L} \right) = \frac{12303 - 15069}{18} = -150$

If limited on account of midship superstructure.

Correction =  $\frac{12303 - 15069}{18} \times (.75 - .50) = -150 \times .25 = -38$

If limited to maximum allowance of 1 1/2 ins. per 100ft. --

Deduction for Tropical Freeboard.		Deduction for Fresh Water.		TABULAR FREEBOARD corrected for Flush Deck (if required)	
Addition for Winter and Winter North Atlantic Freeboard.		Displacement in salt water at summer load water line		Correction for coefficient $\frac{744 + .68}{1.36} = 1424/1360$	2116
Depth to Freeboard Deck = 8.559		$\Delta =$			2215
Summer freeboard = 1.03		Tons per inch immersion at summer load water line			
Moulded draught (d) = 7.529		T =		Depth Correction	
Keel allowance =		Deduction = $\frac{\Delta}{40 T}$ inches		Deduction for superstructures	
Extreme draught =				Sheer correction	
Deduction for Tropical freeboard and addition for =				Round of Beam correction	
Winter freeboard = $\frac{d}{4}$ inches =				Correction for Thickness of Deck amidships	
Addition for Winter North Atlantic Freeboard (if required) =				Other corrections, scantlings, etc.	

Summer Freeboard = 1034

say 103 cm.

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck :-

Tropical Fresh Water Line above Centre of Disc	...	Tropical Fresh Water Freeboard	...
Fresh Water Line	"	Fresh Water	"
Tropical Line	"	Tropical	"
Winter Line below	"	Winter	"
Winter North Atlantic Line	"	Winter North Atlantic	"