

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

N. 15207

Ship's Name **M.V. "CARELIA"** Official Number **8029** Nationality and Port of Registry **Dutch S. GRAVENHAGE** Date of Build **1938** Port of Survey **Amsterdam**

Moulded Dimensions: Length **140.511** Breadth **17.980** Depth **10.363**  $m^2$

Moulded displacement at moulded draught = 85 per cent. of moulded depth **17620**  $m^3$  tons

Coefficient of fineness for use with Tables **.792**

Date of Survey **whilst building 14-38**

Surveyor's Signature **H. P. Jonker**

Particulars of Classification **+100A1**  
*CONTEMPLATED*

Depth for Freeboard (D).  $m/m$

Moulded depth ... **10363**

Stringer plate ... **228**

Sheathing on exposed deck  $T \left( \frac{L-S}{L} \right) =$

Depth for Freeboard (D) = **10386**

Depth correction.

(a) Where D is greater than Table depth (D-Table depth) R = **8.33(10.386-9.368) 30 = +254**  $m$ .

(b) Where D is less than Table depth (if allowed) (Table depth-D) R = **1.018**

If restricted by superstructures ☒

Round of Beam correction.

Moulded Breadth (B) **17980**  $m/m$

Standard Round of Beam =  $\frac{B \times 12}{50} =$  **360**  $m/m$

Ship's Round of Beam = **360**  $m/m$

Difference **nil**

Restricted to

Correction =  $\frac{Diff}{4} \times \left( 1 - \frac{S_1}{L} \right) =$  **nil**

## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S) $m/m$	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed EQUIV. ...	<del>24849</del>	28809	2286	✓	28809
" overhang ...	<del>28809</del>		+64 $m/m$		
R.Q.D. enclosed ...			wood deck		
" overhang ...					
Bridge enclosed EQUIV. ...	<del>13085</del>	13912	2286	2286/2290	13887
" overhang aft ...	<del>13912</del>				
" overhang forward					
F'cle enclosed ...	14722	14722	2286	✓	14722
" overhang ...	630	315	+64 $m/m$	✓	315
Trunk aft ...			wood deck		
" forward ...					
Tonnage opening aft ...					
" " forward					
Total ...	58073	57758			57733

Standard Height of Superstructure **2290**  $m$  ✓

" " R.Q.D. ✓

Deduction for complete superstructure **1067**  $m$  ✓

Percentage covered  $\frac{S}{L} =$  **41.33**

"  $\frac{S_1}{L} =$  **41.11**

"  $\frac{E}{L} =$  **41.09**

Percentage from Table, ~~Line A~~ TANKER = **32.09**  
(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 × .3209 = 342**  $m$ .

## SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P. ...	1425	1	1425	1435	1425	1	1425
$\frac{1}{2}$ L from A.P. ...	633	4	2532	638	633	4	2532
$\frac{3}{8}$ L " ...	158	2	316	159	158	2	316
Amidships ...	-	4	-	0	-	4	-
$\frac{3}{8}$ L from F.P. ...	316	2	632	309	309	2	618
$\frac{1}{2}$ L " ...	1266	4	5064	1261	1261	4	5044
F.P. ...	2849	1	2849	2845	2845	1	2845
Total ...			12818				12780

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) = \frac{38}{18} (.75 - .2067) = +1$   $m$ .

If limited on account of midship superstructure ✓

If limited to maximum allowance of  $1\frac{1}{2}$  ins. per 100 ft. ✓

## Deduction for Tropical Freeboard.

## Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = **10.386**  $m$

Summer freeboard = **2.060**  $m$

Moulded draught (d) = **8.326**  $m$

## Deduction for Tropical Freeboard and addition for

Winter freeboard =  $\frac{d}{48} = 173$   $m = 17$  cms.

Addition for Winter North Atlantic Freeboard (if required) = **173 + 115 = 288**  $m = 29$  cms.

## Deduction for Fresh Water.

Displacement in salt water at summer load water line  $\Delta = 16645$   $m^3$

$\frac{\Delta}{m^3}$  per  $\frac{cm}{m}$  immersion at summer load water line

T = **21.82**

Deduction =  $\frac{\Delta}{40 T}$  inches = **191**  $m/m$

= **19** cms.

## TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient  $\frac{.792 + .68}{1.36} = \frac{1.472}{1.36}$

Depth Correction ... **254**  $m$

Deduction for superstructures ... **342**  $m$

Sheer correction ... **1**  $m$

Round of Beam correction ... **-**  $m$

Correction for Thickness of Deck amidships ... **-**  $m$

Other corrections, scantlings, etc. ... **-**  $m$

1979  $m$

2142  $m$

255 342 - 87  $m$

Summer Freeboard = **2055**  $m$

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

Tropical Fresh Water Line above Centre of Disc ...	36 cms	Tropical Fresh Water Freeboard ...	170 "
Fresh Water Line " " ...	19 "	Fresh Water " " ...	187 "
Tropical Line " " ...	14 "	Tropical " " ...	189 "
Winter Line below " " ...	14 "	Winter " " ...	223 "
Winter North Atlantic Line " " ...	29 "	Winter North Atlantic " " ...	235 "

8 APR 1938



Carelia.

A new form should be prepared if any alterations that affect the freeboard have been made. If no such alterations have been made, the Surveyor should endorse the form on this side with his signature and the date.

At moulded draught of 8325  $\frac{m}{m}$  displacement 16645  $H^3$   
At moulded draught of 8325  $\frac{m}{m}$  displacement 21,82  $H^3$  per cth.

Loop equiv. bhd.

Length at centre = 29289

" " side = 27849

$1440 \times \frac{2}{3} = 960$

27849

28809

Bridge equiv. bhd.

Length at centre = 14326

" " side = 13085

$1241 \times \frac{2}{3} = 827$

13085

13912

Trade of ship Ocean trade

Names of sister ships M.V. "Karisca" N.V. Ned. Scheepsb. H<sup>t</sup> yard N° 242 (Amst. report N° 13939)

Builder's name and yard number N.V. Nederl. Scheepsbouw H<sup>t</sup> yard N° 266

Owners Petroleum Maatschappij La Corona

Fee £ 220.-



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