

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Talbank 39053 similar

"TAINWIND"

Ship's Name "ROWANBANK" (Ex "SAMPFORD" Ex "JOHN REED") LIBERTY SHIP.	Official Number 169797	Nationality and Port of Registry BRITISH GLASGOW.	Gross Tonnage 7261.27	Date of Build AUG. 1943.	Port of Survey Belfast
To CENTRE OF RUDDER STOCK. Moulded Dimensions: Length 416.96' Breadth 56.90' Depth 37.33' 417.73				Date of Survey 28th April - 2nd May 47.	
Moulded displacement at moulded draught = 85 per cent. of moulded depth (31'-8³/₄") 16,500 tons				Surveyor's Signature A. S. Fletcher	
Coefficient of fineness for use with Tables .766				Particulars of Classification 100A1 with freebd (class contemplated)	

Depth for Freeboard (D).		Depth correction.		Round of Beam correction.	
Moulded depth	37.33	(a) Where D is greater than Table depth (D - Table depth) R = (37.33 - 27.85) 3 = + 28.62		Moulded Breadth (B)	56.9'
Stringer plate	.06	(b) Where D is less than Table depth (if allowed) (Table depth - D) R = 3.34		Standard Round of Beam = $\frac{B \times 12}{50}$	13.65"
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$		If restricted by superstructures <input checked="" type="checkbox"/>		Ship's Round of Beam	14" 14.10" equiv
Depth for Freeboard (D) =	37.39			Difference	+ .45
				Restricted to	
				Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right)$	$\frac{.45}{4} = -.11"$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed	✓				
" overhang	✓				
R.Q.D. enclosed	✓				
" overhang	✓				
Bridge enclosed	✓				
" overhang aft	✓				
" overhang forward	✓				
Fore enclosed	✓				
" overhang	✓				
Trunk aft	✓				
" forward	✓				
Tonnage opening aft	✓				
" " forward	✓				
Total	✓				

Standard Height of Superstructure	7.5'
" " R.Q.D.	42"
Deduction for complete superstructure	
Percentage covered $\frac{S}{L} =$	NIL
" " $\frac{S_1}{L} =$	
" " $\frac{E}{L} =$	
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.	51.77	1		51.77	50.00	30.00	1		50.00
1/4 L from A.P.	23.04	4		92.16	19.50	19.50	4		78.00
3/4 L	5.695	2		11.39	5.12	5.12	2		10.24
Amidships	-	4		-	0	-	4		-
3/4 L from F.P.	11.39	2		22.78	11.50	11.50	2		23.00
1/4 L	46.08	4		184.32	46.25	46.25	4		185.00
F.P.	103.55	1		103.55	102.50	102.50	1		102.50
Total				465.97					468.74

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 =	Flush deck
" " aft of "	=

Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{.75 - S}{2L} \right) = \frac{17.23}{18} \times .75 = + .72"$

If limited on account of midship superstructure. ☒

If limited to maximum allowance of 1 1/2 ins. per 100 ft. ☒

Deduction for Tropical Freeboard.
Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = 37.39
Summer freeboard = 9.73
Moulded draught (d) = 27.66

Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 6.92 = 7"

Addition for Winter North Atlantic Freeboard (if required) =

Deduction for Fresh Water.

Displacement in salt water at summer load water line

$\Delta = 14246$

Tons per inch immersion at summer load water line

$T = 48.71$

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

= 7.31" = 7 1/4"

Full DRAFT Δ Tons. T.P.I.

28'-8 3/4" 14825.

28'-0" 14400.

27'-8 3/4" 14246.

27'-0" 13820

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

$\frac{77.07 + 6.27}{1.36} = \frac{1.446}{1.36}$

$\frac{83.34}{1.36} = 88.60$

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

Tropical Fresh Water Line above Centre of Disc

Fresh Water Line

Tropical Line

Winter Line

Winter North Atlantic Line

14 1/4" 362 m/m

7 1/4" 184

7" 178

7" 178

7" 178

7" 178

7" 178

7" 178

Tropical Fresh Water Freeboard

Fresh Water

Tropical

Winter

Winter North Atlantic

9'-8 3/4" 2965 m/m

8'-6 1/2" 2603

9'-1 1/2" 2781

9'-1 3/4" 2787

10'-3 3/4" 3143

10'-3 3/4" 3143

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Rowanbank.

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.

The following particulars were obtained from the existing Load Line Certificate on board the vessel, issued by the British Corporation at Glasgow on 18th March 1944 and in force until 10th September 1948, and having been endorsed for Annual Load Line Survey at Calcutta on 22nd Sept. 1946.

Tropical 9'-1³/₄" ----- 7" above S.
 Summer 9'-8³/₄" ----- from top of Steel upper deck at Sides
 Winter 10'-3³/₄" ----- 7" below S.
 W.H.A. --- not assigned.
 Fresh Water allowance 7¹/₄"

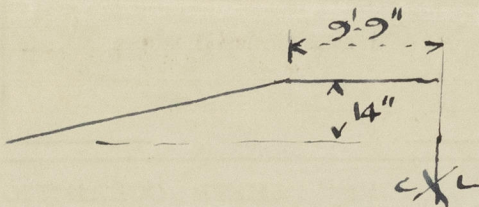
When the vessel was in drydock, by using the draft marks forward the approximate rule position of the forward perpendicular was found. By dropping plumb lines the freeboard length was measured 417'-3". Allowing for a permissible error in checking without proper staging it is considered that the 416'-11¹/₂" which was taken from plans on board, should be taken as freeboard length to centre of Rudder stock and this figure has been used in our reports.

In the short time in drydock it was not possible to rig the proper levelling gear to measure the Moulded Depth but a check figure by internal measurements the vessel has been built to a Moulded Depth of 37'-4"

The sheers given in the report were obtained by dropping plumb lines and sighting a level base line along the dock bottom.

Equiv camber :-

$$\begin{array}{rcl} 19.5 \times 14 & = & 273 \\ \frac{(56.9 - 19.5) \times 14}{2} & = & 261.8 \\ 18.7 & & 534.8 \\ \frac{534.8 \times 3}{569} & = & \underline{\underline{14.1 \text{ "equiv.}}} \end{array}$$



Trade of ship

Ocean going cargo

Names of sister ships

U.S.A. "LIBERTY" TYPE VESSEL. ("SAM"-TYPE).

Builder's name and yard number

Permanente Metals Corporation, Richmond No 1 yard, No 2099.
 California.

Owners

Bank Line Ltd; 102 Hope Street, Glasgow.

Fee £

18-0-0 (See Letter.)



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