

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name <b>BRITISH COMMANDER.</b>	Official Number	Nationality and Port of Registry <b>BRITISH. LONDON.</b>	Gross Tonnage <b>APPROX. 8700.</b>	Date of Build <b>1950</b>	Port of Survey <b>GLASGOW.</b>
Moulded Dimensions: Length <b>464.0</b> Breadth <b>61.5</b> Depth <b>34.0</b>					Date of Survey <b>WHILE BUILDING.</b>
Moulded displacement at moulded draught = 85 per cent. of moulded depth <b>18,345.</b> tons					Surveyor's Signature <i>George Lullist</i>
Coefficient of fineness for use with Tables <b>779.</b>					Particulars of Classification <b>#100 A.I. CARRYING PETROLEUM IN BULK (CONTEMPLATED).</b>

<b>DEPTH FOR FREEBOARD (D).</b> Moulded depth ... <b>34.0</b> Stringer plate ... <b>72</b> ... <b>72</b> Sheathing on exposed deck <b>NIL.</b> $T \left( \frac{L-S}{L} \right) =$ Depth for Freeboard (D) = <b>34.06</b>	<b>DEPTH CORRECTION.</b> (a) Where D is greater than Table depth $(D - \text{Table depth}) R =$ $(34.06 - 30.93) 3 = + 9.39"$ (b) Where D is less than Table depth (if allowed) $(\text{Table depth} - D) R =$ If restricted by superstructures <input checked="" type="checkbox"/>	<b>ROUND OF BEAM CORRECTION.</b> Moulded Breadth (B) = <b>61.5</b> Standard Round of Beam = $\frac{B \times 12}{50} =$ <b>14.76</b> Ship's Round of Beam = <b>14.75</b> Difference = <b>-0.01</b> Restricted to Correction = $\frac{\text{Diff}}{4} \times \left( 1 - \frac{S_1}{L} \right) = \frac{0.01}{4} \times 5734 = \text{NIL.}$
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DEDUCTION FOR SUPERSTRUCTURES.					
	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed	<b>97.83</b>	<b>97.83</b>	<b>8.00</b>	<input checked="" type="checkbox"/>	<b>97.83</b>
" overhang	<b>1.17</b>	<b>.58</b>		<input checked="" type="checkbox"/>	<b>.58</b>
R.Q.D. enclosed					
" overhang	<b>47.50</b>				
Bridge enclosed	<b>47.50</b>	<b>47.50</b>	<b>8.00</b>	<input checked="" type="checkbox"/>	<b>47.50</b>
" overhang aft	<b>3.00</b>	<b>2.25</b>			<b>2.25</b>
" overhang forward	<b>.50</b>	<b>.25</b>			<b>.25</b>
File enclosed	<b>46.88</b>	<b>46.88</b>	<b>8.00</b>	<input checked="" type="checkbox"/>	<b>46.88</b>
" overhang	<b>2.67</b>	<b>2.64</b>			<b>2.64</b>
Trunk aft					
" forward					
Tonnage opening aft					
" forward					
Total	<b>199.55</b>	<b>197.93</b>			<b>197.93</b>

Standard Height of Superstructure **7.50**  
 " " R.Q.D. ☒  
 Deduction for complete superstructure **42.00**  
 Percentage covered  $\frac{S}{L} =$  **43.01**  
 " "  $\frac{S_1}{L} =$  **42.66**  
 " "  $\frac{E}{L} =$  **42.66**  
 Percentage from Table, Line **Tankers** **33.66**  
 (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 = **42.00 x .3366 = 14.14.**

SHEER CORRECTION.							
Station	Standard Ordinate	S	Product	Actual Ordinate	Effective Ordinate	S	Product
A.P.	<b>56.40</b>	<b>1</b>	<b>56.40</b>	<b>59.00</b>	<b>56.40</b>	<b>1</b>	<b>56.40</b>
$\frac{1}{2}L$ from A.P.	<b>25.10</b>	<b>4</b>	<b>100.40</b>	<b>25.10</b>	<b>25.10</b>	<b>4</b>	<b>100.40</b>
$\frac{2}{3}L$ "	<b>6.205</b>	<b>2</b>	<b>12.41</b>	<b>6.38</b>	<b>6.205</b>	<b>2</b>	<b>12.41</b>
Amidships	<b>-</b>	<b>4</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>4</b>	<b>-</b>
$\frac{2}{3}L$ from F.P.	<b>12.41</b>	<b>2</b>	<b>24.82</b>	<b>11.76</b>	<b>11.75</b>	<b>2</b>	<b>23.50</b>
$\frac{1}{2}L$ "	<b>50.20</b>	<b>4</b>	<b>200.80</b>	<b>49.15</b>	<b>49.15</b>	<b>4</b>	<b>196.60</b>
F.P.	<b>112.80</b>	<b>1</b>	<b>112.80</b>	<b>114.00</b>	<b>114.00</b>	<b>1</b>	<b>114.00</b>
Total			<b>507.63</b>				<b>503.31</b>

Mean actual sheer aft = **Excess**  
 Mean standard sheer aft = **Excess**  
 Mean actual sheer forward = **Deficient**  
 Mean standard sheer forward = **Deficient**  
 Length of enclosed superstructure forward of amidships = **Tankers**  
 " " aft of **sheer forward**  
 Std. 112.80 1 112.80 Act. 114.00 1 114.00  
 50.20 3 150.60 49.15 3 147.45  
 12.41 3 37.23 11.75 3 35.25  
 300.63 296.70  
 296.70 - 300.63 = -3.93  
 If limited to maximum allowance of 1 1/2 ins. per 100 ft. **3.93 = .987.**

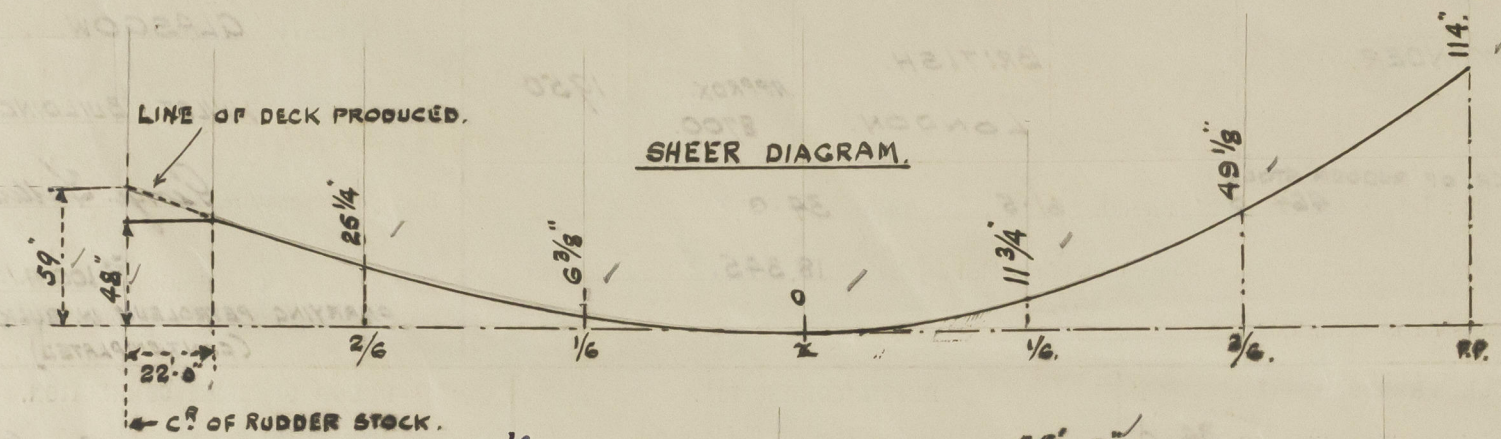
Deduction for Tropical Freeboard. Addition for Winter and Winter North Atlantic Freeboard. Depth to Freeboard Deck = <b>34.06</b> Summer freeboard = <b>6.65</b> Moulded draught (d) = <b>27.41</b> Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = <b>6.85 = 6 3/4</b> Addition for Winter North Atlantic Freeboard (if required) = <b>6.85 + 4.64 = 11.49 = 11 1/2</b>	Deduction for Fresh Water. Displacement in salt water at summer load water line $\Delta =$ <b>17397</b> Tons per inch immersion at summer load water line $T =$ <b>58.71</b> Deduction = $\frac{\Delta}{40 T}$ inches = <b>7.41</b> = <b>7 1/2</b>	<b>TABULAR FREEBOARD</b> corrected for Fresh Deck (if required) Correction for coefficient $\frac{779 + 68}{1.36} = \frac{847}{1.36} =$ <b>622.8</b> Depth Correction ... <b>9.39</b> Deduction for superstructures ... <b>14.14</b> Sheer correction ... <b>.13</b> Round of Beam correction ... <b>-</b> Correction for Thickness of Deck amidships ... <b>-</b> Other corrections, scantlings, etc. ... <b>-</b> Summer Freeboard = <b>79.81</b>
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SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, <b>W</b> , Steel, Deck :-			
Tropical Fresh Water Line above Centre of Disc	<b>14 1/4"</b>	Tropical Fresh Water Freeboard	<b>6 1/4"</b>
Fresh Water Line	<b>7 1/2"</b>	Fresh Water	<b>6 1/4"</b>
Tropical Line	<b>6 3/4"</b>	Tropical	<b>6 1/4"</b>
Winter Line below	<b>6 3/4"</b>	Winter	<b>7 1/2"</b>
Winter North Atlantic Line	<b>11 1/2"</b>	Winter North Atlantic	<b>7 1/4"</b>



# British Commander.

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.

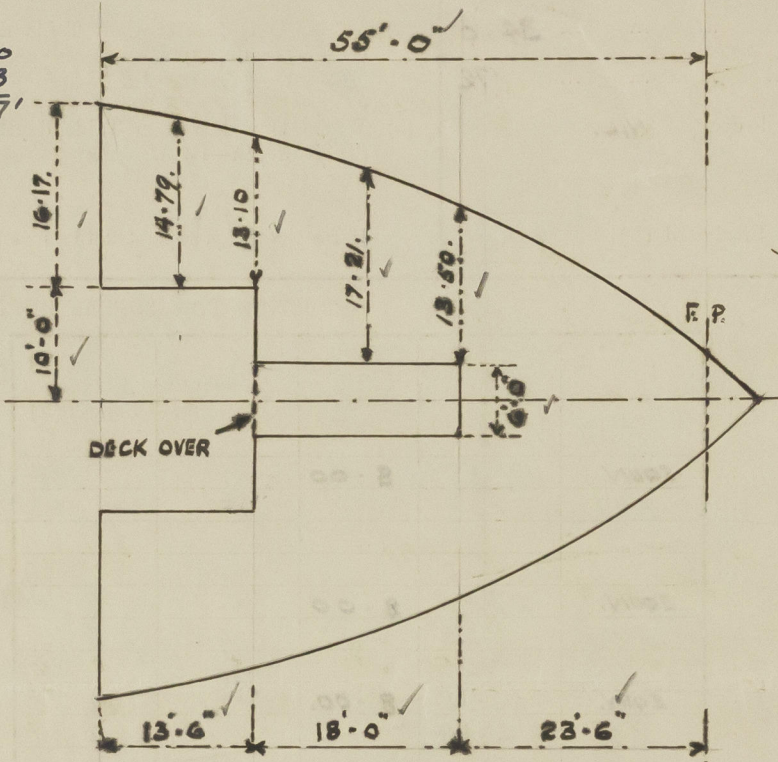


Poop at side 94.50'  
 $\frac{2}{3} \times 5 = 3.33'$   
 97.83' = equiwt. end.

Bridge at side 44.50'  
 $\frac{2}{3} \times 4.50 = 3.00'$   
 47.50' Equi. FORECASTLE  
 END

Ohang 48.00'  
 47.50'  
 .50' equiwt.

BULKHEAD.



Forecastle :- Length to Bhd. 23.50'  
 $\frac{18.00 \times 17.21}{20.21} = 15.33'$   
 38.83'

DRAUGHT, EXTREME	DISPLACEMENT, S.W.	T.P.I.
25'-0"	17.757 TONS.	58.55 ✓
27'-0"	17.052 "	58.55 ✓
KEEL ALLOWANCE, 1"		

Ohang 18.00'  
 15.33'  
 $2.67' \times .987 = 2.64 S.$

$\frac{13.5 \times 14.79}{24.79} = 8.05'$

38.83'  
 8.05'  
 46.88' = Total equiwt. end.

Trade of ship INTERNATIONAL.

Names of sister ships HARLAND & WOLFF'S N° 1397.G. - "BRITISH CAPTAIN."

Builder's name and yard number HARLAND & WOLFF, GLASGOW. YARD N° 1398.G.

Owners BRITISH TANKER CO. LD.

Fee £ WILL BE CHARGED WITH FIRST ENTRY.



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Foundation