

LLOYD'S REGISTER OF SHIPPING

UNITED WITH THE BRITISH CORPORATION REGISTER

SURVEYS FOR FREEBOARD

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER)

Received

Index No.

Govt. Copy

Owners C11

Ship's Name "TORNAGALEONES" (ex "OTTO PETERSEN")	Official Number ✓	Nationality and Port of Registry CHILEAN VALPARAISO	Gross Tonnage 2865	Date of Build 1930
Moulded Dimensions: Length PP. 325'0" Breadth 48'25" Depth 22'25"				
Freeboard Length 326'35"				
Moulded displacement at moulded draught = 85 per cent. of moulded depth (excluding bossing) 6390 M. tons				
Coefficient of fineness for use with Tables .739				

Port of Survey **HAMBURG**

Date of Survey **12/13/14 & 15th April, 1954**

Surveyor's Signature **E. FLYNN.**

Particulars of Classification **S.S.***

DEPTH FOR FREEBOARD (D).

Moulded depth ... **22'25"**

Stinger plate ... **.03**

Wood Sheathing on exposed deck

$T \left(\frac{L-S}{L} \right) =$

Depth for Freeboard (D) = **22'28"**

DEPTH CORRECTION.

(a) Where D is greater than Table depth (D-Table depth) R = **(22'28" - 21'75") 2'51"**
= +1'33"

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

If restricted by superstructures ✓

ROUND OF BEAM CORRECTION.

Moulded Breadth (B) **48'25"**

Standard Round of Beam = $\frac{B \times 12}{50} =$ **11'58"**

Ship's Round of Beam = **12'28"**

Difference **+67"**

Restricted to

Correction = $\frac{\text{Diff}^{\circ}}{4} \times \left(1 - \frac{S_1}{L}\right) = \frac{67}{4} \times .1685 = -11'03"$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...	23'16"	23'16"	8'0"	✓	23'16"
" overhang ...					
R.Q.D. enclosed ...					
" overhang ...					
Bridge enclosed ...	216'66"	216'66"	8'0"	✓	216'66"
" overhang aft ...					
" overhang forward ...					
F'cle enclosed ...	31'53"	31'53"	8'0"	✓	31'53"
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" " forward ...					
Total ...	271'35"	271'35"			271'35"

Standard Height of Superstructure **6'76"**

" " R.Q.D. ✓

Deduction for complete superstructure **37'09"**

Percentage covered $\frac{S}{L} =$ **83'15"**

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

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

Percentage from Table, Line A. 4 **79'21"**

(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 = **37'09" × .7921 = -29'38"**

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	42'64"	1		42'64"	49'00"	49'00"	1		49'00"
$\frac{1}{2}L$ from A.P. ...	18'97"	4		75'88"	21'00"	21'00"	4		84'00"
$\frac{3}{8}L$ " ...	4'69"	2		9'38"	6'00"	6'00"	2		12'00"
Amidships ...	0	4		0	0	0	4		0
$\frac{3}{8}L$ from F.P. ...	9'38"	2		18'76"	13'00"	13'00"	2		26'00"
$\frac{1}{2}L$ " ...	37'95"	4		151'80"	48'00"	48'00"	4		192'00"
F.P. ...	85'28"	1		85'28"	108'00"	108'00"	1		108'00"
Total ...				383'74"					471'00"

Mean actual sheer aft =

Mean standard sheer aft =

Mean actual sheer forward =

Mean standard sheer forward =

Length of enclosed superstructure forward of amidships = **> 1L**

" " aft of " = **> 1L**

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{87'26"}{18} \left(.75 - \frac{.4158}{2} \right) = -1'62"$

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 = **22'28"**

Summer freeboard = **1'88"**

Moulded draught (d) = **20'40"**

Keel allowance =

Extreme draught =

Deduction for Tropical freeboard and addition for =

Winter freeboard = $\frac{d}{4}$ inches = **5'1"5"** (127 1/2")

Addition for Winter North Atlantic Freeboard (if required) = **5'2" = 7"** (178 1/2")

Deduction for Fresh Water.

Displacement in salt water at summer load water line

$\Delta =$

Tons per inch immersion at summer load water line

T =

Deduction = $\frac{\Delta}{40 T}$ inches

= $\frac{d}{4} = 5"$ (127 1/2")

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

Depth Correction ...

Deduction for superstructures ...

Sheer correction ...

Round of Beam correction ...

Correction for Thickness of Deck amidships ...

Other corrections, scantlings, etc. ...

	50'05"
	52'23"
+	-
1'33"	-
-	29'38"
-	1'62"
-	03"
-	-
-	-
1'33"	31'03"
	-29'70"
	Summer Freeboard = 22'53"

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

Tropical Fresh Water Line above Centre of Disc ...	... 258"
Fresh Water Line " " ...	... 129"
Tropical Line " " ...	... 129"
Winter Line below " " ...	... 129"
Winter North Atlantic Line " " ...	... 180"

Tropical Fresh Water Freeboard ...	... 317"
Fresh Water " " ...	... 446"
Tropical " " ...	... 446"
Winter " " ...	... 704"
Winter North Atlantic " " ...	... 755"

As originally assigned by Danish Authorities 1. 6. 1954

Tosnagalanes

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.

Trade of ship

Names of sister ships

Builder's name and yard number

Owners

Fee £ : :

List of plans forwarded for reference. (See "Instructions to Surveyors, Part 4, 1950," paragraph 11.)



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