

LLOYD'S REGISTER OF SHIPPING

UNITED WITH THE BRITISH CORPORATION REGISTER

SURVEYS FOR FREEBOARD

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER)

For LONDON OFFICE ONLY

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Index No.

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Owners C11

Ship's Name TITANIAN	Official Number	Nationality and Port of Registry NORWEGIAN BERGEN.	Gross Tonnage NOT YET KNOWN	Date of Build 1930 CONVERTED 1956	Port of Survey BERGEN
Moulded Dimensions: Length 442'0" Breadth 58'6" Depth 33'0" TO ORIGINAL M. DECK TO TOP OF TRUNK DECK 40'5 3/4"	Freeboard Length 441'5"	Moulded displacement at moulded draught = 85 per cent. of moulded depth (excluding bossing) 16420 tons	Coefficient of fineness for use with Tables .7034 .810 EST.	Surveyor's Signature Knut Olsen	Particulars of Classification 100A1 CONTEMPLATED.

DEPTH FOR FREEBOARD (D). **39.25**
 Moulded depth **TO ORIGINAL M. DECK 33'0"**
 Stringer plate **TRUNK TOP 32.0 mm**
ORIGINAL M. DECK 17.0 mm
= .06'
 Wood Sheathing on exposed deck
 $T \left(\frac{L-S}{L} \right) =$
 Depth for Freeboard (D) = **39.31**

DEPTH CORRECTION.
 (a) Where D is greater than Table depth (D-Table depth) R =
 $(39.31 - 29.43) 3.0 = 29.64$
 (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) **58'6"**
 Standard Round of Beam = $\frac{B \times 12}{50} = 14.04$
 Ship's Round of Beam = **14.50**
 Difference **.46**
 Restricted to
 Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.46}{4} \times 1 = .12$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...	106'6"		7'5 3/4"		
" overhang ...					
R.Q.D. enclosed ...					
" overhang ...					
Bridge enclosed ...	23'6"				
" overhang aft ...					
" overhang forward ...					
F'cle enclosed ...	66'6"		7'5 3/4"		
" overhang ...					
Trunk aft ...	165'6"		7'5 3/4"		
" forward ...	80'5"		7'5 3/4"		
Tonnage opening aft ...					
" " forward ...					
Total ...	441'5"				

Standard Height of Superstructure **7'5 3/4"** **7.5'**
 " " R.Q.D. **-**
 Deduction for complete superstructure **42"**
 Percentage covered $\frac{S}{L} =$
 " " $\frac{S_1}{L} =$
 " " $\frac{E}{L} =$
 Percentage from Table, Line A.
 (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 = **NIL.**

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	54.14	1		54.14	59.88	59.88	1		59.88
1/2 L from A.P. ...	24.09	4		96.36	15.8"	20.00	4		80.00
1/2 L " ...	5.955	2		11.91	2.2"	2.00	2		4.00
Amidships ...	0	4		0	0	0	4		0
1/2 L from F.P. ...	11.91	2		23.82	15.0"	15.00	2		30.00
1/2 L " ...	48.18	4		192.72	41.0"	58.25	4		233.00
F.P. ...	108.28	1		108.28	112.75	112.75	1		112.75
Total ...				487.23					519.63

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{32.40}{18} (.75) = -1.35$
 If limited on account of midship superstructure.

Mean actual sheer aft
 Mean standard sheer aft = **Deficient by 7.75**

Mean actual sheer forward
 Mean standard sheer forward = **EXCESS.**

Length of enclosed superstructure forward of amidships = **Flush deck.**
 " " aft of " =

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = **33.06**
 Summer freeboard = **5.06**
 Moulded draught (d) = **28.00**
 Keel allowance =
 Extreme draught =
 Deduction for Tropical freeboard and addition for =

Winter freeboard = $\frac{d}{4}$ inches = **7.00**

Addition for Winter North Atlantic Freeboard (if required) = **✓**

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

$\frac{1}{4} = 7.00$

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient $\frac{810 + .68}{1.86} = \frac{1.49}{1.36}$ **91.06**
99.76

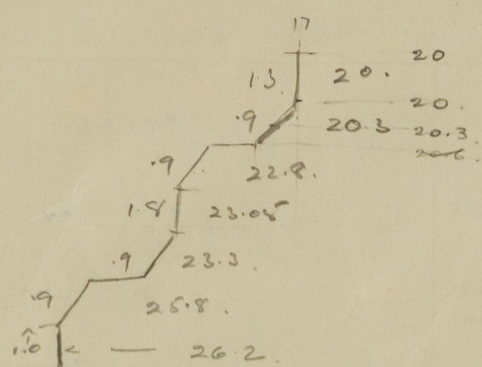
	+	-
Depth Correction ...	29.64	✓
Deduction for superstructures ...		✓
Sheer correction ...		1.35
Round of Beam correction12
Correction for Thickness of Deck amidships ...		75.00
Other corrections, scantlings, etc. to ...	7.82	
Summer Freeboard =	37.46	86.47
		- 39.01
		Summer Freeboard = 60.75

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

Tropical Fresh Water Line above Centre of Disc **14' 35 3/4"**
 Fresh Water Line " **7' 17 3/4"**
 Tropical Line " **7' 17 3/4"**
 Winter Line below " **4' 17 3/4"**
 Winter North Atlantic Line " **✓**

Tropical Fresh Water Freeboard **3' 10 3/4"** **1187**
 Fresh Water " **4' 5 3/4"** **1365**
 Tropical " **4' 5 3/4"** **1365**
 Winter " **5' 3 3/4"** **1721**
 Winter North Atlantic " **✓**

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.



Equiv deck.

$1.0 \times 26.2 =$	26.2
$.9 \times 25.8 =$	23.22
$.9 \times 23.3 =$	20.97
$1.8 \times 23.05 =$	41.49
$.9 \times 22.8 =$	20.52
$.9 \times 20.3 =$	18.27
$1.3 \times 20.0 =$	26.00
	<hr/> 176.67

Equiv Deck = $\frac{176.67}{28.35} = 6.25$

Equiv Depth = $33.00 + 6.25$
= 39.25'

C.B. $\rightarrow .95 \times 39.25'$

= $.7934 + .95 \left(\frac{6.25}{39.25} \right) \times 12$

.8096

use .810

Trade of ship Unrestricted

Names of sister ships ✓

Builder's name and yard number SWAN, HUNTER & RICHARDSON LTD., YARD No. 1384.

Owners HILMAR REKSTEN

Fee £ Not charged yet.

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

No plans forwarded.
Copies available in London.



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Foundation