

9 JUN 1948

Index No. 39682
(For London Office only.)

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

GEX. REPORT N° 23691.

Ship's Name BRITISH ADVOCATE	Official Number 181956	Nationality and Port of Registry BRITISH. LONDON	Gross Tonnage 8573	Date of Build 1948	Port of Survey GREENOCK
Moulded Dimensions: Length 464.00 Breadth 61.50 ✓ Depth 34.00 ✓ Moulded displacement at moulded draught = 85 per cent. of moulded depth 18335 tons Coefficient of fineness for use with Tables 778					Date of Survey WHILE BUILDING. Surveyor's Signature <i>Ramoth Singh</i> Particulars of Classification 100A1 CARRYING PETROLEUM IN BULK (CONTEMPLATED)

DEPTH FOR FREEBOARD (D). Moulded depth ... 34.00 Stringer plate ... 72"06 Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ Depth for Freeboard (D) = 34.06 ✓	DEPTH CORRECTION. (a) Where D is greater than Table depth (D-Table depth) R = (34.06 - 30.93) 3 = + 9.39" (b) Where D is less than Table depth (if allowed) (Table depth-D) R = 3.13 If restricted by superstructures	ROUND OF BEAM CORRECTION. Moulded Breadth (B) 61.50 ✓ Standard Round of Beam = $\frac{B \times 12}{50} =$ 14.76 Ship's Round of Beam = 14.75 ✓ Difference = -.01 Restricted to Correction = $\frac{\text{Diff}^\circ}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.01}{4} \times .5878 = \text{Nil.}$
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DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	
Poop enclosed <i>Exempt</i>	97.83	97.83	8.00	✓	97.83	Standard Height of Superstructure 7.50
" overhang	4.5	.58			.58	" " R.Q.D.
R.Q.D. enclosed	1.17					Deduction for complete superstructure 42.00
" overhang	42.50					Percentage covered $\frac{S}{L} =$ 41.59
Bridge enclosed <i>Exempt</i>	42.50	42.50	8.00	✓	42.50	" " $\frac{S_1}{L} =$ 41.22
" overhang aft	3.5	2.63			2.63	" " $\frac{E}{L} =$ 41.22
" overhang forward	3.5	.25			.25	Percentage from Table, Line A. Tanker 32.22 ✓
Fore enclosed <i>Exempt</i>	47.48	47.48	8.00	✓	47.48	(corrected for absence of forecastle (if required))
" overhang	47.48					Percentage from Table, Line B.
Trunk aft						(corrected for absence of forecastle (if required))
" forward						Interpolation for bridge less than .2L (if required)
Tonnage opening aft						Deduction = 42.00 × .3222 = 13.53 ✓
" forward						
Total	192.98	191.27			191.27	

SEE OVER

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P. ...	56.40	1	56.40	59.57	56.40	1	56.40
$\frac{1}{8}L$ from A.P. ...	25.10	4	100.40	25.1	25.10	4	100.40
$\frac{2}{8}L$ " ...	6.205	2	12.41	6.3	6.205	2	12.41
Amidships ...	-	4	-	0	-	4	-
$\frac{3}{8}L$ from F.P. ...	12.41	2	24.82	11.75	11.75	2	23.50
$\frac{4}{8}L$ " ...	50.20	4	200.80	49.5	49.50	4	198.00
F.P. ...	112.80	1	112.80	114	114.00	1	114.00
Total ...			507.63				504.71

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{2.92}{18} \left(.75 - \frac{2079}{5421} \right) = + 0.09"$ ✓

If limited on account of midship superstructure.

Mean actual sheer aft = *Excess.*
Mean standard sheer aft =Mean actual sheer forward = *Deficient*
Mean standard sheer forward =Length of enclosed superstructure forward of amidships =
" " aft of " = *Tanker.*

Deduction for Tropical Freeboard. Addition for Winter and Winter North Atlantic Freeboard. Ft. Depth to Freeboard Deck = 34.06 Summer freeboard = 6.69 Moulded draught (d) = 27.37 Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 6.84 = 6$\frac{3}{4}$ Addition for Winter North Atlantic Freeboard (if required) = 6.84 + 4.64 = 11.48 = 11$\frac{1}{2}$	Deduction for Fresh Water. Displacement in salt water at summer load water line $\Delta =$ 28 - 17780 17392 Tons per inch immersion at summer load water line $T =$ 28 - 58.88 58.70 $27 - 58.55$ Deduction = $\frac{\Delta}{40 T}$ inches = 7.41" = 7$\frac{1}{2}"$	TABULAR FREEBOARD corrected for Flush Deck (if required) Correction for coefficient $\frac{.778 + .68}{1.36} = \frac{1.458}{1.36}$ ✓ <table border="1"> <tr> <th></th> <th>+</th> <th>-</th> </tr> <tr> <td>Depth Correction</td> <td>9.39</td> <td>-</td> </tr> <tr> <td>Deduction for superstructures</td> <td>-</td> <td>13.53</td> </tr> <tr> <td>Sheer correction</td> <td>.09</td> <td>-</td> </tr> <tr> <td>Round of Beam correction</td> <td>-</td> <td>-</td> </tr> <tr> <td>Correction for Thickness of Deck amidships</td> <td>-</td> <td>-</td> </tr> <tr> <td>Other corrections, scantlings, etc.</td> <td>-</td> <td>-</td> </tr> <tr> <td></td> <td>9.48</td> <td>13.53</td> </tr> <tr> <td>Summer Freeboard =</td> <td>80.32</td> <td></td> </tr> </table>		+	-	Depth Correction	9.39	-	Deduction for superstructures	-	13.53	Sheer correction	.09	-	Round of Beam correction	-	-	Correction for Thickness of Deck amidships	-	-	Other corrections, scantlings, etc.	-	-		9.48	13.53	Summer Freeboard =	80.32	
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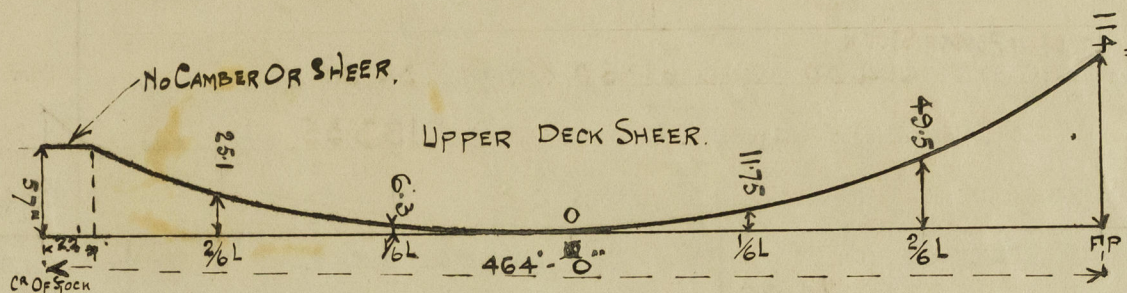
SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck :-

Tropical Fresh Water Line above Centre of Disc	14$\frac{1}{4}"$
Fresh Water Line	7$\frac{1}{2}"$
Tropical Line	6$\frac{3}{4}"$
Winter Line below	6$\frac{3}{4}"$
Winter North Atlantic Line	11$\frac{1}{2}"$

Tropical Fresh Water Freeboard	5$\frac{1}{2}"$
Fresh Water	6$\frac{1}{4}"$
Tropical	6$\frac{1}{2}"$
Winter	7$\frac{1}{2}"$
Winter North Atlantic	7$\frac{1}{2}"$

British Advocate.

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.



$$\begin{aligned} \text{Poop at side} &= 94.50' \\ \frac{2}{3} \times 5 &= \frac{3.33'}{97.83'} = \text{equivalent length.} \end{aligned}$$

$$\begin{aligned} \text{Overhang} &= 99.00' - 97.83' \\ &= 1.17' \end{aligned}$$

$$\begin{aligned} \text{Bridge at side} &= 39.50' \\ \frac{2}{3} \times 4.50 &= \frac{3.00'}{42.50'} \end{aligned}$$

$$\begin{aligned} \text{Overhang} &= 43.00' - 42.50' \\ &= 0.50' \end{aligned}$$

Forecastle:-

$$\begin{aligned} \text{Forward of } \frac{1}{10} = \text{wings} &= 18.08 \times 13.50 = 244.10 \\ &13.80 \times 5.40 = 74.52 \\ &\quad \underline{318.62} \end{aligned}$$

$$\frac{318.62}{21.08} = 15.12$$

$$\frac{27.50}{21.08}$$

$$\text{Equivalent enclosed} = 42.62$$

$$\text{To deck over} = 41.00$$

∴ No overhang.

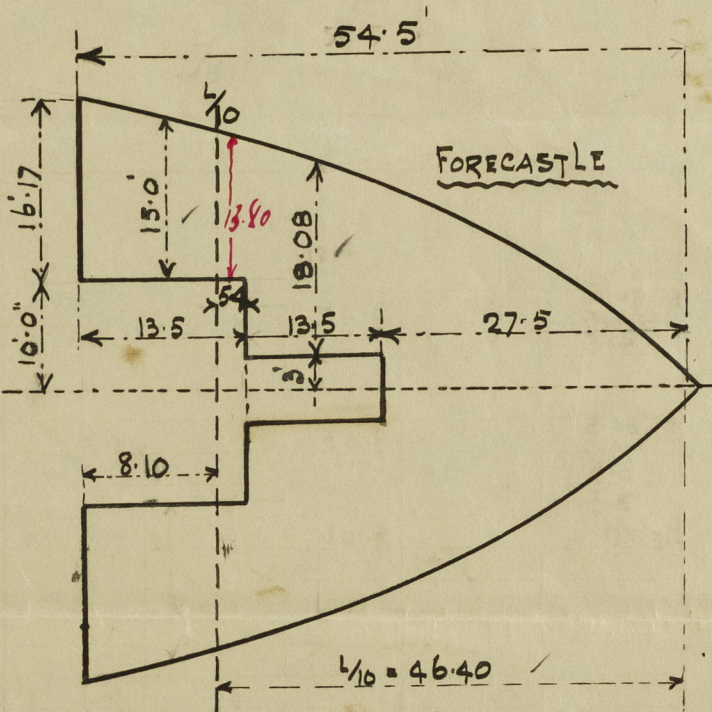
$$\text{Aft of } \frac{1}{10} = 8.10 \times 15.00$$

$$= \frac{121.50}{25}$$

$$= 4.86' = \text{equivalent enclosed}$$

$$\frac{42.62'}{47.48'}$$

$$47.48' = \text{total equivalent enclosed length.}$$



Trade of ship INTERNATIONAL

Names of sister ships BRITISH RANGER, HARLAND WOLFF LTD GLASGOW, YARD NO 1362 G.

Builder's name and yard number LITHGOWS LTD YARD NO 1033

Owners BRITISH TANKER CO. LTD

Fee £ 34 : 0 : 0



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Foundation