

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name **"BRITISH CAPTAIN"** Official Number **183149** Nationality and Port of Registry **BRITISH. LONDON.** Gross Tonnage **8700. APPROX. 8600** Date of Build **1949**

Port of Survey **GLASGOW.** Date of Survey **WHILST BUILDING.** Surveyor's Signature **Wharmillan.**

To CR. OF RUDDER STOCK
Moulded Dimensions: Length **464.00** Breadth **61.50** Depth **34.00**

Moulded displacement at moulded draught = 85 per cent. of moulded depth **18.345** tons

Coefficient of fineness for use with Tables **779**

Particulars of Classification **+100 A.I.**
CARRYING PETROLEUM IN BULK (CONTEMPLATED)

DEPTH FOR FREEBOARD (D). Moulded depth ... **34.00** Stringer plate ... **72** Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) = \text{NIL.}$ Depth for Freeboard (D) = **34.06**

DEPTH CORRECTION. (a) Where D is greater than Table depth (D - Table depth) R = $(34.06 - 30.93) \times 3 = +9.39$ (b) Where D is less than Table depth (if allowed) (Table depth - D) R = **Nil.** 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 = **-0.01** Restricted to **Nil.** Correction = $\frac{\text{Diff}}{4} \times (1 - \frac{S_1}{L}) = \frac{0.01}{4} \times 5734 = \text{Nil.}$

DEDUCTION FOR SUPERSTRUCTURES.

Mean Covered Length (S) Equivalent Enclosed Length (S₁) Height Height Correction Effective Length (E)

Poop enclosed EQUIV...	97.83	97.83	8.00	✓	97.83
" overhang ...	1.17	.58			.58
Bridge enclosed EQUIV...	47.50	47.50	8.00	✓	47.50
" overhang aft ...	3.00	2.25		✓	2.25
" overhang forward50	.25		✓	.25
Fore enclosed EQUIV...	46.88	46.88	8.00	✓	46.88
" overhang ...	2.67	2.64			2.64
Total ...	199.55	197.93			197.93

Standard Height of Superstructure **7.50** R.Q.D. **✓** Deduction for complete superstructure **42.00** Percentage covered $\frac{S}{L} = 43.01$ " $\frac{S_1}{L} = 42.66$ Percentage from Table, Line A. TANKER **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 = $42.00 \times 33.66 = -14.14$

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate SEE OVER	Effective Ordinate	S	M	Product
A.P. ...	56.40	1		56.40	59.00	56.40	1		56.40
1/2 L from A.P. ...	25.10	4		100.40	25.25	25.10	4		100.40
1/2 L " ...	6.205	2		12.41	6.38	6.205	2		12.41
Amidships ...	-	4		-	-	-	4		-
1/2 L from F.P. ...	12.41	2		24.82	11.75	11.75	2		23.50
1/2 L " ...	50.20	4		200.80	49.13	49.13	4		196.52
F.P. ...	112.80	1		112.80	114.00	114.00	1		114.00
Total ...				507.63					503.23

Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{.75 - S}{2L} \right) = \frac{4.4}{18} \left(\frac{.75 - 2.150}{2} \right) = +.13$ If limited on account of midship superstructure.

Mean actual sheer aft = **Excess.** Mean standard sheer aft = **Deficient.** Length of enclosed superstructure forward of amidships = **296.64** aft of **300.63** Two SHEERS: STANDARD: 12.41 3 37.23 50.20 3 150.60 112.80 1 112.80 ACTUAL: 11.75 3 35.25 49.13 3 147.39 114.00 1 114.00 296.64 300.63 987

Deduction for Tropical Freeboard. Addition for Winter and Winter North Atlantic Freeboard. Depth to Freeboard Deck = **34.06** Summer freeboard = **6.65** Moulded draught (d) = **27.41** Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = **6.85 = 6 3/4** Addition for Winter North Atlantic Freeboard (if required) = **6.85 + 4.64 = 11.49 = 11 1/2**

SEE OVER Deduction for Fresh Water. Displacement in salt water at summer load water line $\Delta = 17397$ Tons per inch immersion at summer load water line $T = 58.71$ Deduction = $\frac{\Delta}{40 T}$ inches = **7.41** = **7 1/2**

TABULAR FREEBOARD corrected for Flank Deck (if required) Correction for coefficient $\frac{.779 + .68}{1.36} = 1.459 / .36$ Depth Correction ... **9.39** Deduction for superstructures ... **14.14** Sheer correction ... **.13** Round of Beam correction ... **-** Correction for Thickness of Deck amidships ... **-** Other corrections, scantlings, etc. ... **-** Summer Freeboard = **79.81**

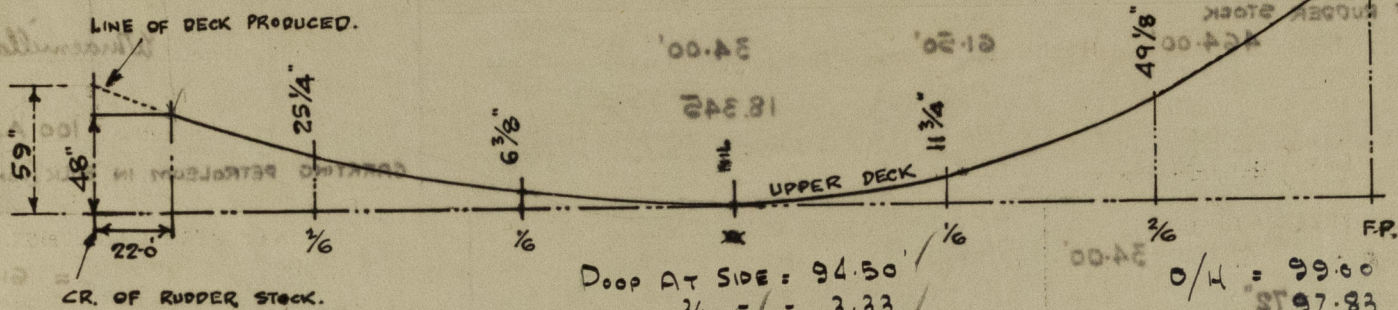
SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Steel, Deck :-

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

British Captain.

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.

SHEER DIAGRAM.



BRIDGE AT SIDE = 44.50 ✓
 $\frac{2}{3} \times 4.5 = 3.00$
 47.50 ✓ Equiv. incl.

O/H. incl. = 48.00
 47.50
 .50

DECK AT SIDE = 94.50
 $\frac{2}{3} \times 5.1 = 3.33$
 97.83 ✓ Equiv. incl.

O/H. = 99.00
 97.83
 1.17

F.C.E.

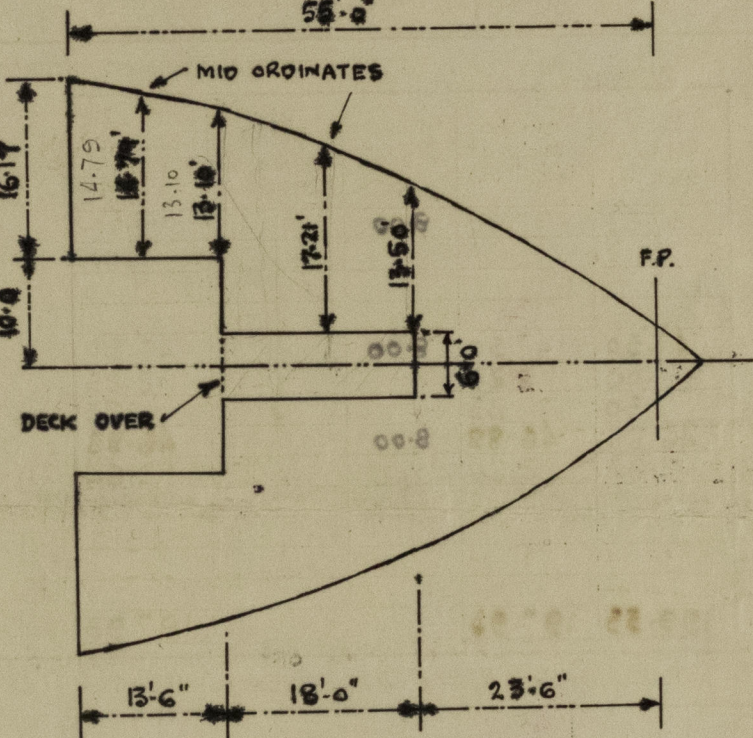
Length to B.M. = 23.50 ✓
 $18.00 \times 17.21 = 15.33$
 $\frac{20.21}{38.83} = 15.33$ ✓ Equiv. Incl.

O/H. 18.00 ✓
 $\frac{15.33}{2.67} \times .987 = 2.64$ ✓ S.I.

$13.5 \times 14.79 = 8.05$ ✓

38.83
 8.05
 46.88 ✓ Total equiv. enclosed.

FORECASTLE
 BULKHEAD.



THE FOLLOWING IS FORWARDED HERewith:-
 FREEBOARD REQUEST FORM.
 MIDSHIP SECTION.
 FRAMING PROFILE.
 STEEL BEAMS.
 STERNFRAME.

HEIGHT EXTREME.	DISPLACEMENT S.W.	T.P. 1"
28'-0"	17,757 TONS	58.88
27'-0"	17,032 "	58.88

KEEL ALLOWANCE = 1"

39556

Trade of ship INTERNATIONAL.

Names of sister ships H. & W. N° 1378 G. "BRITISH MARINER" (EXCEPT BRIDGE & FORECASTLE ERECTIONS)

Builder's name and yard number HARLAND & WOLFF, GLASGOW. YARD N° 1397 G.

Owners BRITISH TANKER CO. LD.

Fee WILL BE CHARGED WITH FIRST ENTRY.



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