

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Index No. 37320
(For London Office only).
20994
- 6 JUL 1943

| | | | | | |
|---|----------------------------------|--|---|--|--|
| Ship's Name "BRIGHTON" | Official Number 169168 | Nationality and Port of Registry British. Newcastle. | Gross Tonnage APPROX 7345 7350. | Date of Build 1943. | Port of Survey Burntisland. (LEITH.) |
| Moulded Dimensions: Length 412.8 Breadth 57.66 Depth 37.83 - UPPER DECK. To centre of rudder stock 28.76 - 2nd DECK. 28.76 - 24.44 = 124.16 Tons. | | | | Date of Survey while building | |
| Moulded displacement at moulded draught = 85 per cent. of moulded depth 41.05 32.16 = 16848 tons | | | | Surveyor's Signature Robert Wood | |
| Coefficient of fineness for use with Tables 744 - 24.44 .7718 @ 32.16 | | | | Particulars of Classification 100.A.1. with freeboard corresponding to a ml. draught of 27.1" | |

| | | | | | |
|---|--------------------------|---|--|--|--------------------------------|
| Depth for Freeboard (D). | | Depth correction. | | Round of Beam correction. | |
| Moulded depth ... | 4.05 37.83 | (a) Where D is greater than Table depth (D - Table depth) R = (37.89 - 27.5) 3 = +31.17" | | Moulded Breadth (B) | 57.66 |
| Stringer plate ... | .72 .057 | (b) Where D is less than Table depth (if allowed) (Table depth - D) R = ✓ | | Standard Round of Beam = $\frac{B \times 12}{50}$ = | 13.84 |
| Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ | | | | Ship's Round of Beam = | 13.84 |
| Depth for Freeboard (D) = | 37.89 | If restricted by superstructures ✓ | | Difference | 12.78 4.05 |
| | | | | Restricted to | .96 |
| | | | | Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S}{L} \right)$ = | .96 4 = +.24" |

DEDUCTION FOR SUPERSTRUCTURES.

| | Mean Covered Length (S) | Equivalent Enclosed Length (S ₁) | Height | Height Correction | Effective Length (E) |
|-------------------------|-------------------------|--|--------|-------------------|----------------------|
| Poop enclosed ... | | | | | |
| overhang ... | | | | | |
| R.Q.D. enclosed ... | | | | | |
| overhang ... | | | | | |
| Bridge enclosed ... | | | | | |
| overhang aft ... | | | | | |
| overhang forward ... | | | | | |
| F'cle enclosed ... | | | | | |
| overhang ... | | | | | |
| Trunk aft ... | | | | | |
| forward ... | | | | | |
| Tonnage opening aft ... | | | | | |
| forward ... | | | | | |
| Total ... | | | | | |

Standard Height of Superstructure ...

" " R.Q.D. ...

Deduction for complete superstructure ...

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

" " $\frac{S_1}{L} =$...

" " $\frac{E}{L} =$... **Flush Deck**

Percentage from Table, Line A.
(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 = **Nil**

SHEER CORRECTION.

| Station | Standard Ordinate | S | M | Product | Actual Ordinate | Effective Ordinate | S | M | Product |
|---------------------|-------------------|----------|---------------|---------------|-----------------|--------------------|---------------|---|---------|
| A.P. ... | 51.25 | 1 | 51.25 | 78 1/8 | 78.125 | 1 | 78.12 | | |
| 1/8 L from A.P. ... | 22.81 | 4 | 91.24 | 34 7/8 | 34.875 | 4 | 139.50 | | |
| 2/8 L " ... | 5.635 | 2 | 11.27 | 8 3/4 | 8.75 | 2 | 17.50 | | |
| Amidships ... | | 4 | | | | 4 | | | |
| 3/8 L from F.P. ... | 11.275 | 2 | 22.55 | 11 5/8 | 11.625 | 2 | 23.25 | | |
| 1/8 L " ... | 45.61 | 4 | 182.44 | 46 3/4 | 46.75 | 4 | 187.00 | | |
| F.P. ... | 102.50 | 1 | 102.50 | 105 | 105.00 | 1 | 105.00 | | |
| Total ... | | | 461.25 | | | | 550.37 | | |

Mean actual sheer aft =
Mean standard sheer aft =

Mean actual sheer forward =
Mean standard sheer forward =

Length of enclosed superstructure forward of amidships =
L

" " aft of " =

T.P.L. @ 28.75 M¹⁰ = 47.95
T.P.L. @ 32.00 M¹⁰ = 48.72
Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{75-S}{2L} \right) = \frac{89.12}{18} \times .75 = -3.71$
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. | Deduction for Fresh Water. Displacement in salt water at summer load water line $\Delta = 14016 @ 27.26$ Tons per inch immersion at summer load water line $T = 47.58$ Deduction = $\frac{\Delta}{40T}$ inches $= 7.364$ $= 7 1/4"$ | TABULAR FREEBOARD corrected for Flush Deck (if required) Correction for coefficient $\frac{771 + 68}{1.36} = 1.451 / 1.36$ Depth Correction ... 31.17 Deduction for superstructures ... Sheer correction ... 3.71 Round of Beam correction24 Correction for Thickness of Deck amidships ... Other corrections, scantlings, etc. to correspond to a summer moulded draught of 27.1" 15.00 Summer Freeboard = 129.75 |
| Depth to Freeboard Deck = 37.89 Summer freeboard = 10.81 Moulded draught (d) = 27.08 Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 6.77 = 6 3/4 Addition for Winter North Atlantic Freeboard (if required) = ✓ | | 81.59 87.05 3296 2941 3112 3125 3467 |

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

| | | | | |
|--|---------------------|------------------------------------|-------------------|-------------|
| Tropical Fresh Water Line above Centre of Disc ... | 14" 355 m/ft | Tropical Fresh Water Freeboard ... | 10' 9 3/4" | 3296 |
| Fresh Water Line " " ... | 7 1/4" 184 | Fresh Water " " ... | 10' 7 3/4" | 2941 |
| Tropical Line " " ... | 6 3/4" 171 | Tropical " " ... | 10' 2 1/2" | 3112 |
| Winter Line below " " ... | 6 3/4" 171 | Winter " " ... | 10' 3" | 3125 |
| Winter North Atlantic Line " " ... | ✓ | Winter North Atlantic " " ... | 10' 4 1/2" | 3467 |

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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 General Cargo.

Names of sister ships S.S. "EMPIRE GLORY" Burntisland Yard N° 266.

Builder's name and yard number The Burntisland S.B. Co. Ltd - Yard N° 271.

Owners R. Chapman & Son Maritime Buildings Newcastle/Tyne.

Fee £ Charged with 1st Entry.



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