

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, Sailing Ship, Tanker—

having as F.S. with 100% SS Port of Survey _____

F.S. Flush Deck (No F.D. Penalty) Date of Survey _____
(Type of Superstructures.)

| | | | | | |
|--|----------------------------------|-----------------|---------------|---------------|------------------|
| Ship's Name <u>Sir James Black Ross</u> | Nationality and Port of Registry | Official Number | Gross Tonnage | Date of Build | Name of Surveyor |
|--|----------------------------------|-----------------|---------------|---------------|------------------|

Moulded Dimensions: Length 535.25 Breadth 74.0 Depth 48.75

Moulded displacement at moulded draught = 85 per cent. of moulded depth _____ tons

Coefficient of fineness for use with Tables 846

Particulars of Classification _____

| | | |
|--|---|---|
| <p style="text-align: center;">Depth for Freeboard (D)</p> <p>Moulded depth</p> <p>Stringer plate</p> <p>Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$</p> <p style="text-align: right;">Depth for Freeboard (D) = <u>48.81</u></p> | <p style="text-align: center;">Depth correction</p> <p>(a) Where D is greater than Table depth (D - Table depth) R = <u>(48.81 - 35.68) 3 = + 39.39</u></p> <p>(b) Where D is less than Table depth (if allowed) (Table depth - D) R =</p> <p style="text-align: center;">If restricted by superstructures</p> | <p style="text-align: center;">Round of Beam correction</p> <p>Moulded Breadth (B)</p> <p>Standard Round of Beam = $\frac{B \times 12}{50} =$</p> <p>Ship's Round of Beam =</p> <p>Difference</p> <p>Restricted to</p> <p>Correction = $\frac{\text{Diff}^e}{4} \times \left(1 - \frac{S_1}{L} \right) =$</p> |
|--|---|---|

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>42.0</u> |
| „ overhang | | | | | | Percentage covered $\frac{S}{L} =$ |
| Bridge enclosed | | | | | | „ „ $\frac{S_1}{L} =$ |
| „ overhang aft | | | | | | „ „ $\frac{E}{L} =$ <u>100.00</u> |
| „ overhang forward | | | | | | Percentage from Table, Line A. (corrected for absence of forecastle (if required)) |
| F'cle enclosed | | | <u>100%</u> | <u>NIL</u> | | Percentage from Table, Line B. (corrected for absence of forecastle (if required)) |
| „ overhang | | | | | | Interpolation for bridge less than 2L (if required) |
| Trunk aft | | | | | | Deduction = <u>-42.0</u> |
| „ forward | | | | | | |
| Tonnage opening aft | | | | | | |
| „ „ forward | | | | | | |
| Total | | | | | | |

SHEER CORRECTION.

| Station | Standard Ordinate | S | M | Product | Actual Ordinate | Effective Ordinate | S | M | Product |
|---------------------------------|-------------------|---|---|---------|-----------------|--------------------|---|---|---------|
| A.P. | | 1 | | | | | 1 | | |
| $\frac{1}{8}L$ from A.P. | | 4 | | | | | 4 | | |
| $\frac{2}{8}L$ „ | | 2 | | | | | 2 | | |
| Amidships | | 4 | | | | | 4 | | |
| $\frac{2}{8}L$ from F.P. | | 2 | | | | | 2 | | |
| $\frac{1}{8}L$ „ | | 4 | | | | | 4 | | |
| F.P. | | 1 | | | | | 1 | | |
| Total | | | | | | | | | |

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

If limited on account of midship superstructure. If limited to maximum allowance of $1\frac{1}{2}$ ins. per 100 ft.

| | | | | | | | | | | | | | | | | | | |
|--|--|---|---|---|-------------------------|--------------|--------------------------------------|-------------|-------------------------|--|---------------------------------|--|---|--|--|--|--------------------|----------------|
| <p>Deduction for Tropical Freeboard.</p> <p>Addition for Winter and Winter North Atlantic Freeboard.</p> <p style="text-align: right;">Ft.</p> <p>Depth to Freeboard Deck = <u>48.934</u></p> <p>Summer freeboard = <u>10.312</u></p> <p>Moulded draught (d) = <u>38.622</u></p> <p>Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches =</p> <p>Addition for Winter North Atlantic Freeboard (if required) =</p> | <p style="text-align: center;">Deduction for Fresh Water.</p> <p>Displacement in salt water at summer load water line</p> <p>$\Delta =$</p> <p>Tons per inch immersion at summer load water line</p> <p>$T =$</p> <p>Deduction = $\frac{\Delta}{40T}$ inches =</p> | <p style="text-align: center;">TABULAR FREEBOARD corrected for Flush Deck (if required)</p> <p>Correction for coefficient <u>126.07</u></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;">+</td> <td style="width: 50%; text-align: center;">-</td> </tr> <tr> <td>Depth Correction</td> <td><u>39.39</u></td> </tr> <tr> <td>Deduction for superstructures</td> <td><u>42.0</u></td> </tr> <tr> <td>Sheer correction</td> <td></td> </tr> <tr> <td>Round of Beam correction</td> <td></td> </tr> <tr> <td>Correction for Thickness of Deck amidships</td> <td></td> </tr> <tr> <td>Other corrections, scantlings, etc.</td> <td></td> </tr> <tr> <td style="border-top: 1px solid black;">Summer Freeboard =</td> <td style="border-top: 1px solid black;"><u>123.467</u></td> </tr> </table> | + | - | Depth Correction | <u>39.39</u> | Deduction for superstructures | <u>42.0</u> | Sheer correction | | Round of Beam correction | | Correction for Thickness of Deck amidships | | Other corrections, scantlings, etc. | | Summer Freeboard = | <u>123.467</u> |
| + | - | | | | | | | | | | | | | | | | | |
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SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck:—

| | |
|---|--|
| <p><u>48.934</u> Tropical Fresh Water Line above Centre of Disc</p> <p><u>130.912</u> Fresh Water Line „ „</p> <p><u>35.014</u> Tropical Line „ „</p> <p>Winter Line below „ „</p> <p>Winter North Atlantic Line „ „</p> | <p>Tropical Fresh Water Freeboard</p> <p>Fresh Water „ „</p> <p>Tropical „ „</p> <p>Winter „ „</p> <p>Winter North Atlantic „ „</p> |
|---|--|

