

Rpt.

Port of

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

Index. No. **23651**  
(For London Office only.)

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having

*Shade deck*

Port of Survey

*Plymouth*

(Type of Superstructures.)

*10,391 Net Tons 25.6*

Date of Survey

*22/6/32 23/6/32 24/6/32*

Ship's Name

**LANCASHIRE**

Nationality and Port of Registry

*British  
Liverpool*

Official Number

*140529*

Gross Tonnage

*9543*

Date of Build

*1917-7*

Name of Surveyor

*R. C. Moffitt*

Moulded Dimensions: Length

*481.5*

Breadth

*57*

Depth

*35.5*

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

*17746*

Coefficient of fineness

Tables

*753*

Particulars of Classification

*+100 A1*

Depth from

(D)

*35.37*

Stringer plate

*.06*

Sheathing on exposed

 $T \left( \frac{L-S}{L} \right)$ *29 x 2 x 93**.07*

Depth to Freeboard (B)

*35.50*

Depth correction

(a) Where D is greater than Table depth

(D - Table depth) R =

 $(35.50 - 32.10) \times 3.0 = 10.20$ 

(b) Where D is less than Table depth (if allowed)

(Table depth - D) R =

If restricted by superstructures

Round of Beam correction

Moulded Breadth (B)

*57.0*Standard Round of Beam =  $\frac{B \times 12}{50}$ *13.68*

Ship's Round of Beam

*9*

Difference

*4.68*

Restricted to

Correction =  $\frac{\text{Diff}^2}{4} \times \left( 1 - \frac{S_1}{L} \right)$ *4.68**3144*

### DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Roop enclosed	<i>48.00</i>	<i>48.00</i>	<i>8.25</i>	-	<i>48.00</i>
overhang	<i>3.08</i>	<i>1.54</i>			<i>1.54</i>
R.Q.D. enclosed					
overhang	<i>193.00</i>				
Bridge enclosed	<i>263.6</i>	<i>193.00</i>	<i>8.25</i>	-	<i>193.00</i>
overhang aft					
overhang forward	<i>42.00</i>	<i>21.00</i>			<i>21.00</i>
Circle enclosed					
overhang	<i>85.00</i>	<i>48.15</i>	<i>8.0</i>	-	<i>48.15</i>
Trunk aft		<i>18.42</i>			<i>18.42</i>
forward					
Tonnage opening aft					
forward					
Total	<i>371.08</i>	<i>330.11</i>			<i>330.11</i>

Standard Height of Superstructure

*7.50*

R.Q.D.

Deduction for complete superstructure

*42.00*Percentage covered  $\frac{S}{L}$ *77.07* $\frac{S_1}{L}$ *68.56* $\frac{E}{L}$ *68.56*

Percentage from Table, Line A.

(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 =

*42.00 x 60.55 = -25.43*

### SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P.	<i>58.15</i>	1	<i>58.15</i>	<i>42.00</i>	<i>42.00</i>	1	<i>42.00</i>
$\frac{1}{2}$ L from A.P.	<i>25.88</i>	4	<i>103.52</i>	<i>9.00</i>	<i>9.00</i>	4	<i>36.00</i>
$\frac{3}{4}$ L	<i>6.39</i>	2	<i>12.78</i>	<i>-3.00</i>	<i>-3.00</i>	2	<i>-6.00</i>
Amidships		4				4	
$\frac{3}{4}$ L from F.P.	<i>12.79</i>	2	<i>25.58</i>	<i>16.50</i>	<i>12.79</i>	2	<i>25.58</i>
$\frac{1}{2}$ L	<i>51.76</i>	4	<i>207.04</i>	<i>51.00</i>	<i>51.76</i>	4	<i>207.04</i>
F.P.	<i>116.30</i>	1	<i>116.30</i>	<i>114.00</i>	<i>116.30</i>	1	<i>116.30</i>
Total			<i>523.37</i>				<i>420.92</i>

Correction =  $\frac{\text{Difference between sums of products}}{18}$  $\left( 75 - \frac{S}{2L} \right) = \frac{102.45}{18} \left( 75 - \frac{38.53}{2} \right) = +2.07$ 

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 = *35.72*Summer freeboard = *11.15*Moulded draught (d) = *24.57*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

 $\Delta =$  *14340*

Tons per inch immersion at summer load water line

T = *54.6*Deduction =  $\frac{\Delta}{40 T}$  inches*6.57**= 6 1/2***TABULAR FREEBOARD corrected for Flush Deck (if required)**

Correction for coefficient

*753 + 68 = 1.433**1.36**+ 1.36*

Depth Correction

*10.20*

Deduction for superstructures

*25.43*

Sheer correction

*2.07*

Round of Beam correction

*.37*

Correction for Thickness of Deck amidships

*2.66*

Other corrections, scantlings, etc.

*40.78**57.23**57.23**25.43**+30.05**30.05**132.00***WINTER 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

*11' - 1 3/4"**10' - 2 3/4"**10' - 2 3/4"**11' - 1 3/4"**11' - 1 3/4"**11' - 1 3/4"**11' - 1 3/4"**11' - 1 3/4"**11' - 1 3/4"**11' - 1 3/4"*



# PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS									
		Shade Dk				Shade Dk			
Description of Hatchway		Nº1.	Nº2.	Nº3.	Nº4.		Nº5.		Nº6.
Dimensions of Hatchway		12'-6" x 14'-0"	22'-5" x 16'-0"	16'-0" x 16'-0"	9'-0" x 15'-10"		16'-3" x 13'-3"		14'-9" x 11'-2"
COAMINGS	Height above Deck	30"	30"	30"	10 1/2"		30"		30"
	Thickness	.45	.45	.45	.45		.45		.45
	Sides	.5	.5	.5	.5		.5		.5
	Stiffeners	7"x3" BA	7"x3" BA	7"x3" BA	✓		7"x3" BA		7"x3" BA
HATCH BEAMS	Brackets, Stays	✓	✓	✓	✓		✓		✓
	Number	1 web	2 webs	1 web	1 web		1 web		1 web
	Spacing	1 beam	3 beams	3 beams	1 beam		2 beams		2 beams
	Scantling and Sketch	3"x3"x9/16"	as Nº1.	as Nº1.	as Nº1.		as Nº4.		as Nº4.
FORE AND AFTERS	Bearing Surface	12"x5"			10 1/2"x3"x6" BA				
	Number								
	Spacing								
	Unsupported Lengths								
HATCH COVERS	Scantling* and Sketch	none	none	none	none		none		none
	Bearing Surface								
	Material	Wood	Wood	Wood	Wood		Wood		Wood
	Thickness	3"	3"	3"	3"		3"		3"
HATCH COVERS	How fitted	F+A.	F+A.	F+A.	F+A.		F+A.		F+A.
	Bearing Surface	2 1/2"	2 1/2"	2 1/2"	2 1/2"		2 1/2"		2 1/2"
	Spacing of Cleats	24"	24"	24"	24"		24"		24"
	Number of Tarpaulins	2.	2.	2.	2.		2.		2.

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

Particulars of fiddle, funnel and ventilator coamings:— Ventilators on A deck & fiddle - efficient Funnel eff.  
 Engine Room & messroom skylights also skylight vents on Shade deck  
 of Steel Strongly constructed  
 Stokehold gratings protected by Steel coaming 2'-0" high.

Particulars of Flush Bunker Scuttles:— none.

Particulars of Companionways:—	Nº1. hatch	1 companion
Hatch companions	2	4
Double hinged doors	3	2
of wood 5'-0" x 3'-0"	4	1
30" sill manipulated	5	1
both sides.	6	2

Saloon entrance on Shade Dk. (A)  
 double hinged doors of wood - protected  
 by hinged steel covering plates.

Entrance to Machinery Rooms on  
 Shade deck. hinged door of wood on  
 Starb'd side manipulated both sides 12" sill

Particulars of Ventilators in exposed positions on freeboard and superstructure decks:—  
 12. 8"x4" Cast Iron 24" high covered gauze or canvas.  
 6. 7" dia bollard vents with screwed mushroom covers.  
 vents to 1st class accommodation on Shade deck.  
 3 screwed mushroom skylights.

10 @ 18" dia 36" high  
 3 @ 24" " 36"  
 3 @ 13" " 36"  
 2 @ 8" " 30"  
 3 @ 6" " 24" C.I.

plugged &  
 canvas covers  
 provided

1-8"x4"x24" high on C deck. Starb aft.

Particulars of Air Pipes in exposed positions on freeboard, raised quarter, or superstructure decks:—  
 8. 3" dia 30" high fitted Tyros valves.  
 16 1" " 30" " " " or perforated caps.  
 2. 3" " 6'-0" " " " Stayed to Bulkhead.

Main Deck (C) forward  
 6 3" dia 36" high with Tyros valves  
 2 4 1/2" " 24" " plugged.

Particulars of Gangway Cargo and Coaling Ports:—  
 1. Starb Side above. C. deck. 5'-10" x 3'-10" double hinged doors of Steel.  
 5 P + 4 S. " " 2'-3" x 2'-3" single " "

all doors secured inside with 2 strong backs



*Sancochine*

Sanitary Discharges :- Stern :- 13 P + 17 S.

7'-0" below c deck. S. Valves

Quarter 8 P + 15 S

7'-0" " C " S. Valves

Mchy Space 1 P 2 S.

3'-0" " D " double Valves

1 S

3'-0" " D " S. Valve

For d of Bridge 4 P + 6 S.

7'-0" " D " S Valves

For d 4 P + 37.

3'-0" " D " S Valves

Particulars of Scuppers and Sanitary Discharge Pipes -

Deck Scuppers discharging below c deck have no valves fitted.

Particulars of Side Scuttles:

Below c deck. 69 P + S. 12" dia + 5 P + S. 10" dia 24" to 28" below deck.

" D " 30 P + S. 12" " 28" below deck.

Hinged glasses + hinged deadlights of substantial construction.

Particulars of Guard Rails :-

Side Rails. 5 Rails + stanchions 3'-8" high - 3'-10" to 4'-0" apart.

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
	<i>OPENING under shade dk.</i>					
After Well ...	P. 15'-0" x 2'-9"	4'-4"	3'-0" x 1'-0"	P. 1	3 $\frac{1}{2}$	8 $\frac{1}{2}$
	S 87'-0" x 3'-4"			S. 5.	15 $\frac{1}{2}$	17.4
Forward Well ...	24'-9" x 2'-9"	4'-4"	3'-0" x 1'-0"	2.	6 $\frac{1}{2}$	9.0
State position of each freeing port ... } After Well :- 10" above decks (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.

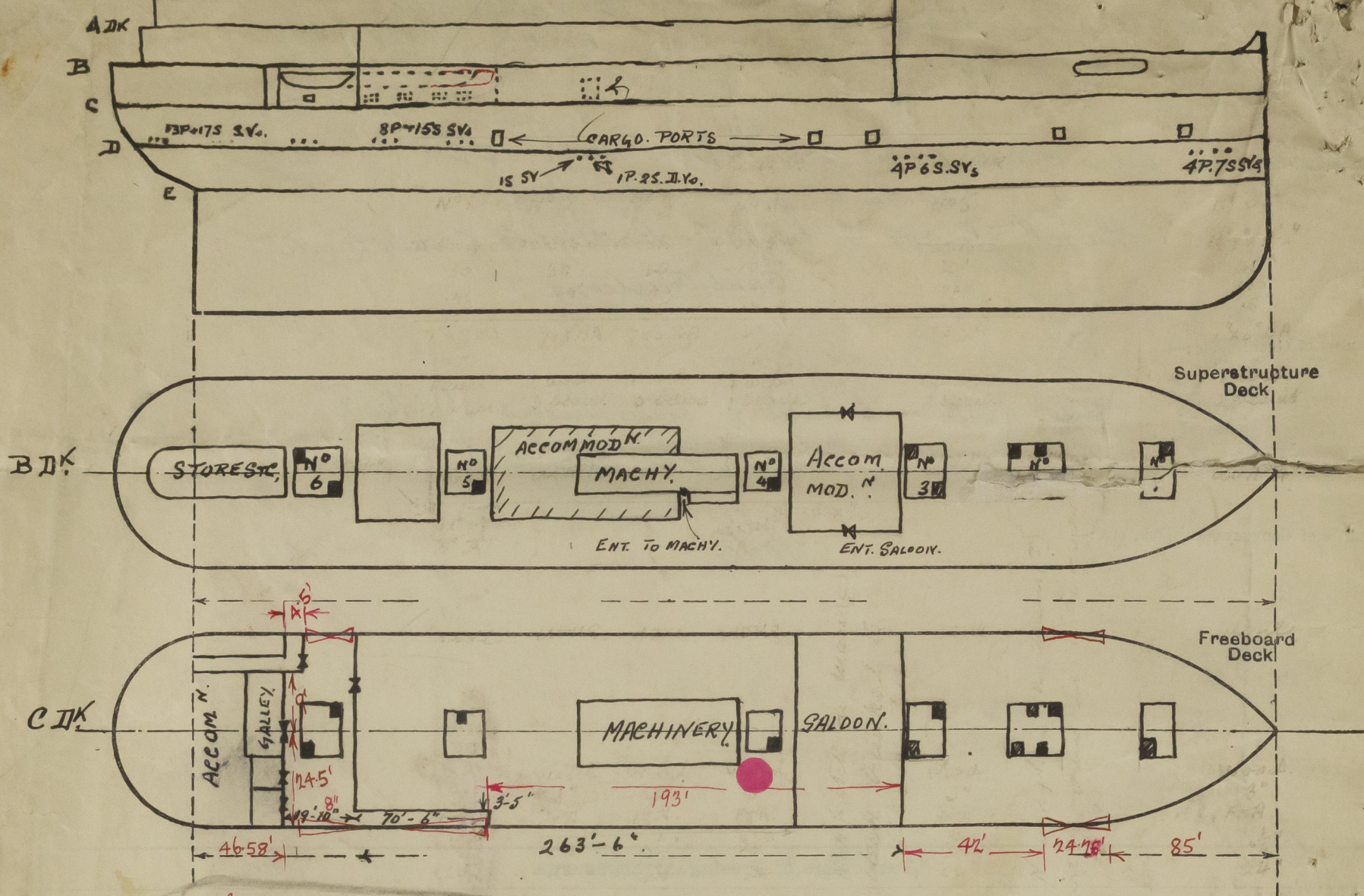
	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Poop Bulkhead ...		7/16 -	5 x 3 x 3/8 BA.	27" -	<i>Skts T + B.</i>	<i>See note P. 4.</i>	12" -	8.25
Raised Quarter Deck Bulkhead ...								
Bridge, After Bulkhead ...		3/8 -	5 x 3 x 3/8 -	36" -	<i>Skts Top Lugs Bottom</i>	5'-5" x 3'-2"	15" -	8.25
Bridge, Forward Bulkhead ...		7/16	6 x 3 1/2 x 5.00 H	24"		None -		8.25
Forecastle Bulkhead ...		✓	4 x 3 x 50 reverse 04					
Trunk, Aft ...								
Trunk, Forward ...								
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...								
Exposed Machinery Casings on Super-structure Decks ...								
Machinery Casings within Superstructures not fitted with Class I Closing Appliances ...	ER.	3/8" - 1/4"	3 1/2 x 3 x 3/8 oa.	30"		5'-4" x 3'-4"	12"	
	BR.	1/4"	4 x 3 x 5/16 oa.	30"		5'-3" x 2'-2"	12"	
Deckhouses on Flush Deck Ships ...								

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

Poop Bulkhead ...	Wood doors to accommodation - manipulated both sides
Raised Quarter Deck Bulkhead ...	✓
Bridge, After Bulkhead ...	Wood - " " " "
Bridge, Forward Bulkhead ...	✓ no openings
Forecastle Bulkhead ...	✓ open
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...	✓
Exposed Machinery Casings on Super-structure Decks ...	On shade deck - wood door manipulated both sides
Machinery Casings within Superstructures not fitted with Class I Closing Appliances ...	1 1/2 teak door, double hinged, manipulated both sides, to S. Room ✓ Steel hinged door, manipulated both sides, to B. Room
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 shown on the following sketches:—



$$\begin{array}{r}
 \text{Poop} \quad 46.58 \\
 + \frac{45 \times 15.5}{49} = 1.42 \\
 \hline
 48.00 \text{ Equiv.}
 \end{array}
 \quad
 \begin{array}{r}
 45 \\
 1.42 \\
 \hline
 3.08 \text{ Gushing}
 \end{array}$$

State any special features in the construction of the ship:— Vessel examined afloat only.

C deck entirely sheathed  $3\frac{1}{2}$ " wood.

B " " " "  $3\frac{1}{2}$ " " "

A " " " "  $2\frac{1}{2}$ " " "

Poop bulkhead is pierced in way of galley 4'6" above the deck.  
3 wood doors & 1 steel door in halves are fitted in this bulkhead

Height of bottom of lowest side light above top of keel =  $25'-2\frac{1}{2}"$  ( $23'-0" + 2'-2\frac{1}{2}"$  less 1" Keel)  
Max. allowed draught permissible =  $24'-8\frac{1}{2}"$

Builder's name and yard number Harland & Wolff Ltd. Belfast.

Names of sister ships ✓

Owners Bibby S S Co Ltd. Bibby Bros & Co.

Fee £ 17 : 0 : 0. Received by me

Expenses 2-10-6