

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Index No. **29257**
(For London Office only.)

Nº100535.

Computation of Freeboard for Steamer, Sailing Ship, Tanker
having *Raised quarter deck, Bridge House & Life Deck. Wooddeck.*

Port of Survey *Liverpool*

(Type of Superstructures.)

Date of Survey *1932.*

Ship's Name

Nationality and Port of Registry

Official Number

Gross Tonnage

Date of Build

"BRIARFIELD"

*British
Liverpool*

143669

446

1920-9

Name of Surveyor *R.R. Ruthven*

Moulded Dimensions: Length *L.N.L. 142.0* Breadth *26.0* Depth *11.5 12.50*

Moulded displacement at moulded draught = 85 per cent. of moulded depth *765* tons

Coefficient of fineness for use with Tables *.687*

Particulars of Classification *100 A.1*

Depth for Freeboard (D)	Depth correction	Round of Beam correction
Moulded depth <i>12.50</i>	(a) Where D is greater than Table depth (D-Table depth) R = <i>(12.53 - 9.47) 1.092 = +3.34</i>	Moulded Breadth (B) <i>25.83</i>
Stringer plate <i>40</i>	(b) Where D is less than Table depth (if allowed) (Table depth-D) R =	Standard Round of Beam = $\frac{B \times 12}{50}$ = <i>6.20</i>
Sheathing on exposed deck <i>2 1/2" on Life & Bridge Deck.</i>		Ship's Round of Beam = <i>6 1/2</i>
T $\left(\frac{L-S}{L}\right)$ =	If restricted by superstructures <i>✓</i>	Difference <i>.30</i>
Depth for Freeboard (D) = <i>12.53</i>		Restricted to
		Correction = $\frac{\text{Diff}^{\circ}}{4} \times \left(1 - \frac{S_1}{L}\right)$ = $\frac{.30}{4} \times .2194 = -.02$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed					
" overhang					
R.Q.D. enclosed	<i>84.75</i>	<i>84.75</i>	<i>3.75</i>	<i>✓</i>	<i>84.75</i>
" overhang					
Bridge enclosed... ..	<i>8.75</i>	<i>8.75</i>	<i>6.75</i>	<i>✓</i>	<i>8.75</i>
" overhang aft					
" overhang forward					
Fore enclosed <i>open</i>	<i>20.50</i>	<i>17.35</i>	<i>6.75</i>	<i>✓</i>	<i>17.35</i>
" overhang					
Trunk aft					
" forward					
Tonnage opening aft					
" forward					
Total	<i>114.00</i>	<i>110.85</i>			<i>110.85</i>

Standard Height of Superstructure	<i>6.00</i>
" " R.Q.D.	<i>3.28</i>
Deduction for complete superstructure	<i>20.20</i>
Percentage covered $\frac{S}{L}$ =	<i>80.29%</i>
" " $\frac{S_1}{L}$ =	<i>78.06%</i>
" " $\frac{E}{L}$ =	<i>78.06%</i>
Percentage from Table, Line A. (corrected for absence of forecastle (if required))	<i>72.91%</i>
Percentage from Table, Line B. (corrected for absence of forecastle (if required))	
Interpolation for bridge less than .2L (if required)	
Deduction = $20.20 \times .7291$	<i>= -14.73</i>

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P.	<i>24.20</i>	<i>1</i>	<i>24.20</i>	<i>32.00</i>	<i>32.00</i>	<i>1</i>	<i>32.00</i>
1/8 L from A.P.	<i>10.77</i>	<i>4</i>	<i>43.08</i>	<i>14.00</i>	<i>14.61</i>	<i>4</i>	<i>58.44</i>
2/8 L "	<i>2.66</i>	<i>2</i>	<i>5.32</i>	<i>3.75</i>	<i>3.65</i>	<i>2</i>	<i>7.30</i>
Amidships	<i>✓</i>	<i>4</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>4</i>	<i>✓</i>
2/8 L from F.P.	<i>5.32</i>	<i>2</i>	<i>10.64</i>	<i>5.75</i>	<i>6.41</i>	<i>2</i>	<i>12.82</i>
1/8 L "	<i>21.54</i>	<i>4</i>	<i>86.16</i>	<i>24.75</i>	<i>25.67</i>	<i>4</i>	<i>102.68</i>
F.P.	<i>48.40</i>	<i>1</i>	<i>48.40</i>	<i>60.00</i>	<i>60.00</i>	<i>1</i>	<i>60.00</i>
Total			<i>217.80</i>				<i>288.42</i>

Mean actual sheer aft = *EXCESS*
Mean standard sheer aft = *EXCESS*
Mean actual sheer forward = *EXCESS*
Mean standard sheer forward = *EXCESS*

Length of enclosed superstructure forward of amidships = *157*
" " aft of " = *500*

SHEER AFT INCREASED BY VIRTUE OF RAISED QUARTER DECK HAVING A HEIGHT IN EXCESS OF STANDARD.

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{70.62}{18} \left(.75 - .4014 \right) = -1.37$

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 = *16.28*
Summer freeboard = *3.92*
Moulded draught (d) = *12.36*

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = *3.09* = *3"*

Addition for Winter North Atlantic Freeboard (if required) = *2"*

Deduction for Fresh Water.

Displacement in salt water at summer load water line

Δ = *420*

Tons per inch immersion at summer load water line

T = *765*

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

= $\frac{420}{40 \times 765}$ = *3.01* = *3"*

TABULAR FREEBOARD corrected for Flush Deck (if required)



Correction for coefficient

	+	-
Depth Correction	<i>3.34</i>	<i>✓</i>
Deduction for superstructures	<i>14.73</i>	<i>✓</i>
Sheer correction	<i>1.37</i>	<i>✓</i>
Round of Beam correction... ..	<i>.02</i>	<i>✓</i>
Correction for Thickness of Deck amidships	<i>45.00</i>	<i>✓</i>
Other corrections, scantlings, etc.	<i>48.34</i>	<i>16.12</i>
Summer Freeboard = $46.75 + .25$	<i>47</i>	<i>✓</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>3"</i>	Tropical Fresh Water Freeboard	<i>3' 8"</i>
Fresh Water Line "	<i>3"</i>	Fresh Water "	<i>3' 8"</i>
Tropical Line "	<i>nil.</i>	Tropical "	<i>3' 11"</i>
Winter Line "	<i>3"</i>	Winter "	<i>4' 2"</i>
Winter North Atlantic "	<i>5"</i>	Winter North Atlantic "	<i>4' 4"</i>

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS									
MAIN DECK R.Q.D.K.									
Description of Hatchway	...	...	1	2					
Dimensions of Hatchway	...	...	14'11 1/2" x 14'6"	22'11 1/2" x 14'5 1/2"					
COAMINGS	Height above Deck	...	40	36 1/2					
	Thickness	{ Sides	42	42					
		{ Ends	36	36					
	Stiffeners	...	✓	✓					
	Brackets, Stays	...	✓	✓					
HATCH BEAMS	Number	...	3	3					
	Spacing	...	60"	69"					
	Scantling and Sketch	...	 15'7 1/2" x 30" angles 3 x 3 x 3 1/4" 3" x 3" x 3 1/4"	 12'18" x 30" angles 3 x 3 x 3 1/4" 3" x 3" x 3 1/4"					
	Bearing Surface	...	2 1/2"	2 1/2"					
		...	✓	✓					
FORE AND AFTERS	Number	...							
	Spacing	...							
	Unsupported Lengths	...							
	Scantling* and Sketch	...							
	Bearing Surface	...							
HATCH COVERS	Material	...	W.W.	as					
	Thickness	...	2 3/4"	2 3/4"					
	How fitted	...	7 x 4	7 x 4					
	Bearing Surface	...	3"	3"					
Spacing of Cleats	...	...	26	24					
Number of Tarpaulins	...	...	3	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:—

Engine room skylight. wood. Coaming 8 x 2 1/2" efficient
 Funnel & Ventilator Coamings are efficient
 Hinged steel covers to fiddle gratings
 Coal hatch on casing top 6'6" x 10'0". Coaming 14 x 30" W.W. on 2 1/2". Fitted 7 x 4. Bearing 2"
 Cleats 32" apart. 1 Tarpaulin

Particulars of Flush Bunker Scuttles:—

1. P.Y.S. Bunker Scuttle on R.Q.D.K. of strong construction, Screwed over.

Particulars of Companionways:—

Steel Companionway on main deck for 4. to crew quarters. 4'6" x 2'6". Coaming 30, plating 25
 No Stuffs. Sill 13" wood over 56 x 22. operated from both sides.

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

1. Vent. P on side 8' 7" dia Coaming 18 x 30 to crew space
 1 " S. on main - fwd 7" dia " 12 x 30 under low of side end to hold.
 1 " P " " " 8 " " 33 x 30 To hold.
 1 " S. " R.Q.D.K. fwd 8 " " 43 x 30 " "
 Wood plugs & canvas covers fitted

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

1 air pipe on side 8' in low 2" dia, 12 high 1 To fore peak tank
 1 " " " R.Q.D.K. 2 1/4" dia 14 30 " To aft peak tank Top section 1
 1 " " " " 2 1/4" " 14 30 " " " Bottom 1
 Wood plugs ~~are~~ provided. and rimping holes drilled in upper bend.

Particulars of Gangway Cargo and Coaling Ports:—

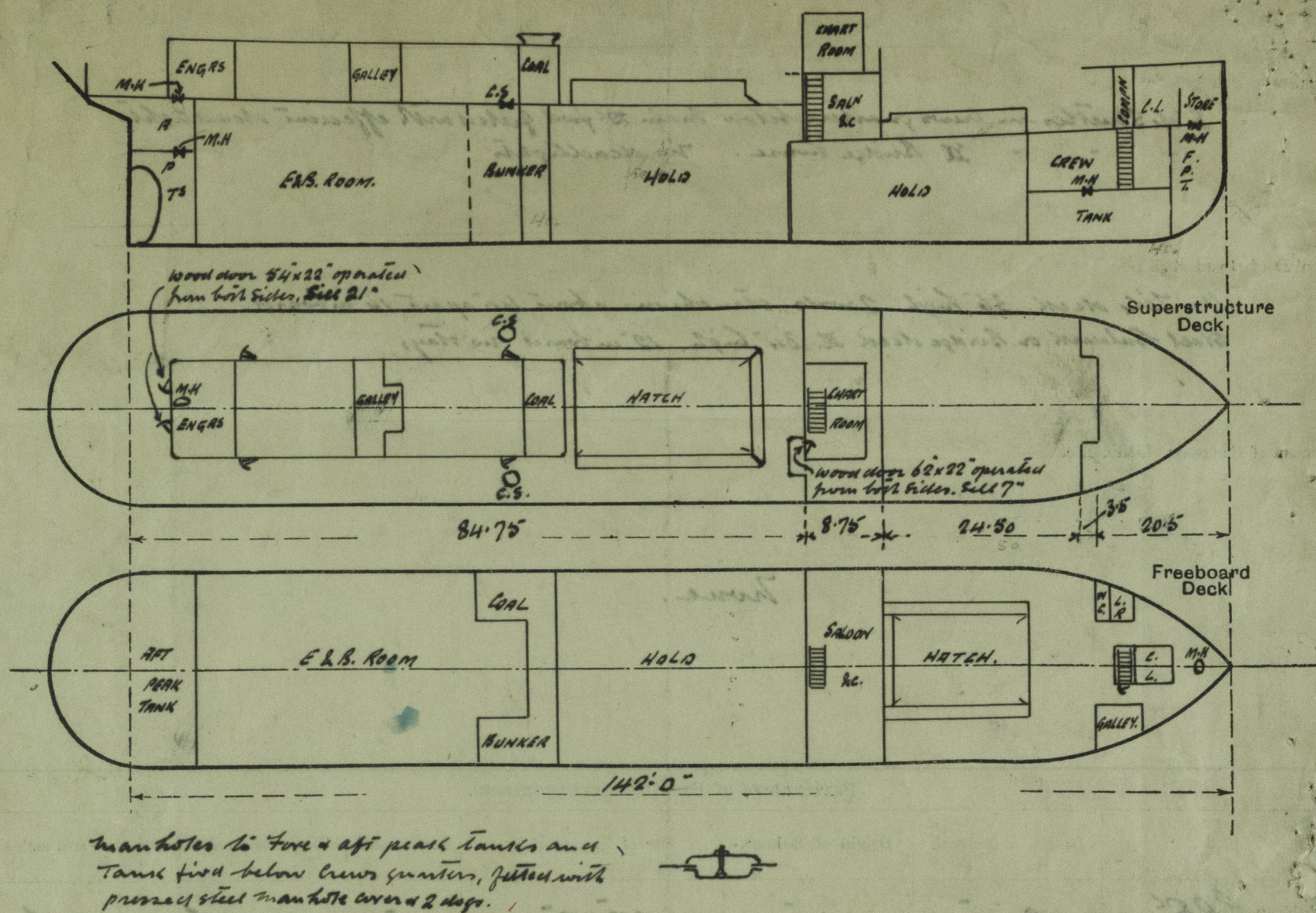


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Brianfield

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:—



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

Vessel placed in Dry Dock for Docking only & Freeboard assignment.

OK To

Builder's name and yard number *Lytham S.B. & E. Co Ltd Lytham N° 579*

Names of sister ships *"GLENAGEARY," "GLENLILLEN," "BEECHFIELD"*

Owners *Zillah Shipping & Carrying Co Ltd*

Fee £ *5 : 2 : 0*

Received by me



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