

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

| | | | | | |
|--|----------------------------------|--|---------------|--|-------------------------------------|
| Computation of Freeboard for Steamer, Sailing Ship, Tanker | | | | | Port of Survey _____ |
| having <u>R.Q.D. ; Bridge, Foremast</u> | | | | | Date of Survey <u>18-5-32</u> |
| (Type of Superstructures.) | | | | | Name of Surveyor _____ |
| Ship's Name | Nationality and Port of Registry | Official Number | Gross Tonnage | Date of Build | Particulars of Classification _____ |
| Moulded Dimensions: Length <u>229.3</u> Breadth <u>34.45</u> Depth <u>18.19</u> | | | | | |
| Moulded displacement at moulded draught = 85 per cent. of moulded depth _____ tons | | | | | |
| Coefficient of fineness for use with Tables <u>469</u> | | | | | |
| Depth for Freeboard (D) | | Depth correction | | Round of Beam correction | |
| Moulded depth | | (a) Where D is greater than Table depth (D - Table depth) R = <u>5.36</u> | | Moulded Breadth (B) _____ | |
| Stringer plate | | (b) Where D is less than Table depth (if allowed) (Table depth - D) R = _____ | | Standard Round of Beam = $\frac{B \times 12}{50} =$ _____ | |
| Sheathing on exposed deck $T \left(\frac{L-8}{L} \right) =$ _____ | | If restricted by superstructures _____ | | Ship's Round of Beam _____ | |
| Depth for Freeboard (D) = <u>18.33</u> | | | | Difference _____ | |
| | | | | Restricted to _____ | |
| | | | | Correction = $\frac{\text{Diff.}}{4} \times \left(1 - \frac{S_1}{L} \right) =$ <u>61.01</u> | |

DEDUCTION FOR SUPERSTRUCTURES.

| | Mean Covered Length (S) | Equivalent Enclosed Length (S ₁) | Height | Height Correction | Effective Length (E) | |
|----------------------------|-------------------------|--|--------|-------------------|----------------------|---|
| Poop enclosed | | | | | | Standard Height of Superstructure _____ |
| " overhang | | | | | | " " R.Q.D. _____ |
| R.Q.D. enclosed | | | | | | Deduction for complete superstructure <u>28.93</u> |
| " overhang | | | | | | Percentage covered $\frac{S}{L} =$ _____ |
| Bridge enclosed | | | | | | " " $\frac{S_1}{L} =$ _____ |
| " overhang aft | | | | | | " " $\frac{E}{L} =$ <u>58.81</u> |
| " overhang forward | | | | | | Percentage from Table, Line A. _____ |
| Fore enclosed | | | | | | (corrected for absence of forecastle (if required)) <u>TIMBER</u> |
| " overhang | | | | | | Percentage from Table, Line B. _____ |
| Trunk aft | | | | | | (corrected for absence of forecastle (if required)) <u>44.45</u> |
| " forward | | | | | | Interpolation for bridge less than 2L (if required) _____ |
| Tonnage opening aft | | | | | | Deduction = <u>44.45 x 28.93 = 21.63</u> |
| " forward | | | | | | |
| Total | | | | | | |

SHEER CORRECTION.

| Station | Standard Ordinate | S | Product | Actual Ordinate | Effective Ordinate | S | Product | |
|----------------------------------|-------------------|---|---------|-----------------|--------------------|---|---------|--|
| A.P. | | 1 | | | | 1 | | Mean actual sheer aft = _____ |
| $\frac{1}{4}$ L from A.P. | | 4 | | | | 4 | | Mean actual sheer forward = _____ |
| $\frac{2}{4}$ L " | | 2 | | | | 2 | | Mean standard sheer aft = _____ |
| Amidships | | 4 | | | | 4 | | Mean standard sheer forward = _____ |
| $\frac{3}{4}$ L from F.P. | | 2 | | | | 2 | | Length of enclosed superstructure forward of amidships = _____ |
| $\frac{1}{4}$ L " | | 4 | | | | 4 | | " " aft of " = _____ |
| F.P. | | 1 | | | | 1 | | |
| Total | | | | | | | | |

$$\text{Correction} = \frac{\text{Difference between sums of products}}{16} \left(\frac{75 - S}{2L} \right) = \underline{61.11}$$

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.

$$\begin{aligned} \text{Depth to Freeboard Deck} &= \underline{18.33} \\ \text{Summer freeboard} &= \underline{1.14} \\ \text{Moulded draught (d)} &= \underline{17.19} \end{aligned}$$

Deduction for Tropical freeboard and addition for

$$\text{Winter freeboard} = \frac{d}{4} \text{ inches} = \underline{4.30 \times 109}$$

$$\text{Addition for Winter North Atlantic Freeboard (if required)} = \frac{d}{5} = \underline{5.73 = 146}$$

Deduction for Fresh Water.

Displacement in salt water at summer load water line

$$\Delta = \underline{3040}$$

Tons per inch immersion at summer load water line.

$$T = \underline{16.5}$$

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

$$= \underline{4.61 \times 117}$$

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

| | + | - | |
|---|-------------|--------------|---------------------------------|
| Depth Correction | <u>5.36</u> | | |
| Deduction for superstructures | | <u>21.63</u> | |
| Sheer correction | | <u>1.12</u> | |
| Round of Beam correction | | <u>.01</u> | |
| Correction for Thickness of Deck amidships | | | |
| Other corrections, scantlings, etc. | <u>.88</u> | | |
| | <u>6.24</u> | <u>22.76</u> | <u>61.16.52</u> |
| | | | Summer Freeboard = <u>13.71</u> |

TIMBER SUMMER FREEBOARD amidships from _____ top of Deck Line, _____, Steel, Deck: 13.71 = 348 7/8

TIMBER Tropical Fresh Water Line above Centre of Disc 367 1/4

" Fresh Water Line " 258

" Tropical Line " 250

" Winter Line below " 5

" Winter North Atlantic Line " 216

Tropical Fresh Water Freeboard ... 122

Fresh Water " 131

Tropical " 139

Winter " 494

Winter North Atlantic " 205