

Rpt. C.11.

Cloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, Sailing Ship, Tanker
Complete Shelter Deck with Forecastle

Port of Survey *PORT NATAL*

Date of Survey *April 1932*

Name of Surveyor *A. H. Doyle*

Particulars of Classification *+100. A.1.*

Ship's Name *"KATHIAWAR"* Nationality and Port of Registry *British Glasgow* Official Number *147884* Gross Tonnage *4150* Date of Build *1924*

Moulded Dimensions: Length *369.65'* Breadth *48.0'* Depth *28.0'*

Moulded displacement at moulded draught = 85 per cent. of moulded depth *9480* tons

Coefficient of fineness for use with Tables *786*

Depth for Freeboard (D) *28.0'*

Depth correction

(a) Where D is greater than Table depth
 (D - Table depth) R = $(28.03 - 24.65) 2.843 = +9.61$

(b) Where D is less than Table depth (if allowed)
 (Table depth - D) R = $0.03 \times 38 = +1.14$

If restricted by superstructures ☒

Round of Beam correction

Moulded Breadth (B) *48.0'*

Standard Round of Beam = $\frac{B \times 12}{50} = 11.52$

Ship's Round of Beam = *12"*

Difference = *48" EXCESS.*

Restricted to

Correction = $\frac{\text{Diff}}{4} \times (1 - \frac{S_1}{L}) = \frac{48}{4} \times 0.068 = 0.816$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...	19.00'	19.00'	8'-0"		19.00'
" overhang ...			+2 1/2" sheathing		
R.Q.D. enclosed ...					
" overhang ...					
Bridge enclosed ...	345.65'	345.65'	8'-0"		345.65'
" overhang aft ...			+2 1/2" sheathing		
" overhang forward ...					
F'cle enclosed ...					
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...	5.00'	2.50			2.50
" forward ...		367.15			367.15
Total ...	369.65'	364.65'			364.65'

Standard Height of Superstructure *7'-2.35"*

" " R.Q.D. *8"*

Deduction for complete superstructure *39.98'*

Percentage covered $\frac{S}{L} = 100\%$

" " $\frac{S_1}{L} = 98\% \text{ } 99.32\%$

" " $\frac{E}{L} = 98\% \text{ } 99.32\%$

Percentage from Table, Line A. = *97.54% 99.16%*
 (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 = $39.98 \times 0.9916 = -39.64$

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	46.96	1		46.96	49.5	49.5	1		49.5
1/4 L from A.P. ...	20.90	4		83.60	18.0	18.0	4		72.0
1/2 L " ...	5.16	2		10.32	6.0	6.0	2		12.0
Amidships ...	—	4		—	—	—	4		—
3/4 L from F.P. ...	10.33	2		20.66	13.0	13.0	2		26.0
3/4 L " ...	41.79	4		167.16	47.0	47.0	4		188.0
F.P. ...	93.93	1		93.93	102.0	102.0	1		102.0
Total ...				422.63					449.5

Mean actual sheer aft = $\frac{24.5}{24.34} = .66\% \text{ EXCESS.}$

Mean standard sheer aft = $\frac{24.5}{24.34}$

Mean actual sheer forward = $\frac{54.00}{48.68} = 10.9\% \text{ EXCESS.}$

Mean standard sheer forward = $\frac{54.00}{48.68}$

Length of enclosed superstructure forward of amidships = *5L*

" " aft of " = *48L*

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{26.87}{18} \left(.75 - \frac{369.65}{2 \times 369.65} \right) = .37\% \text{ EXCESS.}$

If limited on account of midship superstructure.

If limited to maximum allowance of 1 1/2 ins. per 100 ft.

Deduction for Tropical Freeboard.	Deduction for Fresh Water.	TABULAR FREEBOARD corrected for Fresh Deck (if required)
Addition for Winter and Winter North Atlantic Freeboard.	Displacement in salt water at summer load water line	Correction for coefficient
Depth to Freeboard Deck = <i>28.03</i>	$\Delta = 10,036$	Depth Correction ... <i>9.61</i>
Summer freeboard = <i>2.98</i>	Tons per inch immersion at summer load water line	Deduction for superstructures ... <i>39.64</i>
Moulded draught (d) = <i>25.05</i>	T = <i>36.8</i>	Sheer correction ... <i>1.45</i>
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = <i>6.23 = 6 1/4"</i>	Deduction = $\frac{\Delta}{40 T}$ inches = <i>6 3/4"</i>	Round of Beam correction ... <i>—</i>
Addition for Winter North Atlantic Freeboard (if required) = <input checked="" type="checkbox"/>		Correction for Thickness of Deck amidships ... <i>—</i>
		Other corrections, scantlings, etc. ... <i>—</i>
		Summer Freeboard = <i>35.67</i>

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

Tropical Fresh Water Line above Centre of Disc ... <i>13 1/4"</i>	Tropical Fresh Water Freeboard ... <i>2 1/4"</i>
Fresh Water Line " " ... <i>6 3/4"</i>	Fresh Water " " ... <i>2 1/4"</i>
Tropical Line " " ... <i>6 1/4"</i>	Tropical " " ... <i>2 1/4"</i>
Winter Line below " " ... <i>6 1/4"</i>	Winter " " ... <i>2 1/4"</i>
Winter North Atlantic Line " " ... <i>6 1/4"</i>	Winter North Atlantic " " ... <i>2 1/4"</i>

JUN 1932

506 0019 (112)

RECEIVED 27 JAN 1938

RECEIVED 25 JUL 1932

MARKING FORM FEB 1924

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS										
(SUPERSTRUCTURE DECK)					(FREEBOARD DECK)					
Description of Hatchway	Nº1	Nº2	Nº3	Nº4	Nº5	Nº1	Nº2	DEEP TANK O.T. HATCHES	Nº4	Nº5
Dimensions of Hatchway	22'-6"X16'	28'-5"X16'	14'-2½"X16'	20'-8"X16'	20'-8"X16'	22'-6"X16'	28'-5"X16'	9'-2½"X10'-3"	20'-8"X16'	20'-8"X16'
COAMINGS	Height above Deck	30"	30"	30"	30"	30"	9"	9"	15"	9"
	Thickness	44"	44"	44"	44"	44"	44"	44"	44"	44"
	Sides	44"	44"	44"	44"	44"	44"	44"	44"	44"
	Ends	44"	44"	44"	44"	44"	44"	44"	44"	44"
	Stiffeners	7x3x¾	7x3x¾	7x3x¾	7x3x¾	7x3x¾	7x3x¾	7x3x¾	7x3x¾	7x3x¾
HATCH BEAMS	Brackets, Stays	202½"	202½"	102½"	102½"	102½"	102½"	102½"	102½"	102½"
	Number	4	5	2	4	4	4	4	4	4
	Spacing	4'-6"	4'-8"	4'-8"	4'-2"	4'-2"	4'-6"	4'-8"	4'-2"	4'-2"
	Scantling and Sketch									
	Bearing Surface	3½"	3½"	3½"	3½"	3½"	3½"	3½"	3½"	3½"
FORE AND AFTERS	Number									
	Spacing									
	Unsupported Lengths									
	Scantling* and Sketch									
	Bearing Surface									
HATCH COVERS	Material	Wood								
	Thickness	2½"								
	How fitted	Fore and Aft								
	Bearing Surface	3								
	Spacing of Cleats	24"								
Number of Tarpaulins		3								
*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:—

Fitted on top of machinery casing, on Superstructure deck.

Particulars of Flush Bunker Scuttles:—

NONE

Particulars of Companionways:—

Within steel house of ¼" plating, with 3"x3"x5/16" stiffeners spaced 36" apart and 16" sills. 2" Hardwood doors fitted at sides with locks.

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

Ventilators fitted with substantial steel coamings 36" high. All supplied with wooden plugs and canvas covers.

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

Air pipes of steel with gorse-necks, 30" from deck to opening. All supplied with wooden plugs and canvas covers.

Particulars of Gangway Cargo and Coaling Ports:—

NONE



© 2020

Lloyd's Register Foundation

Particulars of Scuppers and Sanitary Discharge Pipes —

Five 4" Scuppers fitted each side of Freeboard deck, discharging through the ship's sides, and fitted with N.R. Valves. For draining shelter tween-decks.

Particulars of Side Scuttles:

9" Scuttles fitted each side of shelter deck, and fitted with deadlights.

Particulars of Guard Rails:—

Efficient guard rails 4 ft. high fitted to shelter deck.

Particulars of Gangways, Lifelines, etc.:—

— None —

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	25"	25"	2½" X 2½" X 40"	30"	—	—	—	8'-0"
Raised Quarter Deck Bulkhead ...	25"	25"	PLATES FLANGED 2½"	27"	—	6'-0" X 3'-0"	18"	8'-0"
Bridge, After Bulkhead	25"	25"	2½" X 2½" X 40"	30"	—	—	—	8'-0"
Bridge, Forward Bulkhead	25"	25"	2½" X 2½" X 40"	30"	—	—	—	8'-0"
Forecastle Bulkhead	25"	25"	2½" X 2½" X 40"	30"	—	—	—	8'-0"
Trunk, Aft								
Trunk, Forward								
Exposed Machinery Casings on Freeboard or Raised Quarter Decks ...	30"	30"	3" X 3" X 40"	30"	—	5'-6" X 2'-6"	14"	8'-0"
Exposed Machinery Casings on Superstructure Decks						None		
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	No openings.
Raised Quarter Deck Bulkhead ...	2½" weatherboards fitted in fixed steel channels.
Bridge, After Bulkhead	
Bridge, Forward Bulkhead	
Forecastle Bulkhead	No openings.
Exposed Machinery Casings on Freeboard or Raised Quarter Decks ...	Steel hinged doors 5/16" thick, secured with locks, manipulated from both sides.
Exposed Machinery Casings on Superstructure Decks	
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	
Deckhouses on Flush Deck Ships ...	



Lloyd's Register
50600191212

RECEIVED

7-12-19

Kathiawar

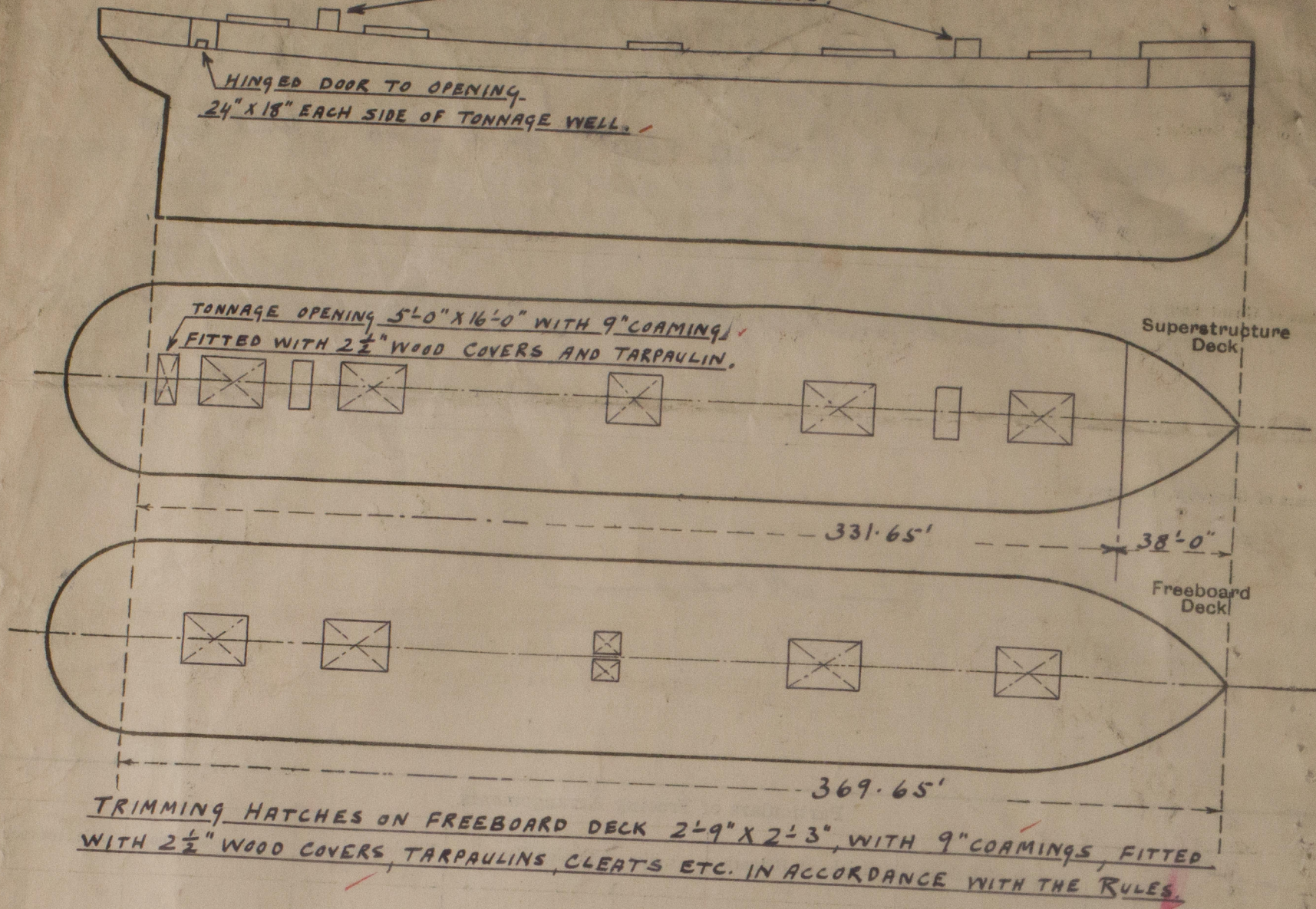
Superstructure bulkheads, trunks, deckhouses, casings, cargo and coaling hatchways, extent and thickness of sheathing on the freeboard deck, gangway, cargo and coaling ports, and any other openings, etc., which would affect the seaworthiness of the ship are to be shewn on the following sketches:—

SUPERSTRUCTURE DECK SHEATHED

STEEL HOUSES ENCLOSING COMPANIONS

WHOLE LENGTH WITH 2½" TEAK.

TO SHELTER TWEEN DECK.



State any special features in the construction of the ship:—

Builder's name and yard number *Harland & Wolff Ltd. London. Yard N° 611.G.*

Names of sister ships *"Luxmi" and "Gujarat"*

Owners *Bank Line Ltd. (A. Weir & Co. Managers.)*

Fee £ Received by me *[Signature]*