

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name **BRITISH BARON** Official Number **181568** Nationality and Port of Registry **BRITISH LONDON** Gross Tonnage **8556** Date of Build **1947**

Port of Survey **LIVERPOOL**

Date of Survey **DURING CONSTRUCTION**

Surveyor's Signature *E. S. Larkin*

Particulars of Classification **+100 A.1. CARRYING PETROLEUM IN BULK.**

Moulded Dimensions: Length **463.46'** Breadth **61.75'** Depth **34.04'**

Moulded displacement at moulded draught = 85 per cent. of moulded depth **18,315** tons

EXTREME DISPLACEMENT AND TONS PER INCH **27.0" ~ 16,928 TONS, 58.0 TONS PER INCH**

Coefficient of fineness for use with Tables **.774** **28.0" ~ 17,630 " , 58.4 " " "**

DEPTH FOR FREEBOARD (D).		DEPTH CORRECTION.		ROUND OF BEAM CORRECTION.	
Moulded depth	34.04	(a) Where D is greater than Table depth (D-Table depth) R =		Moulded Breadth (B)	61.75'
Stringer plate	.06	(34.10 - 30.90) 3	+ 9.60	Standard Round of Beam = $\frac{B \times 12}{50}$	14.82"
Sheathing on exposed deck		(b) Where D is less than Table depth (if allowed) (Table depth-D) R =		Ship's Round of Beam	15.2"
$T \left( \frac{L-S}{L} \right) =$	NIL			Difference	0.68"
Depth for Freeboard (D) =	34.10	If restricted by superstructures	✓	Restricted to	
				Correction = $\frac{\text{Diff}}{4} \times \left( 1 - \frac{S}{L} \right)$	$\frac{.68}{4} \times .5876 = .10$

## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed	97.75	97.75	8.0	-	97.75
" overhang	3.50	1.75	8.0	-	.25
R.Q.D. enclosed	✓	.25	✓	✓	
" overhang	43.58	43.58	8.0	-	43.58
Bridge enclosed	39.50	40.58	8.0	-	43.58
" overhang aft	3.50	2.62	8.0	-	2.62
" overhang forward	3.50	1.75	8.0	-	.25
F'cle enclosed	44.99	44.99	8.0	-	44.99
" overhang	1.75	1.67	✓	✓	1.67
Trunk aft	✓	✓	✓	✓	
" forward	✓	✓	✓	✓	
Tonnage opening aft	✓	✓	✓	✓	
" forward	✓	✓	✓	✓	
Total	192.58	191.11			191.11

Standard Height of Superstructure **7.5**

" " R.Q.D. **✓**

Deduction for complete superstructure **42**

Percentage covered  $\frac{S}{L} =$  **41.55**

" "  $\frac{S_1}{L} =$  **41.24**

" "  $\frac{E}{L} =$  **41.24**

Percentage from Table, Line A. **Tanker**

(corrected for absence of forecastle (if required)) **32.24**

Percentage from Table, Line B.

(corrected for absence of forecastle (if required))

Interpolation for bridge less than .2L (if required)

Deduction = **42 x .3224 = 13.54**

## SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.	56.35	1		56.35	56.75	56.75	1		56.75
1/4 L from A.P.	25.07	4		100.28	23.50	23.50	4		94.00
1/2 L	6.197	2		12.39	6.125	6.125	2		12.25
Amidships	-	4		-	✓	-	4		-
3/4 L from F.P.	12.39	2		24.78	11.75	11.75	2		23.50
1/4 L	50.14	4		200.56	45.75	45.75	4		183.00
F.P.	112.69	1		112.69	113.375	113.375	1		113.37
Total				507.05					482.87

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) = \frac{24.18}{18} \left( .75 - \frac{2077}{5423} \right) = +.73$

If limited on account of midship superstructure.

Mean actual sheer aft

Mean standard sheer aft

Mean actual sheer forward

Mean standard sheer forward

Length of enclosed superstructure forward of amidships =

after of

sheer fwd.

12.39 3 37.17 11.75 3 35.25 285.87

50.14 3 150.42 45.75 3 137.25 300.28

112.69 1 112.69 113.37 1 113.37 285.87

300.28 285.87 = 952

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

Deduction for Tropical Freeboard.	Deduction for Fresh Water.	TABULAR FREEBOARD corrected for Flush Deck (if required)
Addition for Winter and Winter North Atlantic Freeboard.	Displacement in salt water at summer load water line	Correction for coefficient $\frac{.774 + .68}{1.36} = \frac{1.454}{1.36}$
Depth to Freeboard Deck = <b>34.10</b>	$\Delta = 17294$	Depth Correction <b>9.60</b>
Summer freeboard = <b>6.73</b>	Tons per inch immersion at summer load water line	Deduction for superstructures <b>13.54</b>
Moulded draught (d) = <b>27.37</b>	T = <b>58.21</b>	Sheer correction <b>.73</b>
Deduction for Tropical freeboard and addition for	Deduction = $\frac{\Delta}{40 T}$ inches	Round of Beam correction <b>.10</b>
Winter freeboard = $\frac{d}{4}$ inches = <b>6.84 = 6 3/4</b>	= <b>7.43</b>	Correction for Thickness of Deck amidships
Addition for Winter North Atlantic Freeboard (if required) = <b>6.84 + 4.63 = 11.47 = 11 1/2</b>	= <b>7 1/2</b>	Other corrections, scantlings, etc.
		10.33 13.64 - 3.31
		Summer Freeboard = <b>80.68</b>

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

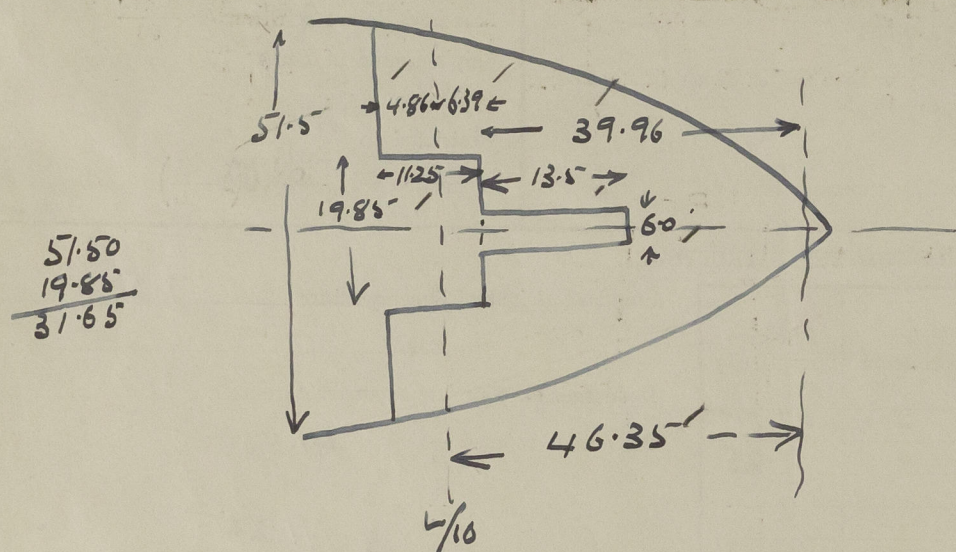
Tropical Fresh Water Line above Centre of Disc	14 1/4	Tropical Fresh Water Freeboard	6' - 8 3/4"
Fresh Water Line	7 1/2	Fresh Water	5' - 6 1/2"
Tropical Line	6 3/4	Tropical	6' - 1 1/4"
Winter Line below	6 3/4	Winter	7' - 3 1/2"
Winter North Atlantic Line	11 1/2	Winter North Atlantic	7' - 8 1/4"



British Baron.

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.

Faccinto



Portion forward 7 1/10. But that 7/10 = 49' -

$$\begin{array}{r} 19.86 \\ 29.15 \end{array}$$

-  $\frac{13.5 \times 6}{46} =$   $\frac{39.96}{38.20}$  *equivalent overhang*

+  $\frac{6.39 \times 29.15}{49} =$   $\frac{3.80}{42.00}$

Portion aft 7/10

+  $\frac{4.86 \times 31.65}{51.5} =$   $\frac{2.99}{44.99}$  *equivalent underhang*

Bridge.

$$\frac{2}{3} \times 40 = \frac{40.58}{3.00} = 43.58$$

Родн

$$73 \times 4.5 = \frac{94.75}{3.0} = 27.25 \checkmark$$

Trade of ship **OIL TANKER**

Names of sister ships SIMILAR TO "BRITISH PROMISE" LIN. FBD. RPT. NO C.L.&COS NO 1068.

Builder's name and yard number. MESSRS. CAMMELL, LAIRD & CO. LTD. B'HEAD № 1177

Owners BRITISH TANKER CO. LTD.

Fee £ .....

ML-10