

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

Index. No. **21365**  
(For London Office only.)Grimsby report  
No 18019Computation of Freeboard for Steamer, Sailing Ship, Tanker  
having a Poop, Bridge and a ForecastlePort of Survey GrimsbyDate of Survey 7-7-32Name of Surveyor A. R. Palmer

(Type of Superstructures.)

Ship's Name

Nationality and Port of Registry

Official Number

Gross Tonnage

Date of Build

"13URY"British  
Grimsby1320931686 (21/6/32)  
16911911-1

Moulded Dimensions: Length 264.66 Breadth 35.82 Depth 18.50  
 Moulded displacement at moulded draught = 85 per cent. of moulded depth 2850 tons  
 Coefficient of fineness for use with Tables .67

Particulars of Classification 100A1S.S. fmo. No. 3-6, 23S.S. fmo. No. 1-27

## Depth for Freeboard (D)

Moulded depth ... .. 18.50Stringer plate ... .. .04Sheathing on exposed deck  
 $T \left( \frac{L-S}{L} \right) = \frac{(59.74 \times .29) + (19.25 \times .33)}{264.66}$  .09Depth for Freeboard (D) = 18.63

## Depth correction

(a) Where D is greater than Table depth  
 $(D - \text{Table depth}) R =$   
 $(18.63 - 17.65) 2.035 = +1.99$ (b) Where D is less than Table depth (if allowed)  
 $(\text{Table depth} - D) R =$ 

If restricted by superstructures

## Round of Beam correction

Moulded Breadth (B) 35.82Standard Round of Beam =  $\frac{B \times 12}{50} =$  8.60Ship's Round of Beam = 9.00Difference Excess .40

Restricted to

Correction =  $\frac{\text{Diff}}{4} \times \left( 1 - \frac{S_1}{L} \right) = \frac{.40}{4} \times .31 = -.03$ 

## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed ... ..	<u>31.75</u>	<u>31.75</u>	<u>7.9</u>		<u>31.75</u>
" overhang ... ..	<u>none</u>				
R.Q.D. enclosed ... ..	<u>✓</u>				
" overhang ... ..	<u>✓</u>				
Bridge enclosed ... ..	<u>115.00</u>	<u>115.00</u>	<u>7.9</u>		<u>115.00</u>
" overhang aft ... ..	<u>none</u>				
" overhang forward ... ..	<u>2.66</u>	<u>1.33</u>			<u>1.33</u>
F'cle enclosed <u>29.77</u> ... ..	<u>38.91</u>	<u>29.77</u>	<u>7.9</u>		<u>29.77</u>
" overhang ... ..	<u>7.42</u>	<u>4.78</u>			<u>4.78</u>
Trunk aft ... ..					
" forward ... ..					
Tonnage opening aft ... ..					
" forward ... ..					
Total ... ..	<u>188.75</u>	<u>182.63</u>			<u>182.63</u>

Standard Height of Superstructure 6.15" " R.Q.D. ✓Deduction for complete superstructure 34.20 15 20 32.47Percentage covered  $\frac{S}{L} =$  71.32"  $\frac{S_1}{L} =$  69.00"  $\frac{E}{L} =$  69.00Percentage 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 = -19.90

## SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ... ..	<u>36.47</u>	1		<u>36.47</u>	<u>48.00</u>	<u>48.00</u>	1		<u>48.00</u>
$\frac{1}{4}$ L from A.P. ... ..	<u>16.23</u>	4		<u>64.92</u>	<u>20.50</u>	<u>20.54</u>	4		<u>82.16</u>
$\frac{2}{4}$ L " ... ..	<u>4.01</u>	2		<u>8.02</u>	<u>5.25</u>	<u>5.13</u>	2		<u>10.26</u>
Amidships ... ..	<u>0.00</u>	4		<u>0.00</u>	<u>0.00</u>		4		<u>0.00</u>
$\frac{3}{4}$ L from F.P. ... ..	<u>8.02</u>	2		<u>16.04</u>	<u>8.50</u>	<u>8.29</u>	2		<u>17.00</u>
$\frac{1}{4}$ L " ... ..	<u>32.46</u>	4		<u>129.84</u>	<u>34.00</u>	<u>33.18</u>	4		<u>132.72</u>
F.P. ... ..	<u>72.94</u>	1		<u>72.94</u>	<u>75.00</u>	<u>75.00</u>	1		<u>75.00</u>
Total ... ..				<u>328.23</u>					<u>368.50</u>

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

If limited on account of midship superstructure.

Mean actual sheer aft = ExcessMean actual sheer forward = Excess

Length of enclosed superstructure forward of amidships =

" " aft of " =

## Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = 18.79Summer freeboard = 1.54Moulded draught (d) = 17.25

Deduction for Tropical freeboard and addition for

Winter freeboard =  $\frac{d}{4}$  inches = 4.31 4.4Addition for Winter North Atlantic Freeboard (if required) = 2

## Deduction for Fresh Water.

Displacement in salt water at summer load water line

 $\Delta =$  3120

Tons per inch immersion at summer load water line

 $T =$  17.8Deduction =  $\frac{\Delta}{40T}$  inches4.2

## TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

Depth Correction ... .. 1.99Deduction for superstructures ... .. 19.90Sheer correction ... .. .80Round of Beam correction 3-1.08 ... .. .03Correction for Thickness of Deck amidships ... .. 1.92

Other corrections, scantlings, etc. ... ..

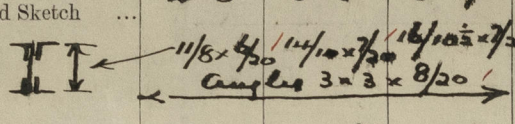
3.91 20.73 -16.82Summer Freeboard = 18.56

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

Tropical Fresh Water Line above Centre of Disc ... .. 8 3/4Fresh Water Line " " ... .. 4 1/2Tropical Line " " ... .. 4 1/4Winter Line below " " ... .. 4 1/4Winter North Atlantic Line " " ... .. 6 1/4Tropical Fresh Water Freeboard ... .. 0 - 9 3/4Fresh Water " " ... .. 1 - 2Tropical " " ... .. 1 - 2 1/4Winter " " ... .. 1 - 10 3/4Winter North Atlantic " " ... .. 2 - 0 3/4



# PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECK									
Description of Hatchway		No. 1	No. 2	No. 3					
Dimensions of Hatchway		16' x 8'	21' x 12'	11-6" x 13-6"					
COAMINGS	Height above Deck	34"	34"	34"					
	Thickness	9/32"	9/32"	9/32"					
	Sides	7/32"	9/32"	7/32"					
	Stiffeners	None	None	None					
Brackets, Stays		None	None	None					
HATCH BEAMS	Number	3	5	5					
	Spacing	4'-0"	3'-6"	5'-9"					
	Scantling and Sketch								
	Bearing Surface	3 1/2"	3 1/2"	3 1/2"					
FORE AND AFTERS	Number								
	Spacing								
	Unsupported Lengths								
	Scantling and Sketch								
Bearing Surface									
HATCH COVERS	Material	Pine							
	Thickness	2 1/2"							
	How fitted	1/2" x 1/2"							
	Bearing Surface	3"							
Spacing of Cleats		24"	24"	24"					
Number of Tarpaulins		3	3	3					
<p>*Are wood fore and afters steel shod at all bearing surfaces? <input checked="" type="checkbox"/></p> <p>Are battens and wedges efficient and in good condition? <input checked="" type="checkbox"/></p> <p>Are tarpaulins in good condition and in accordance with rule requirements? <input checked="" type="checkbox"/></p> <p>Are lashings provided in accordance with rule requirements? <input checked="" type="checkbox"/></p>									

Particulars of fiddle, funnel and ventilator coamings:— All gratings to stowhold and boiler space are covered by strong steel plate hinged covers. The stowhold and engine room ventilators are in good and efficient condition. The engine room skylight is strongly constructed of steel coamings and wood top.

Particulars of Flush Bunker Scuttles:—

None.

Particulars of Companionways:—

Two companionways in fore tween decks strongly constructed of steel plates and angles. One 5'-0" x 3'-6" x 7'-9" wood door at after end. One 5'-0" x 6'-0" x 7'-9" 2 " " " fore " } 4'-3" x 28" x 1 1/2" operated from both sides. Side 16"

Particulars of Ventilators in exposed positions on freeboard and superstructure decks:—									
Poop deck (p.s.)		1-12" diam	24 x 34	24 x 32	24 x 32	24 x 32	24 x 32	24 x 32	24 x 32
Bridge " (p.s.)		2-9"	24 x 32	24 x 32	24 x 32	24 x 32	24 x 32	24 x 32	24 x 32
" " (p.s.)		1-5"	24 x 32	24 x 32	24 x 32	24 x 32	24 x 32	24 x 32	24 x 32
Foreboard " (SS)		2-7 1/2"	24 x 32	24 x 32	24 x 32	24 x 32	24 x 32	24 x 32	24 x 32
" "		2-12"	24 x 32	24 x 32	24 x 32	24 x 32	24 x 32	24 x 32	24 x 32
" "		1-16"	24 x 32	24 x 32	24 x 32	24 x 32	24 x 32	24 x 32	24 x 32
" "		1-10"	24 x 32	24 x 32	24 x 32	24 x 32	24 x 32	24 x 32	24 x 32

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

One C & P air pipe on poop deck 16" high x 2" diam from after peak in steering gear house. Four " " " bridge " 18" " x 2" " No. 3 & 4 tanks. Two " " " foreboard " 5 1/2" " x 2" " No. 2 tank. One " " " " 8 1/2" " x 2" " " 1 "

Wood plugs and canvas covers are fitted for closing the openings.

Particulars of Gangway Cargo and Coaling Ports:—

One gangway door p.s. in after well 10'-0" } Efficiently supported  
" " " " fore " 12'-3" } and stiffened.  
" " " " " 10'-3" }

One ash ejector (Lunn & Paxton patent) on starboard side just above midships, opening through ship's side 11' x 0", lower edge of 20" above top of (wood) foreboard deck.



Particulars of Scuppers and Sanitary Discharge Pipes — Four scuppers each side in wells 2-7' x 3' and 2-5½' x 3½' through stringer angle; remainder on peakboard and superstructure scuppers are fitted with gunmetal non-return storm valves, openings through ships side 2' below peakboard deck, excepting two on SS and one on PS from peakboard deck in forecabin, openings 5'-6" below peakboard deck. The sanitary discharge pipes are fitted with gunmetal non-return storm valves, openings thro' ships side from peakboard deck in file 5'-6" in poop 4'-9" x 3'-9" and from peakboard & superstructure decks in bridge 3'-3" or 4' <sup>way</sup> below peakboard deck.

Particulars of Side Scuttles: *All scuttles are of substantial construction.*

Distance of lower edge of  
side scuttles in forward inner deck  
above Entrance Road. W. L. (17-10)  
1-5, 1-8, 2-0, 2-6, 3-1, 3-6½ and 4-5

Particulars of Guard Rails :—

Side sides and end	3'-0"	Spaced 4'-0" to 4'-6" apart.
Bridge " " after	3'-6"	Spaced about 4'-0" apart.
Top sides & front	3'-6"	Spaced 3'-9" - 4'-9" apart.

Wood gangway 2'-6" x 2½" thick fitted from roof to bridge and from bridge to forecastle deck, efficiently supported and having stanchions and chain on each side.

3'-0" ← Chain  
← spaced ii-6" to ii-9" apart.

State position of each freeing port ... } After Well:—9' x 16'-0" from poop front to aft edge of openings, 23" above deck  
(F. and A. position and height above deck edge) } Forward Well:—6' x 7'-0" x 38'-0" breadth " " " " " "  
State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:—Plate shutters and two rails

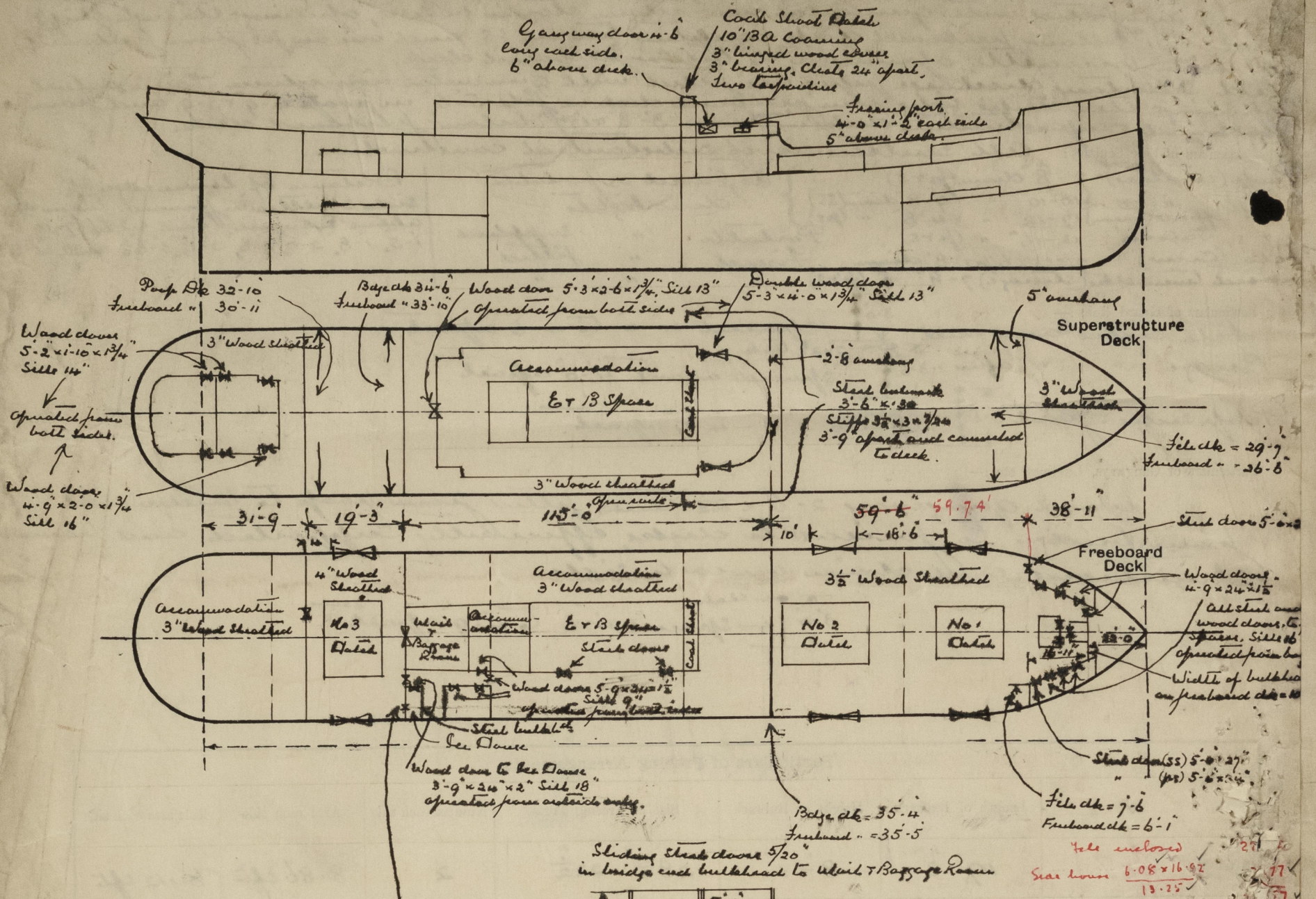
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...	140	30	3 x 3 x 30	36"	none	1-5-9 x 2-0 2-5-0 x 2-0	9" 15"	7-9"
Exposed Machinery Casings on Super-structure Decks ...	none	30 or 25	3 x 3 x 30	36"	"	none	—	"
Machinery Casings within Superstruc-tures not fitted with Class I Closing Appliances ...	—	—	—	—	—	—	—	—

Poop Bulkhead	...	...	Wood door 2" thick, operated from both sides.
Raised Quarter Deck Bulkhead	...	...	Two sliding and one hinged steel doors (see sketch). Sliding boards 2 1/2" thick, fitted full height of opening in channels. Have rivets to bulkhead.
Bridge, After Bulkhead	...	...	
Bridge, Forward Bulkhead	...	...	
Forecastle Bulkhead	...	...	All wood and steel doors operated from both sides.
Exposed Machinery Casings on Freeboard or Raised Quarter Decks	...	...	One wood door 1 1/2" thick. Two steel doors
Exposed Machinery Casings on Superstructure Decks	...	...	" " " " " "
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	...	...	✓
Deckhouses on Flush Deck Ships	...	...	✓

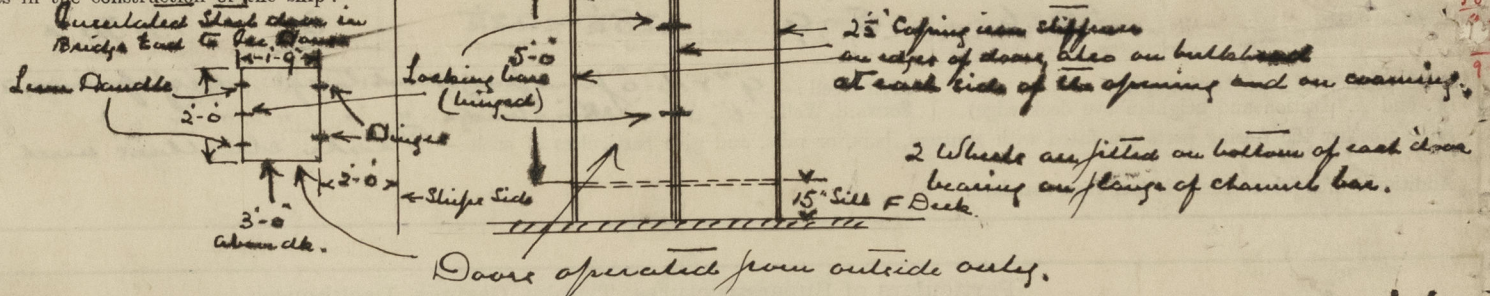


Bury.

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:—



The bulkhead plating in fore and after walls is supported by efficient web plates at each edge of the gangway door openings. These 2 1/2" round iron struts are efficiently connected to bulkhead and deck plating and fitted each side in foreward wall in way of the rigging.

Survey hatch in dry dock.

The vessel is under survey for completion of 2nd SS No. 2.

Request form for survey is attached.

Builder's name and yard number

Carlisle Co Ltd, Dumb., No 569.

Names of sister ships

"Stockport," "Dunelmury," Nos 72265 and 60995 in R 13k register.

Owners

London & North Eastern Ry.

Fee £

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Received by me



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