

LLOYD'S REGISTER OF SHIPPING
UNITED WITH THE BRITISH CORPORATION REGISTER
SURVEYS FOR FREEBOARD
(COMPUTATION FOR STEAMER, ^{TURKET} SAILING SHIP, TANKER)

For LONDON OFFICE ONLY

Received
Index No.
Govt. Copy
Owners C11

Ship's Name TITANIAN	Official Number	Nationality and Port of Registry NORWESIAN BERGEN.	Gross Tonnage 1930 CONVERTED 1752	Date of Build	Port of Survey BERGEN.
Moulded Dimensions: Length 441.42 Breadth 58.50 Depth 33.00 ^{to U. DECK} Freeboard Length 37.37 Moulded displacement at moulded draught = 85 per cent. of moulded depth 16420 tons Coefficient of fineness for use with Tables 793					Date of Survey 2nd, 6th, 8th, 9th, 10th Nov. 1928
Surveyor's Signature KNUT. OLSEN.					Particulars of Classification 100 A1 CONTINGENT

DEPTH FOR FREEBOARD (D). Moulded depth 37.37 Stringer plate 0.06 Wood Sheathing on exposed deck $T \frac{(L-S)}{L} =$ Depth for Freeboard (D) = 37.43	DEPTH CORRECTION. (a) Where D is greater than Table depth (D-Table depth) R = 37.43 - 29.43 = 8.0 (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) Standard Round of Beam = $\frac{B \times 12}{50} =$ Ship's Round of Beam = ASSUMED STANDARD Difference Restricted to Correction = $\frac{\text{Diff}^{\circ}}{4} \times (1 - \frac{S_1}{L}) =$ NIL.
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DEDUCTION FOR SUPERSTRUCTURES.					
	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height (Virtual)	Height Correction	Effective Length (E)
Poep enclosed	106.00	106.00	3.11	3.14	43.95
" overhang				17.5	
R.Q.D. enclosed					
" overhang					
Bridge enclosed	23.00	23.00	3.11	3.475	9.54
" overhang aft					
" overhang forward					
Fele enclosed	66.50	66.50	3.11	3.175	27.57
" overhang					
Trunk aft					
" forward					
Tonnage opening aft					
" " forward					
Total	195.50	195.50			81.06
Standard Height of Superstructure 7.50 " " R.Q.D. ✓ Deduction for complete superstructure 42.0 Percentage covered $\frac{S}{L} =$ 44.29 " " $\frac{S_1}{L} =$ " " $\frac{E}{L} =$ 18.36 Percentage from Table, Line A. 9.18 (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 = 42.0918 = 3.86					

SHEER CORRECTION.							
Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S
A.P.	54.14	1		54.14	59.88	59.88	1
1/2 L from A.P.	24.09	4		96.36	20.00	20.00	4
2/3 L	6.955	2		11.96	2.0	2.00	2
Amidships	0	4		0	0	0	4
2/3 L from F.P.	11.91	2		23.82	15.0	15.0	2
1/2 L	48.18	4		192.72	58.25	58.25	4
F.P.	108.28	1		108.28	112.75	112.75	1
Total				487.23			
Mean actual sheer aft = 7.75 Mean standard sheer aft = Mean actual sheer forward = EXCEN Mean standard sheer forward = Length of enclosed superstructure forward of amidships = NIL. " " aft of " =							
Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{.75 - S}{2L} \right) = \frac{32.40 \times .75 - 22.15}{78} = - .95$ If limited on account of midship superstructure. YES. NIL. If limited to maximum allowance of 1 1/2 ins. per 100ft.							

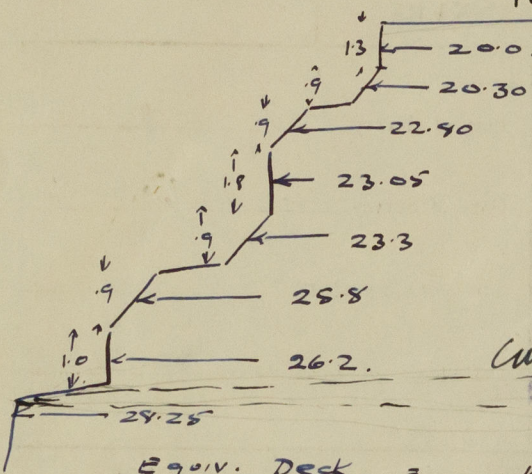
Deduction for Tropical Freeboard. Addition for Winter and Winter North Atlantic Freeboard. Depth to Freeboard Deck = 33.06 Summer freeboard = 5.06 Moulded draught (d) = 28.00 Keel allowance = ✓ Extreme draught = Deduction for Tropical freeboard and addition for = Winter freeboard = $\frac{d}{4}$ inches = 7.0 Addition for Winter North Atlantic Freeboard (if required) =	Deduction for Fresh Water. Displacement in salt water at summer load water line $\Delta =$ 16330 Tons per inch immersion at summer load water line T = 52.29 Deduction = $\frac{\Delta}{40 T}$ inches = 7.81 73.4	TABULAR FREEBOARD corrected for Flush Deck (if required) Correction for coefficient $\frac{.793 \times .68}{1.36} = \frac{1.473}{1.36}$ Depth Correction ... 24.00 Deduction for superstructures ... 3.86 Sheer correction ... ✓ Round of Beam correction ... ✓ Correction for Thickness of Deck amidships ... 52.44 Other corrections, scantlings, etc. 1.60 25.6056.30 Summer Freeboard = 60.75
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SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck :-				
Tropical Fresh Water Line above Centre of Disc	14.34	375	Tropical Fresh Water Freeboard	3.10
Fresh Water Line	7.4	197	Fresh Water	4.5
Tropical Line	7.1	178	Tropical	4.5
Winter Line below	7.1	178	Winter	5.7
Winter North Atlantic Line	✓	...	Winter North Atlantic	...

Titanian.

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.

Top of deck parallel to camber



Camber line practically standard level line.

Equiv. Deck =	1.0 x 26.2	=	26.2 ✓
	.9 x 25.8	=	23.22 ✓
	.9 x 23.3	=	20.97 ✓
	1.8 x 23.05	=	41.49 ✓
	.9 x 22.80	=	20.52 ✓
	.9 x 20.3	=	18.27 ✓
	1.3 x 20.0	=	26.00 ✓
			<u>176.67</u> ✓

$$\text{Equiv Deck} = \frac{176.67}{28.25} \times 7 = 6.25 \times 7 = 4.37 \quad \checkmark$$

$$\text{Equiv Depth} = 33.0 \times 4.37 = 37.37 \quad \checkmark$$

$$\text{Virtual HT. OF BRIDGE. Prop. FLS} = 7.48 - 4.37 = 3.11 \text{ FT.} \quad \checkmark$$

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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