

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name BRITISH PIPER (Ex-EMPIRE GRENADA)	Official Number 16946	Nationality and Port of Registry BRITISH GLASGOW LONDON	Gross Tonnage 8231 8238 <i>Inv T 4/7/46</i>	Date of Build 1946	Port of Survey GLASGOW
Moulded Dimensions: Length 460.96 Breadth 59.0 Depth 34.83 TO CENTRE RUDDER STOCK					Date of Survey MARCH 1946
Moulded displacement at moulded draught = 85 per cent. of moulded depth 18207 tons					Surveyor's Signature H. DICKERSON
Coefficient of fineness for use with Tables .791					Particulars of Classification 100A1 CARRYING PETROLEUM IN BULK.

DEPTH FOR FREEBOARD (D).	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth 34.83	(a) Where D is greater than Table depth (D-Table depth) R = (34.90-30.73)3.0 = + 12.51	Moulded Breadth (B) 59.0
Stringer plate07	(b) Where D is less than Table depth (if allowed) (Table depth-D) R = ✓	Standard Round of Beam = $\frac{B \times 12}{50} = 14.16$
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$	If restricted by superstructures ✓	Ship's Round of Beam = 14.75
Depth for Freeboard (D) = 34.90		Difference .59
		Restricted to
		Correction = $\frac{\text{Diff}^{\circ}}{4} \times \left(1 - \frac{S_1}{L}\right) = \frac{.59}{4} \times .576 = -.08$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed EQUIN ...	96.70	96.70	7.5	✓	96.70
" overhang					
R.Q.D. enclosed					
" overhang					
Bridge enclosed EQUIN ...	50.83	50.83	7.5	✓	50.83
" overhang aft	2.92	2.19			2.19
" overhang forward ...					
F'cle enclosed	45.75	45.75	7.5	✓	45.75
" overhang					
Trunk aft					
" forward					
Tonnage opening aft ...					
" " forward ...					
Total	196.20	195.47			195.47

Standard Height of Superstructure **7.5**

" " R.Q.D. **-**

Deduction for complete superstructure **42.0**

Percentage covered $\frac{S}{L} = 42.56$

" " $\frac{S_1}{L} =$ } **42.40**

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

Percentage from Table, Line A TANKER = **33.40**
(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 = **42.0 × 33.40 = - 14.03**

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P.	56.10	1	56.10	46.66	46.66	1	46.66
$\frac{1}{2}$ L from A.P. ...	24.96	4	99.84	7.67	7.67	4	30.68
$\frac{2}{5}$ L "	6.17	2	12.34	-	-	2	-
Amidships	-	4	-	-	-	4	-
$\frac{3}{5}$ L from F.P. ...	12.34	2	24.68	-	-	2	-
$\frac{1}{2}$ L "	49.92	4	199.68	30.62	30.62	4	122.48
F.P.	112.19	1	112.19	101.68	101.68	1	101.68
Total			504.83				301.50

Mean actual sheer aft =

Mean standard sheer aft =

Mean actual sheer forward =

Mean standard sheer forward =

Length of enclosed superstructure forward of amidships =

" " aft of " =

DEFICIENT

TANKER

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{203.33}{18} (.75 - .2128) = + 6.07$

If limited on account of midship superstructure. ✓

If limited to maximum allowance of $1\frac{1}{2}$ ins. per 100 ft. ✓

Deduction for Tropical Freeboard. Addition for Winter and Winter North Atlantic Freeboard.	Deduction for Fresh Water. Displacement in salt water at summer load water line $\Delta = 16833$ Tons per inch immersion at summer load water line $T = 56.38$ Deduction = $\frac{\Delta}{40 T}$ inches $= 7.46$ $= 7\frac{1}{2}"$	TABULAR FREEBOARD corrected for Flush Deck (if required) Correction for coefficient $\frac{.791 + .68}{1.36} = \frac{1.471}{1.36}$	77.94 84.30
Depth to Freeboard Deck = 34.90 Summer freeboard = 7.40 Moulded draught (d) = 27.50 Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = $6.875 = 6\frac{3}{4}"$ Addition for Winter North Atlantic Freeboard (if required) = $6.87 + 4.61 = 11.48 = 11\frac{1}{2}"$		Depth Correction 12.51 Deduction for superstructures 14.03 Sheer correction 6.07 Round of Beam correction08 Correction for Thickness of Deck amidships Other corrections, scantlings, etc. 18.58 14.11 + 4.47 Summer Freeboard = 88.77	82.8. 14.5.46

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

FREEBOARDS AS PREVIOUSLY ASSIGNED BY	BRITISH CORPORATION.	NOW REASSIGNED.	16.5.46
Tropical Fresh Water Line above Centre of Disc	14 $\frac{1}{2}"$	Tropical Fresh Water Freeboard	6 $\frac{1}{2}"$
Fresh Water Line " "	7 $\frac{1}{2}"$	Fresh Water " "	6 $\frac{1}{2}"$
Tropical Line " "	7"	Tropical " "	6 $\frac{1}{2}"$
Winter Line below " "	7"	Winter " "	7 $\frac{1}{2}"$
Winter North Atlantic Line " "	11 $\frac{1}{2}"$	Winter North Atlantic " "	8 $\frac{1}{2}"$