

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Index. No. 30730
(For London Office only.)

Computation of Freeboard for Steamer, Sailing Ship, Tanker

Port of Survey

(Type of Superstructures.)

Date of Survey

Name of Surveyor

Particulars of Classification

Ship's Name

Nationality and Port of Registry

Official Number

Gross Tonnage

Date of Build

JEHANGIR

Bombay

1924

Moulded Dimensions: Length 349.0 Breadth 47.75 Depth 25.5

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

Coefficient of fineness for use with Tables

Depth for Freeboard (D)

Depth correction

Round of Beam correction

Moulded depth 25.5

Stringer plate04

Sheathing on exposed deck

 $T \left(\frac{L-S}{L} \right) =$ Depth for Freeboard (D) = 25.54(a) Where D is greater than Table depth
(D-Table depth) R = $(25.54 - 23.27) 2.685 + 6.09$ (b) Where D is less than Table depth (if allowed)
(Table depth-D) R =

If restricted by superstructures

Moulded Breadth (B) 47.75Standard Round of Beam = $\frac{B \times 12}{50} = 11.46$ Ship's Round of Beam = 12.00Difference = 54

Restricted to

Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{54}{4} (1.54) = 8.19$

DEDUCTION FOR SUPERSTRUCTURES.

| | Mean Covered Length (S) | Equivalent Enclosed Length (S ₁) | Height | Height Correction | Effective Length (E) |
|----------------------------|-------------------------|--|--------|-------------------|----------------------|
| Poop enclosed | 39.34 | 39.34 | 7-6 | - | 39.34 |
| " overhang | 7.62 | 3.81 | | | 3.81 |
| R.Q.D. enclosed | | | | | |
| " overhang | | | | | |
| Bridge enclosed | 204.04 | 204.04 | 7-6 | - | 204.04 |
| " overhang aft | 5.83 | 4.37 | | | 4.37 |
| " overhang forward | 3.20 | 1.60 | | | 1.60 |
| Forecastle enclosed | 34.90 | 34.90 | 7-6 | - | 34.90 |
| " overhang | 14.10 | 7.05 | | | 7.05 |
| Trunk aft | | | | | |
| " forward | | | | | |
| Tonnage opening aft | | | | | |
| " " forward | | | | | |
| Total | 309.03 | 295.11 | | | 295.11 |

Standard Height of Superstructure 6.99" " R.Q.D. 38.60Deduction for complete superstructure 38.60Percentage covered $\frac{S}{L} = 88.56\%$ " " $\frac{S_1}{L} = 84.56\%$ " " $\frac{E}{L} = 84.56\%$

Percentage from Table, Line A.

(corrected for absence of forecastle (if required))

Percentage from Table, Line B. 80.95

(corrected for absence of forecastle (if required))

Interpolation for bridge less than 2L (if required)

Deduction = $38.6 \times .8095 = - 31.25$

SHEER CORRECTION.

| Station | Standard Ordinate | S | M | Product | Actual Ordinate | Effective Ordinate | S | M | Product |
|---------------------------------|-------------------|---|---|---------|-----------------|--------------------|---|---|---------|
| A.P. | 44.9 | 1 | | | 38.0 | 38.0 | 1 | | 38.0 |
| $\frac{1}{8}L$ from A.P. | | 4 | | | 15.8 | 15.8 | 4 | | 63.2 |
| $\frac{3}{8}L$ " | | 2 | | | 3.45 | 3.45 | 2 | | 6.9 |
| Amidships | | 4 | | | - | - | 4 | | - |
| $\frac{5}{8}L$ from F.P. | | 2 | | | 8.39 | 8.39 | 2 | | 16.78 |
| $\frac{7}{8}L$ " | | 4 | | | 33.57 | 33.57 | 4 | | 134.28 |
| F.P. | 89.8 | 1 | | | 71.5 | 71.50 | 1 | | 71.50 |
| Total | | | | 404.1 | | | | | 330.66 |

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{73.44}{18} (.75 - .443) + .84 = 2.07$

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 = Ft.

Summer freeboard =

Moulded draught (d) =

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches =

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

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

Depth Correction

Deduction for superstructures

Sheer correction

Round of Beam correction

Correction for Thickness of Deck amidships

Other corrections, scantlings, etc.

+

-

6.09

31.25

.84

.02

6.98

31.27

- 24.34

Summer Freeboard =

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

Tropical Fresh Water Line above Centre of Disc

Fresh Water Line " "

Tropical Line " "

Winter Line below " "

Winter North Atlantic Line " "

Tropical Fresh Water Freeboard

Fresh Water " "

Tropical " "

Winter " "

Winter North Atlantic " "

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PARTICULARS OF PROTECTION TO OPENINGS, ETC.

| HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS | | | | | | | | | | |
|---|-----------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Description of Hatchway | | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Dimensions of Hatchway | | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| COAMINGS | Height above Deck | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| | Thickness | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| | Sides | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| | Ends | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| HATCH BEAMS | Stiffeners | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| | Brackets, Stays | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| | Number | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| | Spacing | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| FORE AND AFTERS | Scantling and Sketch | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| | Bearing Surface | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| | Number | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| | Spacing | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| HATCH COVERS | Unsupported Lengths | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| | Scantling* and Sketch | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| | Bearing Surface | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| | Material | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Spacing of Cleats | | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Number of Tarpaulins | | ... | ... | ... | ... | ... | ... | ... | ... | ... |

*Are wood fore and afters steel shod at all bearing surfaces?
 Are battens and wedges efficient and in good condition?
 Are tarpaulins in good condition and in accordance with rule requirements?
 Are lashings provided in accordance with rule requirements?

Particulars of fiddle, funnel and ventilator coamings :—

Particulars of Flush Bunker Scuttles :—

Particulars of Companionways :—

Particulars of Ventilators in exposed positions on freeboard and superstructure decks :—

Particulars of Air Pipes in exposed positions on freeboard, raised quarter, or superstructure decks :—

Particulars of Gangway Cargo and Coaling Ports :—

Particulars of Scuppers and Sanitary Discharge Pipes —

Particulars of Side Scuttles :

Particulars of Guard Rails :—

Particulars of Gangways, Lifelines, etc. :—

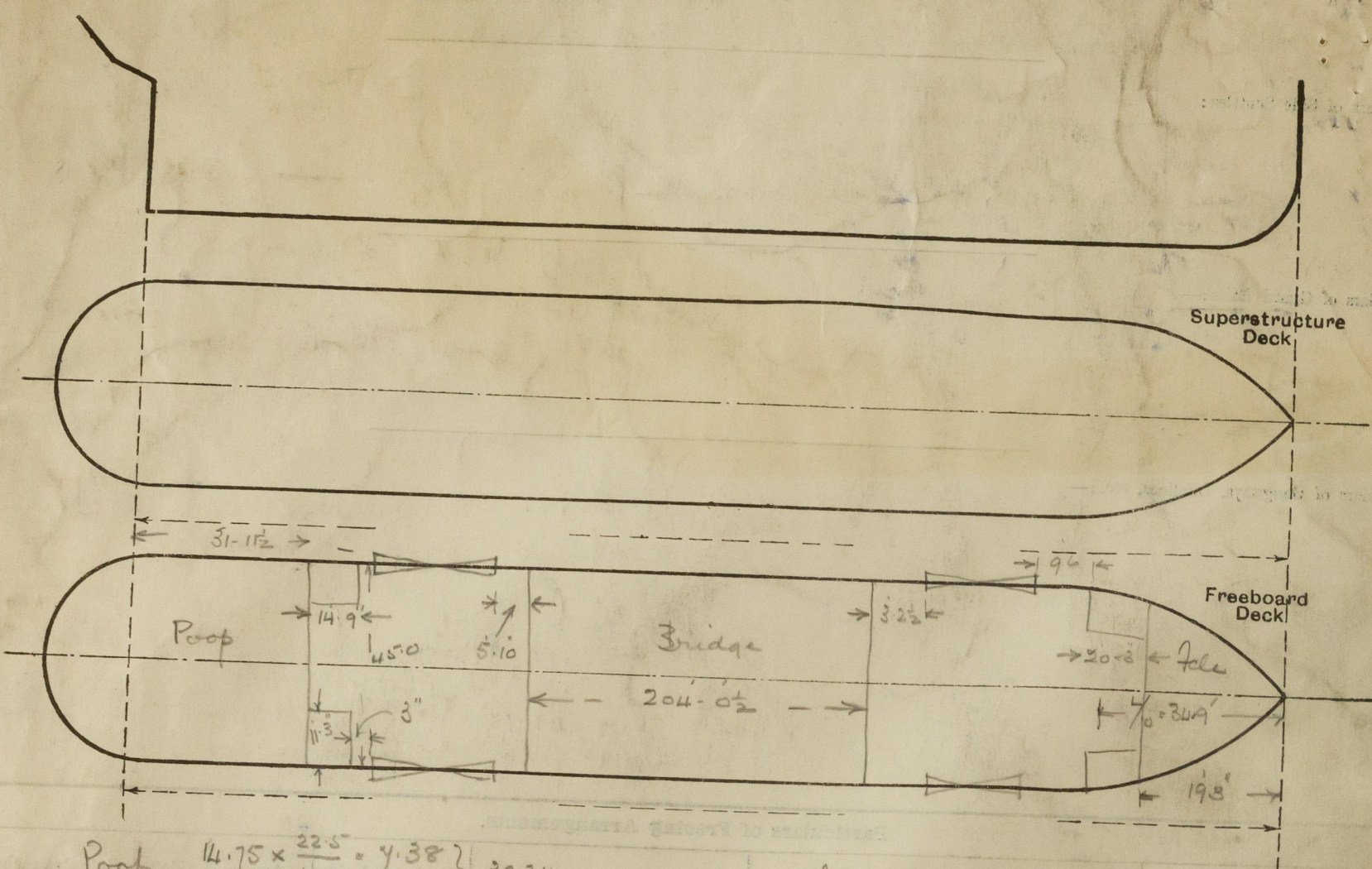
| Particulars of Freeing Arrangements. | | | | | | |
|--------------------------------------|-------------------|-------------------|-----------------------|------------------|----------------|---------------------|
| | Length of Bulwark | Height of Bulwark | Size of Freeing Ports | Number each side | Area each side | Rule area each side |
| After Well ... | | | | | | |
| Forward Well ... | | | | | | |

State position of each freeing port ... } After Well :—
 (F. and A. position and height above deck edge) } Forward Well :—
 State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such :—
 Additional area where sheer is less than standard.

| Particulars of Superstructures, Trunks, Casings, Deckhouses. | | | | | | | | |
|---|---------|---------|------------|---------|-------------------------------|------------------|-----------------|-------------------|
| | Coaming | Plating | Stiffeners | Spacing | End Attachments of Stiffeners | Size of Openings | Height of Sills | Height of Casings |
| Poop Bulkhead ... | | | | | | | | |
| Raised Quarter Deck Bulkhead ... | | | | | | | | |
| Bridge, After Bulkhead ... | | | | | | | | |
| Bridge, Forward Bulkhead ... | | | | | | | | |
| Forecastle Bulkhead ... | | | | | | | | |
| Trunk, Aft ... | | | | | | | | |
| Trunk, Forward ... | | | | | | | | |
| Exposed Machinery Casings on Freeboard or Raised Quarter Decks ... | | | | | | | | |
| Exposed Machinery Casings on Superstructure Decks ... | | | | | | | | |
| Machinery Casings within Superstructures not fitted with Class I Closing Appliances ... | | | | | | | | |
| Deckhouses on Flush Deck Ships ... | | | | | | | | |

| Particulars of Closing Appliances (state if capable of being manipulated from both sides). | |
|--|--|
| Poop Bulkhead ... | |
| Raised Quarter Deck Bulkhead ... | |
| Bridge, After Bulkhead ... | |
| Bridge, Forward Bulkhead ... | |
| Forecastle Bulkhead ... | |
| Exposed Machinery Casings on Freeboard or Raised Quarter Decks ... | |
| Exposed Machinery Casings on Superstructure Decks ... | |
| Machinery Casings within Superstructures not fitted with Class I Closing Appliances ... | |
| Deckhouses on Flush Deck Ships ... | |

Superstructure bulkheads, trunks, deckhouses, casings, cargo and coaling hatchways, extent and thickness of sheathing on the freeboard deck, gangway, cargo and coaling ports, and any other openings, etc., which would affect the seaworthiness of the ship are to be shewn on the following sketches:—



Poop $14.75 \times \frac{22.5}{45.0} = 4.38$
 $31.96 \times 4.38 = 39.34$
 $46.96 \times 39.34 = 4.62 \div 2 = 3.81$
 $4.62 \div 2 = 3.81$

Fore $4/10 = 34.9$
 $49.0 \times 34.9 = 1710.1$
 $214.1 \times 7.05 = 1510.1$
 $1710.1 - 1510.1 = 200.0$

Bridge:— $3.20 \div 2 = 1.60$
 $204.04 \times 1.60 = 326.46$
 $5.83 \times 3/4 = 4.37$
 $326.46 + 4.37 = 330.83$

Position of Lowest Side Scuttle:— 23-8 from bottom of keel

Builder's name and yard number

Names of sister ships

Owners *Bombay & Persia S.N. Co. Ltd*

Fee £

Received by me



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