

PRELIMINARY.

Rpt. C.11 (Comp.).

Index No. _____
(For London Office only.)

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

| | | | | | |
|--|----------------------------------|---|--------------------------------|-------------------------------------|-------------------------|
| Ship's Name Harland & Wolff. | Official Number 540.83 | Nationality and Port of Registry 1431/2 | Gross Tonnage 29.800 | Date of Build 25.10.49 | Port of Survey _____ |
| Moulded Dimensions: Length 540.83 Breadth 74.00 Depth 44.00 | | | | Date of Survey 25.10.49 | |
| Moulded displacement at moulded draught = 85 per cent. of moulded depth 29.800 tons | | | | Surveyor's Signature _____ | |
| Coefficient of fineness for use with Tables 697 | | | | Particulars of Classification _____ | |

| DEPTH FOR FREEBOARD (D). | | DEPTH CORRECTION. | | ROUND OF BEAM CORRECTION. | |
|---|-------|--|--|--|--------------------|
| Moulded depth ... | 44.00 | (a) Where D is greater than Table depth (D - Table depth) R = | | Moulded Breadth (B) | 74.00 |
| Stringer plate ... | 35.03 | (44.03 - 36.06) 3 = +23.91 | | Standard Round of Beam = $\frac{B \times 12}{50}$ | 17.76 |
| Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ | | (b) Where D is less than Table depth (if allowed) (Table depth - D) R = | | Ship's Round of Beam | 9.00 |
| Depth for Freeboard (D) = | 44.03 | If restricted by superstructures / | | Difference | 8.76 |
| | | | | Restricted to | |
| | | | | Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right)$ | 8.76 x .3214 = +70 |

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 ... | 367.00 | 367.00 | 8.5 | ✓ | 367.00 |
| „ overhang aft ... | | | | | |
| „ overhang forward ... | | | | | |
| Fore enclosed ... | | | | | |
| „ overhang ... | | | | | |
| Trunk aft ... | | | | | |
| „ forward ... | | | | | |
| Tonnage opening aft ... | | | | | |
| „ „ forward ... | | | | | |
| Total ... | 367.00 | 367.00 | | | 367.00 |

Standard Height of Superstructure **7.50**

„ „ R.Q.D. **✓**

Deduction for complete superstructure **42.00**

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

„ „ $\frac{S_1}{L} =$ **67.86**

„ „ $\frac{E}{L} =$

Percentage from Table, Line A. **59.36**

(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 x .5936 = - 24.93**

SHEER CORRECTION.

| Station | Standard Ordinate | S | Product | Actual Ordinate | Effective Ordinate | S | Product |
|------------------------------|-------------------|---|---------|-----------------|--------------------|---|---------|
| A.P. ... | 64.08 | 1 | 64.08 | 57 | 57 | 1 | 57.00 |
| $\frac{1}{8}L$ from A.P. ... | 28.52 | 4 | 114.08 | 39 | 39 | 4 | 156.00 |
| $\frac{2}{8}L$ „ ... | 7.05 | 2 | 14.10 | 6 | 6 | 2 | 12.00 |
| Amidships ... | | 4 | | | | 4 | |
| $\frac{3}{8}L$ from F.P. ... | 14.10 | 2 | 28.20 | 22 | 22 | 2 | 44.00 |
| $\frac{4}{8}L$ „ ... | 57.04 | 4 | 228.16 | 69 | 69 | 4 | 276.00 |
| F.P. ... | 128.17 | 1 | 128.17 | 129 | 129 | 1 | 129.00 |
| Total ... | | | 576.79 | | | | 674.00 |

Mean actual sheer aft =

Mean standard sheer aft =

Mean actual sheer forward =

Mean standard sheer forward =

Length of enclosed superstructure forward of amidships = **56**

„ „ aft of „ = **211**

Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{.75 - S}{2L} \right) = \frac{97.21}{18} \left(\frac{.75 - .3393}{2} \right) = - 2.22$

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.

Depth to Freeboard Deck = **44.03**

Summer freeboard = **15.95**

Moulded draught (d) = **28.08**

Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = **7.02 = 7**

Addition for Winter North Atlantic Freeboard (if required) = **✓**

Deduction for Fresh Water.

Displacement in salt water at summer load water line

$\Delta =$

Tons per inch immersion at summer load water line

T =

Deduction = $\frac{\Delta}{40 T}$ inches

$\frac{1}{4} = 7$

TABULAR FREEBOARD corrected for Fresh Deck (if required)

Correction for coefficient

Depth Correction ... **23.91**

Deduction for superstructures ... **24.93**

Sheer correction ... **2.22**

Round of Beam correction ... **70**

Correction for Thickness of Deck amidships ... **78.57**

Other corrections, scantlings, etc. to be considered to a summer moulded draught of **28.1**

113.92

115.35

28.10.49

191.38

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

| | | | |
|--|----|--------------------------------|----|
| Tropical Fresh Water Line above Centre of Disc | 14 | Tropical Fresh Water Freeboard | 14 |
| Fresh Water Line | 7 | Fresh Water | 14 |
| Tropical Line | 7 | Tropical | 14 |
| Winter Line below | 7 | Winter | 14 |
| Winter North Atlantic Line | 7 | Winter North Atlantic | 14 |