

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, ~~SAILING SHIP, TANKER.~~)

GREENOCK REPT N° 23379

|  |                                  |   |  |                                |  |
|--|----------------------------------|---|--|--------------------------------|--|
| Ship's Name<br><b>"JALARAJAN"</b><br><i>Lithgows N° 1015</i>   | Official Number<br><b>172601</b> | Nationality and Port of Registry<br><b>BRITISH BOMBAY</b> | Gross Tonnage<br><b>APPROX 5000 5085</b> | Date of Build<br><b>1945/6</b> | Port of Survey<br><b>GREENOCK</b>              |
| Moulded Dimensions: Length <b>400.55'</b> Breadth <b>51.75'</b> Depth <b>30.5'</b> <i>TO UPPER DECK</i><br><b>400'-6 3/8" TO CENTRE OF STOCK</b> |                                  |   |  |                                | Date of Survey<br><b>DURING CONSTRUCTION</b>   |
| Moulded displacement at moulded draught = 85 per cent. of moulded depth <b>11705.</b> tons   |                                  |   |  |                                | Surveyor's Signature<br><i>Alfred Heas</i>     |
| Coefficient of fineness for use with Tables <b>.762</b>  |                                  |   |  |                                | Particulars of Classification<br><b>+100A1</b> |

|   |       |  |  |  |  |
|---|-------|--|--|--|--|
| Depth for Freeboard (D).  |       | Depth correction.  |  | Round of Beam correction.  |  |
| Moulded depth   | 30.5  | (a) Where D is greater than Table depth<br>(D - Table depth) R =<br>$(30.53 - 26.70) 30 = + 11.49$<br>3.83 |  | Moulded Breadth (B)  | 51.75'                                 |
| Stringer plate  | .40   | (b) Where D is less than Table depth (if allowed)<br>(Table depth - D) R =                                 |  | Standard Round of Beam = $\frac{B \times 12}{50} =$                              | 12.42                                  |
| Sheathing on exposed deck<br>$T \left( \frac{L-S}{L} \right) = 2\frac{1}{2}"$ <i>WOOD DK ON POOP.</i> |       |  |  | Ship's Round of Beam =   | 13.00'                                 |
| Depth for Freeboard (D) =   | 30.53 | If restricted by superstructures   |  | Difference   | .58"                                   |
|   |       |  |  | Restricted to  |  |
|   |       |  |  | Correction = $\frac{\text{Diff}^2}{4} \times \left( 1 - \frac{S_1}{L} \right) =$ | $\frac{.58^2}{4} \times .4536 = -.07"$ |

### DEDUCTION FOR SUPERSTRUCTURES.

|                         | Mean Covered Length (S) | Equivalent Enclosed Length (S <sub>1</sub> ) | Height | Height Correction | Effective Length (E) |  |
|-------------------------|-------------------------|--|--------|-------------------|----------------------|--|
| Poop enclosed ...       | 40.65                   | 40.65  | 7.50   | ✓                 | 40.65                |  |
| „ overhang ...          | -                       | -  | -      | -                 | -                    |  |
| R.Q.D. enclosed ...     | -                       | -  | -      | -                 | -                    |  |
| „ overhang ...          | -                       | -  | -      | -                 | -                    |  |
| Bridge enclosed ...     | 144.66                  | 144.66                                       | 8.0    | ✓                 | 144.66               |  |
| „ overhang aft ...      | -                       | -  | -      | -                 | -                    |  |
| „ overhang forward ...  | -                       | -  | -      | -                 | -                    |  |
| F'cle enclosed ...      | 30.50                   | 30.50  | 7.25   | 7.25/7.5          | 29.48                |  |
| „ overhang ...          | 2.25                    | 2.25   | 7.25   | 7.25/7.5          | 2.17                 |  |
| Trunk aft ...           | -                       | -  | -      | -                 | -                    |  |
| „ forward ...           | -                       | -  | -      | -                 | -                    |  |
| Tonnage opening aft ... | -                       | -  | -      | -                 | -                    |  |
| „ „ forward ...         | -                       | -  | -      | -                 | -                    |  |
| Total ...               | 218.06                  | 218.06                                       |        |                   | 216.96               |  |

  

|   |        |
|---|--------|
| Standard Height of Superstructure   | 7.5    |
| „ „ R.Q.D.  | ✓      |
| Deduction for complete superstructure   | 42.0   |
| Percentage covered $\frac{S}{L} =$  | 54.44  |
| „ „ $\frac{S_1}{L} =$   | 54.16  |
| „ „ $\frac{E}{L} =$   | 54.16  |
| Percentage from Table, Line A.<br>(corrected for absence of forecastle (if required)) | ✓      |
| Percentage from Table, Line B.<br>(corrected for absence of forecastle (if required)) | 40.16  |
| Interpolation for bridge less than 2L (if required)                                   |        |
| Deduction = 42.0 x .4016 =  | -16.87 |

### SHEER CORRECTION.

| Station             | Standard Ordinate | S M | Product | Actual Ordinate | Effective Ordinate | S M | Product |  |
|---------------------|-------------------|-----|---------|-----------------|--------------------|-----|---------|--|
| A.P. ...            | 50.05             | 1   | 50.05   | 54.00           | 54.00              | 1   | 54.00   |  |
| 1/4 L from A.P. ... | 22.27             | 4   | 89.08   | 24.00           | 24.00              | 4   | 96.00   |  |
| 1/2 L „ ...         | 5.51              | 2   | 11.02   | 6.00            | 6.00               | 2   | 12.00   |  |
| Amidships ...       | -                 | 4   | -       | 0.              | -                  | 4   | -       |  |
| 3/4 L from F.P. ... | 11.01             | 2   | 22.02   | 12.00           | 12.00              | 2   | 24.00   |  |
| 1/4 L „ ...         | 44.55             | 4   | 178.20  | 48.00           | 48.00              | 4   | 192.00  |  |
| F.P. ...            | 100.11            | 1   | 100.11  | 108.00          | 108.00             | 1   | 108.00  |  |
| Total ...           |                   |     | 450.48  |                 |                    |     | 486.00  |  |

  

Mean actual sheer aft =  
Mean standard sheer aft =

Mean actual sheer forward =  
Mean standard sheer forward =

Length of enclosed superstructure forward of amidships = 7.1L  
aft of „ = 7.1L

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( 75 - \frac{S}{2L} \right) = \frac{35.52}{18} \left( 75 - \frac{2722}{216} \right) = -.94"$   
If limited on account of midship superstructure. 4778  
If limited to maximum allowance of 1 1/2 ins. per 100 ft.

|   |  |   |
|---|--|---|
| Deduction for Tropical Freeboard.<br>Addition for Winter and Winter North Atlantic Freeboard.             | Deduction for Fresh Water.                                       | TABULAR FREEBOARD corrected for Flush Deck (if required)                |
| Depth to Freeboard Deck = 30.53   | Displacement in salt water at summer load water line 11,244 TONS | Correction for coefficient $\frac{762 + 68}{1.36} = \frac{1.442}{1.36}$ |
| Summer freeboard = 5.79   | Δ = 24' 10787 TONS   | Depth Correction ... 11.49  |
| Moulded draught (d) = 24.74   | Tons per inch immersion at summer load water line                | Deduction for superstructures ... 16.87                                 |
| Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 6.18 = 6 1/4" | T = 25' 41.50  | Sheer correction ... .94  |
| Addition for Winter North Atlantic Freeboard (if required) = ✓  | 24' 41.17  | Round of Beam correction ... .07  |
|   | Deduction = $\frac{\Delta}{40 T}$ inches = 6.78                  | Correction for Thickness of Deck amidships ...                          |
|   | = 6 3/4"   | Other corrections, scantlings, etc. ...                                 |
|   |  | 11.49 17.88 - 6.39  |
|   |  | Summer Freeboard = 69.60  |

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

|  |        |                                    |           |
|--|--------|------------------------------------|-----------|
| Tropical Fresh Water Line above Centre of Disc ... | 13"    | Tropical Fresh Water Freeboard ... | 5'-9 1/2" |
| Fresh Water Line „ „ ...                           | 6 3/4" | Fresh Water „ „ ...                | 4'-8 1/2" |
| Tropical Line „ „ ...                              | 6 1/4" | Tropical „ „ ...                   | 5'-2 3/4" |
| Winter Line below „ „ ...                          | 6 1/4" | Winter „ „ ...                     | 5'-3 1/4" |
| Winter North Atlantic Line „ „ ...                 | ✓      | Winter North Atlantic „ „ ...      | 6'-3 3/4" |



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 INTERNATIONAL

Names of sister ships "JALAKRISHNA" (with slight modification in length and poop)

Builder's name and yard number LITHGOWS LTD NO 1015.

Owners THE SCINDIA STEAM NAV. CO. LTD.

APPROX  
Fee £ 16 : 0 : 0

ML-D



© 2020  
Lloyd's Register  
Foundation