

Lloyd's Register of British & Foreign Shipping.

SURVEYS FOR FREEBOARD.

SAT. APR 21 1906

PARTICULARS IN RESPECT OF STEAM SHIPS WITH TOP GALLANT FORECASTLES,
HAVING LONG POOPS OR RAISED QUARTER DECKS CONNECTED WITH BRIDGE HOUSES,
OR SHORT POOP AND BRIDGE HOUSE DISCONNECTED, OR BRIDGE HOUSE.

Port of Survey *Liverpool*Date of Survey *Apr 20th 1906*Name of Surveyor *James Bradley*

Delete words which do not apply.

Shelter deck with tonnage opening aft 20.5 x 18.5

Ship's Name.	Gross Tonnage.	Official Number.	Type of Ship.	Date of Build.	Particulars of Classification.
<i>DURHAM</i>	<i>5561</i>	<i>118499</i>	<i>Shelter Dr. with fuel?</i>	<i>1904-11</i>	<i>100 A1 Shelter Dr. with fuel?</i>
Number in Register Book <i>711</i>					

Registered Length as shown by ship's register. *420.7* Breadth *5.4* Depth *28.65*
Length on Loadline *420.7* ✓
Breadth *5.4* ✓

to top of ceiling *28.65* ✓
plus ceiling *.2* ✓
Depth *28.85* ✓
Correction for excess or deficiency of Gradual Sheer (Para. 3) *.79* ✓
Depth to be used *29.64* ✓

Tons and Dk. *5219.84*
× 100

Co-efficient of fineness *.77*
Any modification necessary [Para. 4 (a) to (e)*] *Cell WB 2 deep framing*
Co-efficient as corrected *.76*

Sheer { Stem... *127 1/4* } *173 ÷ 2 = 86.5* Mean
at { Sternpost... *45 3/4* }
Sheer at 1/2 of the length from { Stem *65 1/2* } *88 1/2 ÷ 2 = 44.25* Mean
{ Sternpost *23* }
Gradual Sheer *80.5* ✓
Standard Sheer (Table, Para. 18) *52.07* ✓ Correction ✓
Difference *28.43 ÷ 4 = -7*

Rise in Sheer from amidships { At front of bridge house.....
[Para. 18 (e)] { At after end of forecastle

ALLOWANCE FOR DECK ERECTIONS:—

Freeboard, Table C. *5.1 1/2* ✓
Correction for Length, if required (Para. 12 and 18) ✓
Freeboard by Table A, corrected for sheer, and for length, if required (Para. 12 and 18) *7.7 3/4* ✓
Difference *2.6 1/2* ✓
Percentage as below *92.3%* ✓
= 28 1/4

Correction for engine and boiler openings not being covered by bridge house, in cases coming under Para. 11

Allowance for Deck Erections

	Length.	Length allowed.	Height.
Forecastle.....	<i>360.2</i> ✓	<i>359.6</i> ✓	<i>7.11 1/2</i>
Bridge House			
† Raised Qr. Dk. <i>opening 20.5</i> ✓			
Poop.....	<i>40</i> ✓	<i>38.75</i> ✓	
Total	<i>420.7</i>	<i>398.35</i>	
	<i>298.35</i>	<i>11.17</i>	
Length of Ship	<i>420.7</i>	<i>409.52</i>	<i>= .973</i>
	<i>11.17</i>	<i>420.7</i>	

Corresponding percentage (Para. 11, 12, or 18.) *92.3%* ✓

FREEBOARD recommended amidships from centre of Disc to top of Statutory Deck Line, Wood (Iron) Deck:—

	Fresh Water Line	above centre of Disc
<i>23.4.06</i>	Indian Summer Line	" " "
	Winter Line	below " "
	Winter North Atlantic Line	" " "

Moulded Depth as measured *31.9*

NOTE.—If the depth is measured when vessel is afloat, the details of measurement should be reported.

CORRECTION FOR LENGTH.

Length of Ship on Loadline..... *420.7* ✓
Length in Table *381.0* ✓
Difference *39.7*

Correction for 10ft., Table A. *1.6* ✓ Table C.
× Difference divided by 10 *6.35* (if required.)
If the length covered divide by 2 for vessels coming under Para. 11 and Para. 12 *+ 3*

CORRECTION FOR IRON DECK.

Proportion covered, if less than 1/10ths length covered
Thickness of usual wood deck, less stringer..... *3 1/2*

CORRECTION FOR ROUND OF BEAM.

Breadth at Gunwale amidships..... *5.2* ✓
Round of Beam..... *13* ✓
Normal round *13* ✓
Difference *÷ 2 =*
Proportion of Deck uncovered (Para. 19)

NOTE.—The round of beam should be reported on the full breadth of vessel at the gunwale

Freeboard, Table A	<i>8.2 3/4</i> ✓
Correction for Sheer	<i>-7</i> ✓
	<i>7.7 3/4</i> ✓
Correction for Length	<i>+3</i>
	<i>7.10 3/4</i>
Allowance for Deck Erections	<i>-2.4 1/2</i>
	<i>5.6 1/2</i>
Correction for Round of Beam	—
Correction for Iron Deck (if required)	<i>-3 1/2</i>
	<i>5.3</i>
Additions for non-compliance with provisions of Para. 11 (d) and (e) †	—
Other corrections (if any)	—

Winter Freeboard *5.3* ✓
Summer Freeboard *4.8 1/2* ✓
N.A. Winter Freeboard
Correction necessary because clear side amidships measured in accordance with the Statutes is not taken at the intersection of the wood or iron deck with side. *2*

Winter Freeboard from deck line § *5.5* ✓
Summer " " " " *4.10 1/2* ✓
N.A. Winter " " " "

† If the frames skin planking or ceiling are of unusual thickness the breadth of vessel to inside of ceiling should be reported if possible.
‡ In vessels obtaining an allowance for deck erections under Para. 11 where the sheer drops abaft amidships the height of the R.Q.D. is to be taken from the level of the top of the amidship beam.

† State dimensions of freeing port area on back of this form.
‡ Marked in accordance with Sec. 437, M. S. Act, 1894.

DELETE WORDS WHICH DO NOT APPLY.

The Crew *are, are not,* berthed in the bridge house.

The arrangements to enable them to get backwards and forwards from their quarters *are, are not* satisfactory.

Length of Bulwarks in well

Area of freeing ports required by Para. 11 (a) each side of vessel

Sq. Ft.

Freeing Ports (each side of vessel)

Ft.	Tenths.	Ft.	Tenths.	No.		Sq. Ft.
x		x			}	
x		x				

Total deficiency = Sq. Ft.

Total excess = "

Vertical distance from bottom of keel or from top of deck at side amidships to lower edge of lowest side scuttle.

(N.B.—This dimension need not be reported unless the sill of the lowest side scuttle would be less than 6 inches above the Indian Summer Load Line if assigned under the tables.)

Do all the Frames extend to the top height in the Poop?

Do. do. do. in the Raised Quarter Deck?

Do. do. do. Bridge House?

Do. do. do. Forecastle?

To what height do the Reverse Frames extend?

Has the Poop or Raised Quarter Deck an efficient Iron Bulkhead at the fore end?

Give particulars of the means for closing the openings in Bulkhead

Is the Poop or raised Quarter Deck connected with the Bridge House?

State whether the Bridge House efficiently covers the Engine and Boiler Openings

Has the Bridge House an efficient Iron Bulkhead at the fore end?

Give particulars of the means for closing the openings in Bulkhead

Describe how and to what extent it is Stiffened, give scantlings and spacing of Angle Irons, Bulb Plates, etc.

Has the Bridge House an efficient Iron Bulkhead at the after end?

How are the openings closed?

Is the forecastle at least as high as the main or top-gallant rail?

Has the Forecastle an efficient Iron or Wood Bulkhead at its after end?

Are the Hatchways efficiently constructed? What is the thickness of the Hatches?

State the height of the Coamings in fore well? In after well

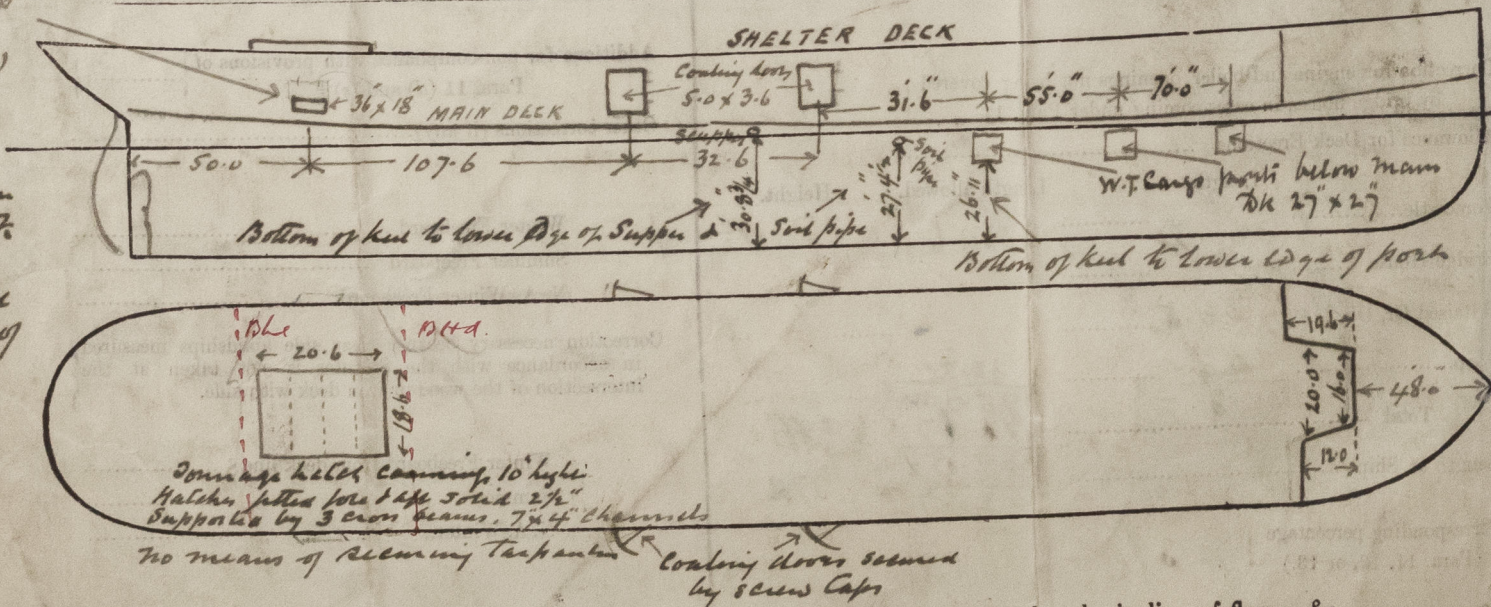
Are the exposed parts of the Engine and Boiler Casings efficiently constructed?

State any special features in the construction of the Vessel. *The Owners desire to be informed what reduction in freeboard will be made, if bulkheads are fitted between Main & Shelter decks, at each end of tonnage opening, and also provision made for securing tarpaulins at tonnage hatch on Shelter deck.*

Freeing port secured with hark and screw bolts (Frame between)

Scuppers from main deck 6' aside in way of Shelter deck

Storm valve



Show hereon the actual measurements of sheer, draft, erections, breaks in line of floors, &c.

Owners

Address

Fee £

6 : 6 : 0

Received by me

Fee applied for

20 / 11 1906

Federal S. N. Co Ltd

2 Fenchurch Avenue London E.C.

Lloyd's Register Foundation