

22 JUL 1932

Index No. **29437**
(For London Office only.)

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, ~~Sailing Ship, Tug~~
 having Raised Quarter Deck, Bridge on R.Q.D. & Forecastle. Port of Survey Newcastle-on-Tyne

(Type of Superstructures.)

Date of Survey 20th July 1932

Name of Surveyor Alex. E. Stevenson

Particulars of Classification + 100A.1.
SS Ltd No. 229

Ship's Name	Nationality and Port of Registry	Official Number	Gross Tonnage	Date of Build
WHITEMANTLE	British London	145077	1692	1920 11mo

Moulded Dimensions: Length 259.94' Breadth 37.5' Depth 18.58'
 Moulded displacement at moulded draught = 85 per cent. of moulded depth 3345 @ 15.92' tons
 Coefficient of fineness for use with Tables .760 7604

Depth for Freeboard (D)	Depth correction	Round of Beam correction
Moulded depth <u>18.58'</u>	(a) Where D is greater than Table depth (D-Table depth) R = <u>(18.62 - 17.33)2 = 2.58</u>	Moulded Breadth (B) <u>37.5'</u> Standard Round of Beam = $\frac{B \times 12}{50} =$ <u>9</u> Ship's Round of Beam = <u>9½"</u> Difference <u>.5</u>
Stringer plate <u>.04</u>	(b) Where D is less than Table depth (if allowed) (Table depth-D) R =	Restricted to Correction = $\frac{\text{Diff}^2}{4} \times (1 - \frac{S_1}{L}) =$ <u>$\frac{.5^2}{4} \times .3064 = -.04$</u>
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$	If restricted by superstructures	
Depth for Freeboard (D) = <u>18.62</u>		

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	
Poop enclosed						Standard Height of Superstructure <u>6.099</u>
" overhang						" " R.Q.D. <u>4.13</u>
R.Q.D. enclosed (Total) <u>101.44'</u>	<u>101.44'</u>	<u>101.40</u>	<u>4.0"</u>	<u>4.0/4.13</u>	<u>98.22</u>	Deduction for complete superstructure <u>31.99</u>
" overhang						Percentage covered $\frac{S}{L} =$ <u>69.82</u>
Bridge enclosed on R.Q.D. <u>51.75'</u>	<u>51.75'</u>	<u>51.75</u>	<u>7.0"</u>		<u>51.75</u>	" " $\frac{S_1}{L} =$ <u>69.36</u>
" overhang aft						" " $\frac{E}{L} =$ <u>68.14</u>
" overhang forward						Percentage from Table, Line A. <u>59.84</u> (corrected for absence of forecastle (if required))
Fore enclosed <u>25.99'</u>	<u>25.99'</u>	<u>25.99</u>	<u>7.25'</u> to wood dk.		<u>25.99</u>	Percentage from Table, Line B. (corrected for absence of forecastle (if required))
" overhang	<u>24.29'</u>	<u>1.15</u>			<u>1.15</u>	Interpolation for bridge less than 2L (if required)
Trunk aft	<u>2.30</u>					Deduction = <u>31.99 × .5984 = 19.14</u>
" forward						
Tonnage opening aft						
" " forward						
Total	<u>181.44</u>	<u>180.29</u>			<u>177.11</u>	

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product	
A.P.	<u>35.99</u>	1		<u>35.99</u>	<u>40</u>	<u>40.00</u>	1		<u>40.00</u>	Mean actual sheer aft = <u>Excess</u> Mean standard sheer aft
1/4 L from A.P.	<u>16.03</u>	4		<u>64.08</u>	<u>17.7</u>	<u>17.38</u>	4		<u>69.52</u>	Mean actual sheer forward = <u>Excess</u> Mean standard sheer forward
1/2 L "	<u>3.95</u>	2		<u>7.90</u>	<u>4.2</u>	<u>4.34</u>	2		<u>8.68</u>	
Amidships		4					4			Length of enclosed superstructure forward of amidships = $\frac{23.15}{25.994} = .891$
3/4 L from F.P.	<u>7.90</u>	2		<u>15.80</u>	<u>9</u>	<u>9.13</u>	2		<u>18.26</u>	" " aft of " = <u>allow .1</u> <u>.1891</u>
1/4 L "	<u>32.04</u>	4		<u>128.16</u>	<u>36</u>	<u>36.54</u>	4		<u>146.16</u>	
F.P.	<u>71.98</u>	1		<u>71.98</u>	<u>84</u>	<u>84.00</u>	1		<u>84.00</u>	
Total				<u>323.91</u>					<u>366.62</u>	

Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{.75 - \frac{S}{2L}}{2L} \right) =$ $\frac{42.71}{18} \left(\frac{.75 - .3491}{2} \right) = .95$
 If limited on account of midship superstructure. $\frac{1891}{2000} \times .95 = .90$ ✓ If limited to maximum allowance of 1½ ins. per 100 ft.

Deduction for Tropical Freeboard.	Deduction for Fresh Water.	TABULAR FREEBOARD corrected for Flush Deck (if required)
Addition for Winter and Winter North Atlantic Freeboard. <u>IN WAY OF MARKING</u> Ft. Depth to Freeboard Deck <u>22.62</u> Summer freeboard = <u>5.58</u> Moulded draught (d) = <u>17.04</u>	Displacement in salt water at summer load water line $\Delta =$ Tons per inch immersion at summer load water line $T =$	Correction for coefficient <u>$\frac{760+68}{1.36} = 144$</u>
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = <u>4.26</u> <u>4 1/4</u>	Deduction = $\frac{\Delta}{40T}$ inches $T/1" =$ DRAFT. Δ 19.55 14.0 2945 19.70 15.0 3180 19.85 16.0 3418	Depth Correction <u>2.58</u> Deduction for superstructures <u>19.14</u> Sheer correction <u>.90</u> Round of Beam correction <u>.04</u> Correction for Thickness of Deck amidships Other corrections, scantlings, etc. <u>RAD</u> <u>48.00</u> <u>50.58</u> <u>20.08</u> + <u>30.50</u> Summer Freeboard = <u>66.91</u> ✓

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, ~~RAISED QUARTER~~ Steel, Deck:

Tropical Fresh Water Line above Centre of Disc	Tropical Fresh Water Freeboard
Fresh Water Line " " " " " " " " " " " "	Fresh Water " " " " " " " " " " " "
Tropical Line " " " " " " " " " " " "	Tropical " " " " " " " " " " " "
Winter Line below " " " " " " " " " " " "	Winter " " " " " " " " " " " "
Winter North Atlantic Line " " " " " " " " " " " "	Winter North Atlantic " " " " " " " " " " " "

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS									
Description of Hatchway	...	...	N ^o 1.	N ^o 2	N ^o 3	N ^o 4	Bunker H. on Casing hdp.	Bunker H. on Bridge Dk.	Bunker H. on R.A.D. in Br.
Dimensions of Hatchway	...	...	30'5" x 25'3"	32'11" x 25'3"	31'6" x 25'3"	28'6" x 25'3"	4'6" x 12'0"	6'9" x 3'0"	6'9" x 3'0"
COAMINGS	Height above Deck	...	42"	42"	36"	36"	8"	30"	8"
	Thickness	{ Sides	44"	44"	44"	44"	8 x 3 B.A.	32"	8 x 3 B.A.
		{ Ends	44"	44"	44"	44"		32"	
	Stiffeners	...	7" x 3" B.A.	7" x 3" B.A.	7" x 3" B.A.	7" x 3" B.A.	-	-	-
	Brackets, Stays	2" dia.	2 off.	2 off.	2 off.	2 off.	-	-	-
HATCH BEAMS	Number	...	5	5	5	4'9"	-	-	-
	Spacing	...	5'1"	5'6"	5'3"	4'9"	-	-	-
	Scantling and Sketch	...	39'34" x 40'34" = 40'34" x 40'34"	As N ^o 1.	34'28" x 40'28" = 40'28" x 40'28"	As N ^o 3.	-	2 off.	2 off.
	Bearing Surface	...	5"	5"	5"	5"	-	-	-
FORE AND AFTERS	Number	...	-	-	-	-	-	-	-
	Spacing	...	-	-	-	-	-	-	-
	Unsupported Lengths	...	-	-	-	-	-	-	-
	Scantling* and Sketch	...	-	-	-	-	-	-	-
	Bearing Surface	...	-	-	-	-	-	-	-
HATCH COVERS	Material	...	w.p.	w.p.	w.p.	w.p.	w.p.	w.p.	w.p.
	Thickness	...	3"	3"	3"	3"	2 1/2"	3"	3"
	How fitted	...	f + a.	f + a.	f + a.	f + a.	f + a.	Twatship	Twatship
	Bearing Surface	...	5 1/2" x 3"	5 1/2" x 3"	5 1/2" x 3"	5 1/2" x 3"	5 1/2" x 3"	2 1/2"	2 1/2"
Spacing of Cleats	...	...	21"	21"	21"	20"	24"	22"	24"
Number of Tarpaulins	...	...	2	2	2	2	2	2	2
<p>*Are wood fore and afters steel shod at all bearing surfaces? <input checked="" type="checkbox"/> yes.</p> <p>Are battens and wedges efficient and in good condition? <input checked="" type="checkbox"/> yes.</p> <p>Are tarpaulins in good condition and in accordance with rule requirements? <input checked="" type="checkbox"/> yes.</p> <p>Are lashings provided in accordance with rule requirements? <input checked="" type="checkbox"/> yes.</p>									

Particulars of fiddle, funnel and ventilator coamings:—

Fidley gratings covered by strong steel hinged covers.
 Funnel & fidley ventilators in efficient condition.
 Engine skylight steel, with hinged wood covers, of substantial construction. ✓

Particulars of Flush Bunker Scuttles:—

none

Particulars of Companionways:—

Entrance to accommodation at fore end of Bridge, in steel house on Bridge deck.
 With solid hinged wood door (1 1/2" thick) 4'6" x 11", sill 18", Door secured both sides by lock handle. ✓

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

Upper deck f well. 1 off 16" dia. coam. 36" x 38" led to hold.
 " " " 1 " 12" " " 36" x 38" " " extended with sheet metal to 6'6"
 on forward hatch Trunk 2 " 16" " " 36" x 38" " " "
 Bridge deck. 2 goosenecks 5 1/2" dia. x 11" to opening. led to space between R.A.D. & upper deck.
 R.A.D. 2 off 16" dia. coam 36" x 32" led to hold.
 " 1 gooseneck 5 1/2" dia x 11" to opening led to Tunnel.
 on aft hatch Trunk 2 off 16" dia. coam 36" x 32" led to hold.

Ventilators constructed in accordance with rules.

wood plugs & canvas covers provided for No. closing appliances to coamings.

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

F'le dk. 1 gooseneck 1 1/2" dia x 9" to opening from fore peak.
 upper dk f well 1 " 2" " x 9" " " double bottom.
 " " " 2 " 2" " x 36" " " "
 Bridge deck 3 " 2" " x 9" " " "
 R.A.D. 2 " 1 1/2" " x 22" x 24" " " (thru. Engine casing aft bulkhead).
 " 1 " 2" " x 72" " " aft peak.
 " 1 air pipe through steering house from 36" above dk. from aft peak.

no closing appliances.

wood plugs or canvas covers provided

Particulars of Gangway Cargo and Coaling Ports:—

none

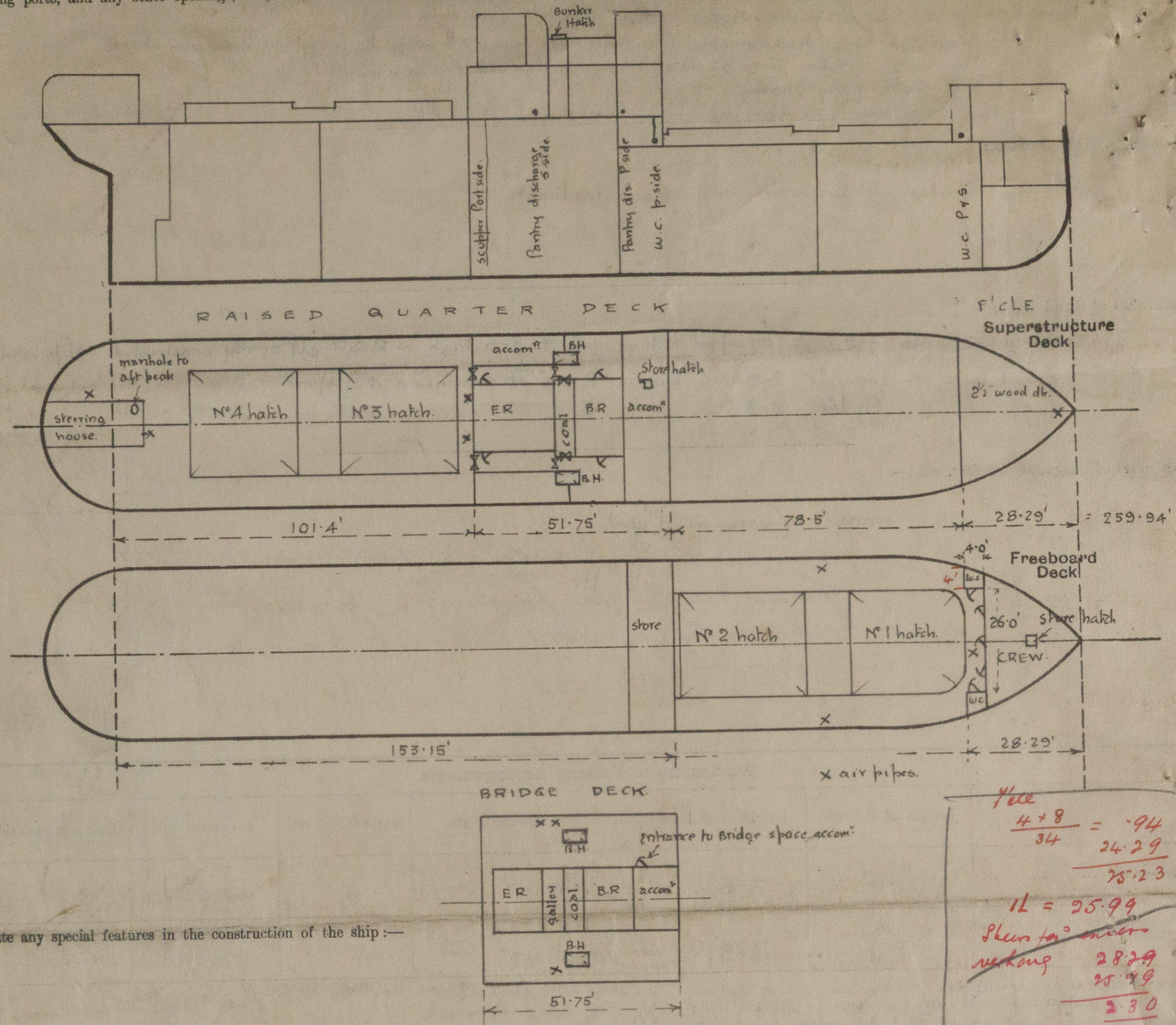


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Whitman

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:—



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

$$\frac{4 \times 8}{34} = .94$$

$$24.29$$

$$25.23$$

$$1L = 25.99$$

$$28.29$$

$$25.99$$

$$2.30$$

~~Timber assignment not required~~
~~Vessel surveyed in dry dock for docking only.~~

Request form.

Builder's name and yard number. Wood Skinner & Co. Ltd.

Names of sister ships

Owners Gas, Light & Coke Co.

Fee £ 9 : 7 : 0

Received by me

ENCLOSURE



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