

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

 16 MAY 1932
 Index. No. 31165
 (For London Office only.)

Computation of Freeboard for MOTOR VESSEL
 having Shelter deck with top gallant forecastle.

Port of Survey Baleu Ha.

Date of Survey 20. 4. 32.

Name of Surveyor D. Pesbekt.

Particulars of Classification +100A.1. with freeboard.
Carrying vegetable oil in Day Tank

Ship Name	Nationality and Port of Registry	Official Number	Gross Tonnage	Date of Build
<u>M.L. "LUXMI"</u>	<u>BRITISH. GLASGOW.</u>	<u>147888.</u>	<u>4148.67.</u>	<u>1924. 3.</u>

Moulded Dimensions: Length 370. Breadth 48.2. Depth 28.0.

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

Coefficient of fineness for use with Tables .482.786

Depth for Freeboard (D)	Depth correction	Round of Beam correction
Moulded depth <u>28.00</u>	(a) Where D is greater than Table depth (D - Table depth) R = <u>(28.032 - 24.65) x 2.85 = 9.51</u>	Moulded Breadth (B) <u>48.2</u> Standard Round of Beam = $\frac{B \times 12}{50} =$ <u>11.56</u> Ship's Round of Beam = <u>12.0</u> Difference <u>.44</u>
Stringer plate <u>.032</u>	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =	Restricted to <u>.12 x (1 - .9932)</u> Correction = $\frac{\text{Diff}^2}{4} \times (1 - \frac{S_1}{L}) =$ <u>Nil.</u>
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$	If restricted by superstructures	
Depth for Freeboard (D) = <u>28.032</u>		

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	
Poop enclosed	<u>19.35</u>	<u>19.35</u>	<u>8.0</u>	<u>✓</u>	<u>19.35</u>	
" overhang						
R.Q.D. enclosed						
" overhang						
Bridge enclosed... ..						
" overhang aft						
" overhang forward	<u>345.65</u>	<u>345.65</u>	<u>8.0</u>	<u>✓</u>	<u>345.65</u>	
Fore enclosed						
" overhang						
Trunk aft						
" forward						
Tonnage opening aft	<u>5.0</u>	<u>2.5</u>	<u>8.0</u>	<u>✓</u>	<u>2.5</u>	
" " forward	<u>349.65</u>	<u>367.15</u>			<u>367.15</u>	
Total	<u>340.0</u>	<u>367.5</u>			<u>367.5</u>	

Standard Height of Superstructure 7.20
 " " R.Q.D. ✓

Deduction for complete superstructure 40.39.98

Percentage covered $\frac{S}{L} =$ 1.00.
 " " $\frac{S_1}{L} =$.9932.
 " " $\frac{E}{L} =$.9932.

Percentage from Table, Line A. 99.16%
 (corrected for absence of forecastle (if required)) 99.6%

Percentage from Table, Line B. ✓
 (corrected for absence of forecastle (if required)) ✓

Interpolation for bridge less than .2L (if required) ✓

Deduction = 40 x .99.6 = 39.84

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product	
A.P.	<u>46.96</u>	<u>1</u>	<u>1</u>	<u>46.96</u>	<u>49.50</u>	<u>61.02</u>	<u>1</u>	<u>1</u>	<u>61.02</u>	
$\frac{1}{2}$ L from A.P.	<u>20.915</u>	<u>4</u>	<u>4</u>	<u>83.66</u>	<u>18.96</u>	<u>27.42</u>	<u>4</u>	<u>4</u>	<u>109.68</u>	
$\frac{2}{3}$ L "	<u>5.146</u>	<u>2</u>	<u>2</u>	<u>10.292</u>	<u>4.74</u>	<u>6.78</u>	<u>2</u>	<u>2</u>	<u>13.56</u>	
Amidships	<u>0</u>	<u>4</u>	<u>4</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>4</u>	<u>4</u>	<u>0</u>	
$\frac{2}{3}$ L from F.P.	<u>10.34.33</u>	<u>2</u>	<u>2</u>	<u>20.686</u>	<u>11.45</u>	<u>12.55</u>	<u>2</u>	<u>2</u>	<u>25.10</u>	
$\frac{1}{2}$ L "	<u>41.82.79</u>	<u>4</u>	<u>4</u>	<u>167.32.16</u>	<u>45.82</u>	<u>50.78</u>	<u>4</u>	<u>4</u>	<u>203.12</u>	
F.P.	<u>94.0</u>	<u>1</u>	<u>1</u>	<u>94.0</u>	<u>102.00</u>	<u>114.12</u>	<u>1</u>	<u>1</u>	<u>114.12</u>	
Total	<u>73.93</u>			<u>423.00</u>	<u>422.63</u>	<u>422.63</u>			<u>422.63</u>	

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{460.4 - 423.0}{18} \left(.75 - \frac{S}{2L} \right) = \frac{37.4}{18} \times .25 =$ -1.6

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 = 28.032 Ft.

Summer freeboard = 3.0375

Moulded draught (d) = 24.994

Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 6.25

Addition for Winter North Atlantic Freeboard (if required) = 6.25 + 2 = 8.25

Deduction for Fresh Water.

Displacement in salt water at summer load water line $\Delta =$ 10,036.

Tons per inch immersion at summer load water line $T =$ 36.8

Deduction = $\frac{\Delta}{40T}$ inches = 10.036.

$40 \times 36.8 = 1472$

$= 6\frac{3}{4}$ ✓

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient $\frac{782 + .68}{1.56} \times 62.4 =$ 31.2

Depth Correction 9.

Deduction for superstructures 31.2

Sheer correction 31.2

Round of Beam correction 31.2

Correction for Thickness of Deck amidships 31.2

Other corrections, scantlings, etc. 31.2

Summe 31.2

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	Winter North Atlantic Line	Tropical Fresh Water Freeboard	Fresh Water	Tropical	Winter	Winter North Atlantic
21 MAY 1932	<u>13"</u>	<u>6 3/4"</u>	<u>6 3/4"</u>	<u>6 3/4"</u>	<u>6 3/4"</u>	<u>13"</u>	<u>6 3/4"</u>	<u>6 3/4"</u>	<u>6 3/4"</u>	<u>6 3/4"</u>

base line to be marked 2' 11 1/4" below the centre of disc
2' 9 3/4"

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

- SUPERSTRUCTURE DECK -					- FREEBOARD DECK -				
HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS									
Description of Hatchway	...	...	...	...	...	...	...	...	...
Dimensions of Hatchway	...	...	...	...	...	...	...	...	...
COAMINGS	Height above Deck	...	...	...	...	...	...	...	...
	Thickness	...	...	...	...	...	...	...	...
	Sides	...	...	...	...	...	...	...	...
	Ends	...	...	...	...	...	...	...	...
	Stiffeners	...	...	...	...	...	...	...	...
HATCH BEAMS	Number	...	...	...	...	...	...	...	...
	Spacing	...	...	...	...	...	...	...	...
	Scantling and Sketch	...	...	...	...	...	...	...	...
	Bearing Surface	...	...	...	...	...	...	...	...
	FORE AND AFTERS	...	...	...	...	...	...	...	...
HATCH COVERS	Material	...	...	...	...	...	...	...	...
	Thickness	...	...	...	...	...	...	...	...
	How fitted	...	...	...	...	...	...	...	...
	Bearing Surface	...	...	...	...	...	...	...	...
	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:— *Look vessel - no fiddle - single funnel enclosing silencers.*
Foundation bar 3" x 4 1/2" x 1/2" -
P.R. Casing vent plates: - plating .25 ——— 20; 22" - 24" dia - all coamings
considerably above required height -

Particulars of Flush Bunker Scuttles:—

- Nil -

Particulars of Companionways:—

Companionways to lower deck from shelter deck on port & starboard sides of centre line
between No 1-2 hatches. No 3-4 hatches steel casings closed by teakwood doors
& stone boards in channels. 4'-3" x 5'-3" sill 1'-3". Two companionways in top galley
precast 2'-0" x 5'-6" to cross quarters closed by teakwood doors - also similar opening
to steering gear space.

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

20" dia vent plates fitted on shelter deck - all coamings considerably
above height - .25 steel plate.

wood plugs & canvas covers provided

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

W.L. 4 1/2" pipe with perforated covers fitted in upper? deck

Particulars of Bunkers and Coaling Ports:—

- Nil -



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 Lloyd's Register
 Foundation

Particulars of Scuppers and Sanitary Discharge Pipes —

All sanitary discharges fitted above freeboard deck.
1/2 inch shelter deck scuppers. Two freeing ports in tonnage opening 21" x 18" fitted with hinged cover - bars -

Particulars of Side Scuttles :

12" side scuttles with c.l. covers fitted in shelter deck for the carriage of immigrants -

Particulars of Guard Rails :—

Short bulwarks in way of accommodation - rails fitted round rest of vessel four bars 3'-9" high.

Particulars of Gangways, Lifelines, etc. :—

- 11 -

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		Rails fitted.				
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.

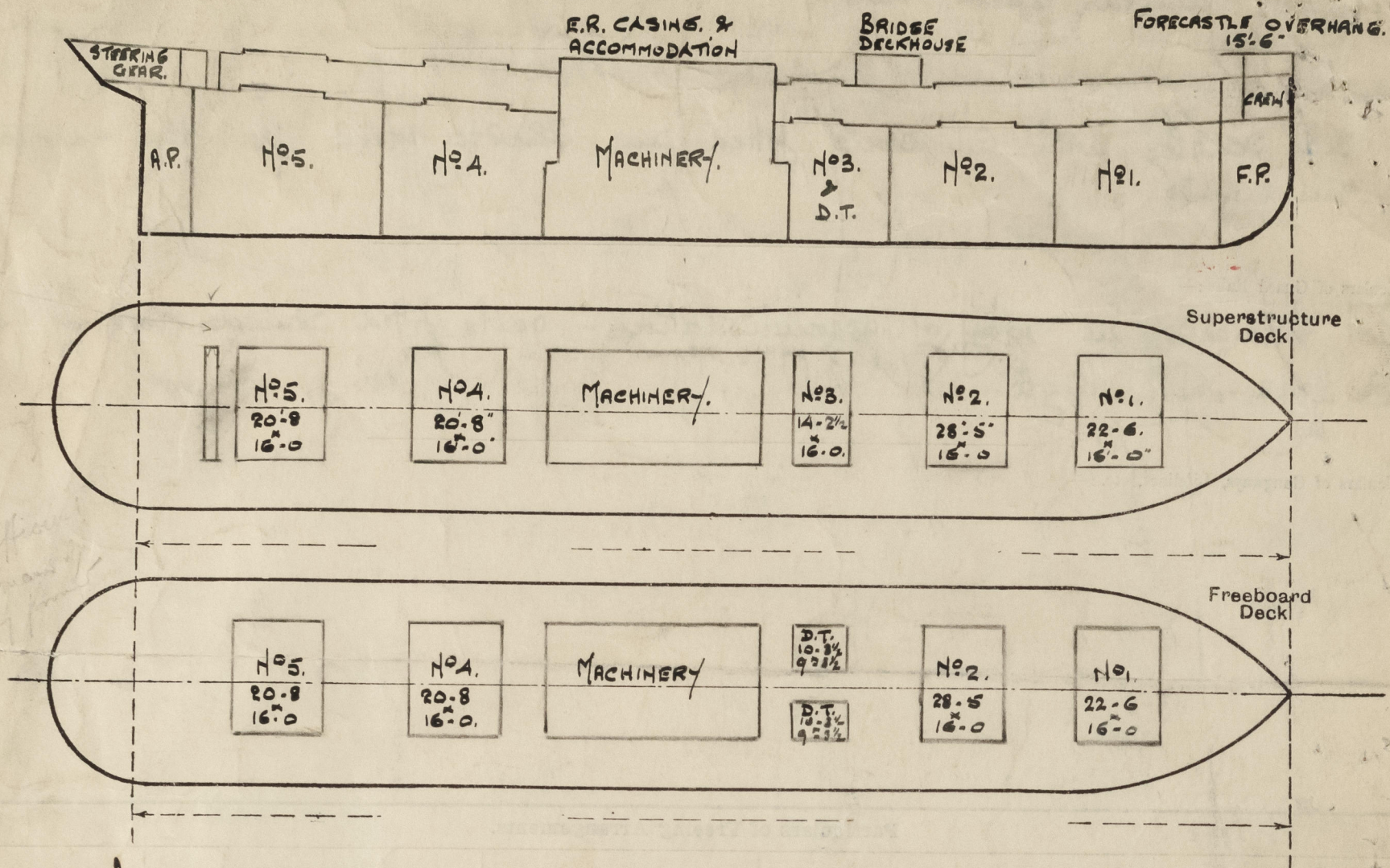
	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	
Poop Bulkhead	5 x 3 1/2 angle	.25	4 x 3 x 1/2	2'-1"	/	3'-3" x 6'-3"	1'-3"	
Raised Quarter Deck Bulkhead ...								
Bridge, After Bulkhead	3'-6"	.25	4 x 3 1/2 x 1/2	2'-8"	9" x 9" x 1/2 brackets	2'-3" x 5'-6"	1'-3"	
Bridge, Forward Bulkhead	- do -	- do -	- do -	- do -	- do -	/	/	- do -
Forecastle Bulkhead	5 x 3 1/2 angle	- do -	4 x 2 1/2 x 1/2	2'-6"	/	/	/	- do -
Trunk, Aft								
Trunk, Forward								
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...								
Exposed Machinery Casings on Super-structure Decks	3'-6"	.25	4 x 2 1/2 x 1/2	3'-0"	5 x 9 x 1/2 brackets	4'-3" x 5'-6"	1'-3"	- do -
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	18" 5/16	5/16	3 x 3 + 3/8	2'-7"		No openings	-	
Deckhouses on Flush Deck Ships ...								

Particulars of Closing Appliances (state if capable of being manipulated from both sides).

Poop Bulkhead	Poop Bulkhead :- Two openings 8'-3" x 6'-3" sills 1'-3" high, closed by strong boards full height.
Raised Quarter Deck Bulkhead ...	E.R. Casings :- enclosed by steel light mechanically operated. Two entrances to engine room inside accommodation 2'-3" x 5'-6" closed by steel doors. Alleyways in accommodation closed forward by steel doors.
Bridge, After Bulkhead	Peak wood doors aft.
Bridge, Forward Bulkhead	Bridge deck house :- completely plated forward - entrances at sides & after end of house closed by teak wood doors - sills 1'-3" high.
Forecastle Bulkhead	Forward Bulkhead :- completely plated.
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...	Top gallant forecastle bulkhead .25 plating - Two openings closed by steel hinged doors.
Exposed Machinery Casings on Super-structure Decks	
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	
Deckhouses on Flush Deck Ships ...	

Suzuki.

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 shown on the following sketches:—



Freeboard deck unsheathed. Tonnage opening 5'-0" x 16'-0" with efficient temporary covers.

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

Endorsement on present certificate:— when more than 12 passengers are carried the foregoing baseline does not apply & the maximum baseline for all seasons shall be 2'-6 3/4" below centre of disc—

Particulars of Construction

Japanese
Ship

Builder's name and yard number

Names of sister ships

Owners

Bank Line Ltd (Amoy)

Fee £

Received by me

See not charged in Calcutta.



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