

28 JUN 1950

Lloyd's Register of Shipping.
SURVEYS FOR FREEBOARD.
(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

WIGHTSTONE

LY BRENTFORD ex
ev BRENT KNOLL

Ship's Name	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build	Port of Survey
LY BRENTFORD ex ev BRENT KNOLL	183301	BRITISH LONDON	1362.48	1950	SUNDERLAND
Moulded Dimensions: Length 224.3A Breadth 35.75 Depth 16.25					Date of Survey
Moulded displacement at moulded draught = 85 per cent. of moulded depth (13.81) 2327 tons					WHILST BUILDING
Coefficient of fineness for use with Tables -735					Surveyor's Signature P. H. Groudale
					Particulars of Classification +100A1

DEPTH FOR FREEBOARD (D).	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth ... 16.25	(a) Where D is greater than Table depth (D-Table depth) R = (16.25-14.93) 1.32	Moulded Breadth (B) 35.75
Stringer plate53	(b) Where D is less than Table depth (if allowed) (Table depth-D) R =	Standard Round of Beam = $\frac{B \times 12}{50} = 8.58$
Sheathing on exposed deck T $\left(\frac{L-S}{L}\right) =$	If restricted by superstructures ✓	Ship's Round of Beam = 9
Depth for Freeboard (D) = 16.29		Difference 0.42
		Restricted to
		Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L}\right) = \frac{.42}{4} \times .2467 = -.03$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed	57.09		7'-0"		
" overhang	SEE SKETCH				
R.Q.D. enclosed @ SIDE	145.50	145.50	3'-10"	✓	145.50
" overhang @ CENTRE	146.08				
Bridge enclosed					
" overhang aft					
" overhang forward	22.15				
Fore enclosed	21.00	22.15	7'-0"	✓	22.15
" overhang	3.00	1.34			1.34
Trunk aft	1.85				
" forward					
Tonnage opening aft					
" forward					
Total	169.50	168.99			168.99

Standard Height of Superstructure	6.00'
" " R.Q.D.	3.829
Deduction for complete superstructure	28.43
Percentage covered $\frac{S}{L} =$	75.55
" " $\frac{S_1}{L} =$	75.33
" " $\frac{E}{L} =$	
Percentage from Table, Line A. x B.	69.56
(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 = 28.43 x .6956 =	19.78

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P.	32.43	1	32.43	32.5	32.50	1	32.50
1/2 L from A.P.	14.43	4	57.72	14.44	14.44	4	57.76
3/4 L	3.565	2	7.13	3.62	3.62	2	7.24
Amidships	✓	4	✓	✓	✓	4	✓
3/4 L from F.P.	7.135	2	14.27	7.25	7.25	2	14.50
1/2 L	28.87	4	115.48	29.00	29.00	4	116.00
F.P.	64.87	1	64.87	65.00	65.00	1	65.00
Total			291.90				293.00

Mean actual sheer aft	} Even
Mean standard sheer aft	
Mean actual sheer forward	}
Mean standard sheer forward	
Length of enclosed superstructure forward of amidships =	2.1 L
" " aft of " =	.5 L

Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{.75 - S}{2L} \right) = \frac{1.10}{18} \left(\frac{.75 - .3778}{2} \right) = -.02$
If limited on account of midship superstructure. ✓
If limited to maximum allowance of 1 1/2 ins. per 100 ft. ✓

Deduction for Tropical Freeboard.
Addition for Winter and Winter North Atlantic Freeboard.

R.Q.
Depth to Freeboard Deck = 20.12
Summer freeboard = 4.15
Moulded draught (d) = 15.37

Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 3.84 = 3 3/4
Addition for Winter North Atlantic Freeboard (if required) = 5 3/4

Deduction for Fresh Water.

Displacement in salt water at summer load water line
 $\Delta = 2643$
Tons per inch immersion at summer load water line
T = 16.23
Deduction = $\frac{\Delta}{40 T}$ inches = 4.07
= 4"

TABULAR FREEBOARD corrected for Flush Deck (if required)
Correction for coefficient

	+	-
Depth Correction	2.31	✓
Deduction for superstructures	✓	19.78
Sheer correction	✓	.02
Round of Beam correction	✓	.03
Correction for Thickness of Deck amidships	46.00	✓
Other corrections, scantlings, etc.	✓	✓
	48.31	19.83

Summer Freeboard = 57.01

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

Tropical Fresh Water Line above Centre of Disc	4.9	not required
Fresh Water Line	4.5	not required
Tropical Line	4.1	not required
Winter Line below	3.3	not required
Winter North Atlantic Line	3.3	not required

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.

Trade of ship COLLIER.

Names of sister ships "BODMIN MOOR" ETC.

Builder's name and yard number MESSRS AUSTINS 403.

Owners BRITISH E.L. AUTHORITY.

Fee £ will be charged on 1/2



© 2021

Lloyd's Register
Foundation