

14 AUG 1945

Index. No. 37456
(For London Office only).

Lloyd's Register of Shipping.
SURVEYS FOR FREEBOARD.
(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name M/T "JULIAN"	Official Number	Nationality and Port of Registry Norwegian Bergen	Gross Tonnage abt. 8500	Date of Build 1943	Port of Survey Mahua
Moulded Dimensions: Length 465.75' Breadth 62.0' Depth 34.50'				Date of Survey Whilst building.	Surveyor's Signature A. Sundin
Moulded displacement at moulded draught = 85 per cent. of moulded depth 18830 tons				Particulars of Classification + 100 A1 Carrying Petroleum in Bulk (Contemplated)	
Coefficient of fineness for use with Tables .7783					

Depth for Freeboard (D). Moulded depth 34.50 Stringer plate .76" Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ Depth for Freeboard (D) = 34.56	Depth correction. (a) Where D is greater than Table depth (D—Table depth) R = (34.56-31.05) .9 = +10.53" (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) 62.0 Standard Round of Beam = $\frac{B \times 12}{50} =$ 14.88 Ship's Round of Beam = 14.97 Difference Even 0.09 Restricted to Correction = $\frac{\text{Diff}^e}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.09}{4} \times .5872 = -.01"$
--	--	--

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed	97.11	97.11	7.25		97.11
» overhang					
R.Q.D. enclosed					
» overhang					
Bridge enclosed	38.38	38.38	7.95		38.38
» overhang aft					
» overhang forward					
F'cle enclosed	56.79	56.79	7.50		56.79
» overhang					
Trunk aft					
» forward					
Tonnage opening aft					
» forward					
Total	192.28	192.28			192.28

Standard Height of Superstructure **9.5**
» » R.Q.D.
Deduction for complete superstructure **42.00**
Percentage covered $\frac{S}{L} =$ **41.28**
» » $\frac{S_1}{L} =$ **41.28**
» » $\frac{E}{L} =$ **41.28**
Percentage from Table, Line A. **Tanker** **36.48%**
(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 x .3228 = -13.56"**

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.	56.52	1		56.52	41.74	41.74	1		41.74
1/6 L from A.P.	25.18	4		100.72	3.02	3.02	4		12.08
2/6 L	6.22	2		12.44			2		
Amidships		4					4		
2/6 L from F.P.	12.44	2		24.88	0.08	0.08	2		0.16
1/6 L	50.35	4		201.40	25.88	25.88	4		103.52
F.P.	113.15	1		113.15	100.25	100.25	1		100.25
Total				509.16					257.75

Mean actual sheer aft = **Deficient**
Mean standard sheer aft =
Mean actual sheer forward = **Deficient**
Mean standard sheer forward =
Length of enclosed superstructure forward of amidships = **Tanker with deficient plan**
» » aft of » =

Correction = $\frac{\text{Difference between sums of products}}{18} \left(75 - \frac{S}{2L} \right) = \frac{251.41}{18} \times (.95 - .2064) = +7.59$
If limited on account of midship superstructure.

Deduction for Tropical Freeboard. Addition for Winter and Winter North Atlantic Freeboard. Depth to Freeboard Deck = 34.56 Summer freeboard = 7.45 Moulded draught (d) = 27.11 Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 6.78" Addition for Winter North Atlantic Freeboard (if required) = 6.78 + 4.66 = 11.44"	Deduction for Fresh Water. Displacement in salt water at summer load water line $\Delta =$ 19270 Tons per inch immersion at summer load water line $T =$ 61.05 Deduction = $\frac{\Delta}{40 T}$ inches = 7.08"	TABULAR FREEBOARD corrected for Flush Deck (if required) Correction for coefficient $\frac{.7783-.68}{1.96} = \frac{.0983}{1.96}$ Depth Correction 10.53 Deduction for superstructures 18.24 Sheer correction 7.59 Round of Beam correction .01 Correction for Thickness of Deck amidships Other corrections, scantlings, etc. 18.12 13.52 + 4.55 Summer Freeboard = 89.41"
---	--	---

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

Tropical Fresh Water Line above Centre of Disc	1-13/4" = 34.97"	Tropical Fresh Water Freeboard	7'-5 1/2" = 227.37"
Fresh Water Line	7/8" = 178"	Fresh Water	6'-3 3/4" = 192.41"
Tropical Line	6 3/4" = 171"	Tropical	6'-10 1/2" = 209.5"
Winter Line below	6 3/4" = 171"	Winter	6'-10 3/4" = 210.24"
Winter North Atlantic Line	11 1/2" = 292"	Winter North Atlantic	8'-0 1/4" = 244.4"
			8'-5" = 256.5"

M. T. Julian

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.

Displacement in salt water and tons per inch immersion:

Moulded draught	Displacement	Tons per inch.
75% 25.875'	16365 tons	60.87
80% 27.60'	17630 tons	61.12
85% 29.325'	18900 tons	61.37

Trade of ship

Names of sister ships

M/T "Beauregard" Kochums Gard No 222.

Builder's name and yard number

Kochums Mek. Verkefads A.-B. Gard No 224

Owners

Hilmer Beksten, Bergen.

Fee £



© 2020

Lloyd's Register
Foundation