

8 APR 1932

Rpt. C.11.

Index No. 29640
(For London Office only.)Lloyd's Register of Shipping.
SURVEYS FOR FREEBOARD. *Mch. No. 7515.*

Computation of Freeboard for Steamer, Sailing Ship, Tanker					Port of Survey <u>MANCHESTER</u>
Having <u>LONG BRIDGE AND FORECASTLE</u>					Date of Survey <u>4th APRIL 1932</u>
(Type of Superstructures.)					Name of Surveyor <u>A. R. Gibbs</u>
Ship's Name	Nationality and Port of Registry	Official Number	Gross Tonnage	Date of Build	Particulars of Classification <u>100A1 with freeboards</u>
<u>"ICELAND"</u>	<u>BRITISH LONDON</u>	<u>144633</u>	<u>1236</u> ✓	<u>1914</u>	
Moulded Dimensions: Length <u>241.0'</u> Breadth <u>36.2'</u> Depth <u>18.0'</u>					
Moulded displacement at moulded draught = 85 per cent. of moulded depth <u>2845</u> tons					
Coefficient of fineness for use with Tables <u>.75</u>					

Depth for Freeboard (D)		Depth correction		Round of Beam correction	
Moulded depth	<u>18.0'</u>	(a) Where D is greater than Table depth (D-Table depth) R = $(18.03 - 16.07) \cdot 1.854$ = <u>+ 3.63</u> ✓		Moulded Breadth (B)	<u>36.00</u>
Stringer plate	<u>.03</u>	(b) Where D is less than Table depth (if allowed) (Table depth-D) R = ✓		Standard Round of Beam = $\frac{B \times 12}{50}$ =	<u>8.64</u> ✓
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$	✓			Ship's Round of Beam =	<u>9'</u> ✓
Depth for Freeboard (D) =	<u>18.03</u>	If restricted by superstructures	✓	Difference	<u>.36"</u> ✓
				Restricted to	
				Correction = $\frac{\text{Diff}^{\circ}}{4} \times \left(1 - \frac{S_1}{L} \right)$	= $\frac{.36}{4} \times .167 = - .02"$ ✓

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	
Poep enclosed	✓					Standard Height of Superstructure <u>6.00</u> ✓
" overhang	✓					" " R.Q.D. ✓
R.Q.D. enclosed	✓					Deduction for complete superstructure <u>30.10</u> ✓
" overhang	✓					Percentage covered $\frac{S}{L} = 91.8\%$ ✓
Bridge enclosed	<u>185.83</u> ✓	<u>167.25</u>	<u>4.25</u>		<u>167.25</u>	" " $\frac{S_1}{L} = 83.3\%$
" overhang aft	✓					" " $\frac{E}{L} = 83.3\%$
" overhang forward	<u>1.66</u>	<u>.83</u>			<u>.83</u>	Percentage from Table, Line A.
Pole enclosed <u>equivalent</u>	<u>31.58</u>	<u>31.58</u>	<u>4.25</u>		<u>31.58</u>	(corrected for absence of forecastle (if required)) <u>79.39</u> ✓
" overhang	<u>2.17</u>	<u>1.08</u>			<u>1.08</u>	Percentage from Table, Line B.
Trunk aft	✓					(corrected for absence of forecastle (if required))
" forward	✓					Interpolation for bridge less than .2L (if required)
Tonnage opening aft ...	✓					Deduction = <u>30.10</u> x <u>.7939</u> = <u>-23.90</u>
" forward	✓					
Total	<u>221.24</u>	<u>200.74</u>			<u>200.74</u>	

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product	
A.P.	<u>34.10</u>	1		<u>34.10</u>	<u>32.5</u> ✓	<u>32.50</u>	1		<u>32.50</u> ✓	Mean actual sheer aft = Deficient ✓ 95%
$\frac{1}{4}$ L from A.P. ...	<u>15.17</u>	4		<u>60.68</u>	<u>14.22</u> ✓	<u>14.22</u>	4		<u>56.88</u> ✓	Mean actual sheer forward = Excess ✓
$\frac{2}{4}$ L " ...	<u>3.75</u>	2		<u>7.50</u>	<u>3.54</u> ✓	<u>3.55</u>	2		<u>7.10</u> ✓	Mean standard sheer forward
Amidships	✓	4		✓	0	✓	4		✓	Length of enclosed superstructure forward of amidships = $\frac{65.33}{241} = .27L$
$\frac{3}{4}$ L from F.P. ...	<u>7.50</u>	2		<u>15.00</u>	<u>8.34</u> ✓	<u>8.25</u>	2		<u>16.56</u> ✓	" " aft of " = <u>.5L</u>
$\frac{1}{4}$ L " ...	<u>30.34</u>	4		<u>121.36</u>	<u>35.1</u> ✓	<u>37.13</u>	4		<u>148.52</u> ✓	
F.P.	<u>68.20</u>	1		<u>68.20</u>	<u>89.75</u> ✓	<u>89.75</u>	1		<u>89.75</u> ✓	
Total				<u>306.84</u> ✓					<u>353.31</u> ✓	

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{46.47}{18} \left(.75 - \frac{.459}{.291} \right) = - .75"$

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.	Deduction for Fresh Water.	TABULAR FREEBOARD corrected for Flush Deck (if required)	<u>30.50</u> ✓
Addition for Winter and Winter North Atlantic Freeboard.	Displacement in salt water at summer load water line	Correction for coefficient $\frac{.75 + .68}{1.36} = \frac{1.43}{1.36}$	<u>32.07</u> ✓
Depth to Freeboard Deck = <u>18.03</u> Ft.	$\Delta =$ <u>not available</u>	Depth Correction	<u>3.63</u> ✓
Summer freeboard = <u>1.40</u>	Tons per inch immersion at summer load water line	Deduction for superstructures	<u>-23.90</u>
Moulded draught (d) = <u>16.63</u>	T = <u>not available</u>	Sheer correction	<u>.75</u> ✓
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = $\frac{16.63}{4} = 4.16 = 4\frac{1}{4}"$	Deduction = $\frac{\Delta}{40T}$ inches = $\frac{1}{40 \times 4.16} = \frac{1}{166.4} = .006$	Round of Beam correction	<u>.02</u> ✓
Addition for Winter North Atlantic Freeboard (if required) = <u>2"</u>		Correction for Thickness of Deck amidships	<u>-</u>
		Other corrections, scantlings, etc.	<u>5.72</u>
		Summer Freeboard =	<u>16.75</u>

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

Tropical Fresh Water Line above Centre of Disc	<u>82</u>	Tropical Fresh Water Freeboard	<u>0.84</u> ✓
Fresh Water Line " "	<u>44</u>	Fresh Water " "	<u>1.02</u> ✓
Tropical Line " "	<u>44</u>	Tropical " "	<u>1.02</u> ✓
Winter Line below " "	<u>44</u>	Winter " "	<u>1.9</u> ✓
Winter North Atlantic Line " "	<u>64</u>	Winter North Atlantic " "	<u>1.9</u> ✓

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS												
<div><div>Upper Deck</div><div>Bridge Deck</div></div>												
Description of Hatchway	...	...	No 1	No 2	No 3	COALING Hatchways	Hatch in Forecastle	No 2	No 3	Coaling Hatchways	Hatch Aft.
Dimensions of Hatchway	...	...	19'-9" x 11'-0"	35'-6" x 12'-6"	35'-6" x 12'-0"	2'-13'-8" x 2'-2" 1'-7'-6" x 2'-2"	2'-0" x 2'-0"	35'-6" x 12'-6"	33'-9" x 12'-6"	2'-5'-8" x 2'-5"	3'-3" x 4'-0"
COAMINGS	{	Height above Deck	...	42"	11 1/2"	11 1/2"	2 x 2 x 5 L	3 x 3 x 5 L	36"	32"	32"	
		Thickness	Sides	...	50"	50"	50"	✓	✓	44"	30"	30"
			Ends	...	50"	50"	50"	✓	✓	44"	30"	30"
		Stiffeners	...	5 x 2 1/2 x 32 f	NONE	NONE	NONE	✓	✓	5 1/2 x 2 1/2 x 35	NONE	NONE
Brackets, Stays	...	NONE	NONE	NONE	NONE	✓	✓	NONE	NONE	NONE	NONE	
HATCH BEAMS	{	Number	...	1	3			3	3			
		Spacing	...	9'-10 1/2"	8'-10 1/2"			8'-10 1/2"	8'-5"			
		Scantling and Sketch	...	33 x 17 x 4	SAME AS No 1	SAME AS No 2	NONE	NONE	SAME AS No 2 ON UPPER DECK	SAME AS No 2	NONE	NONE
			Bearing Surface	...	3"	3"			3"	3"		
FORE AND AFTERS	{	Number	...	2	2				2			
		Spacing	...	3'-6" x 4'-0" x 3'-6"	4'-2"			SAME	4'-2"			
		Unsupported Lengths	...	9'-4 1/2"	8'-4 1/2"			AS	7'-11"			
			Scantling* and Sketch	...	8 x 7 WOOD	8 x 7 WOOD	SAME AS No 2	NONE	NONE	No 2 ON UPPER DECK	8 x 7 WOOD	NONE	NONE
Bearing Surface	...	3"	3"									
HATCH COVERS	{	Material	...	W.P.	W.P.	W.P.	W.P.	W.P.	W.P.	W.P.	W.P.	
		Thickness	...	2 1/4 - 2 1/2	3 1/2	SAME	2 1/4	2 1/4	2 1/4	2 1/4	2 1/2	2 1/2
		How fitted	...	THWARTSHIP	THWARTSHIP	AS	THWARTSHIP	F.E.A.	THWARTSHIP	THWARTSHIP	THWARTSHIP	F.E.A.
		Bearing Surface	...	2"	2"	AS	3"	3"	2"	2"	2"	2"
Spacing of Cleats	22"	22"	No 2	NONE	NONE	23"	24"	19"	24"
Number of Tarpaulins	...	...	...	3	NONE	2 NONE	2 NONE	3	3	2	2

*Are wood fore and afters steel shod at all bearing surfaces? *Yes*

Are battens and wedges efficient and in good condition? *Yes.*

Are tarpaulins in good condition and in accordance with rule requirements? *YES. - ON WEATHER DECK HATCHES ONLY*

Are lashings provided in accordance with rule requirements?

Locking bars fitted to no. 1 Hatch in well deck, no. 2 Hatch
on Bridge deck and no. 3 H. on Bridge deck. No lashing provided for
nos 2 & 3 Hatches on upper deck.

Particulars of fiddley, funnel and ventilator coamings:—

Stokehold gratings covered by strong hinged steel covers. ✓

Holey & funnel vents. in good condition.

E. R. Skylight of Steel strongly constructed ✓

Particulars of Flush Bunker Scuttles:—

NONE ✓

Particulars of Companionways :—

1. Steel Companion on Forecastle 3'-0" x 3'-0" x 2'-5" ✓

2 hinges $1\frac{3}{4}$ wood does. in front.

11 hinges steel cover on top.

Side 12" High

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

3 VENTS. on Yoyle Deck 8' dia x 2 1/2' x 25 hwt Accommodation - 1036 high x 2 x 2 1/2

3 " " Bridge " 15" x 36" x 30. " " Holds 2 1/2 Weeks.

~~No~~ means of closing provided ^{by wood plugs} and ^{and canvas covers}

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

3" W.I. air pipe to After Peash Yank. $12\frac{1}{2}$ " high

Air pipes to D. P. Tanks situated on Bridge Deck 42" high

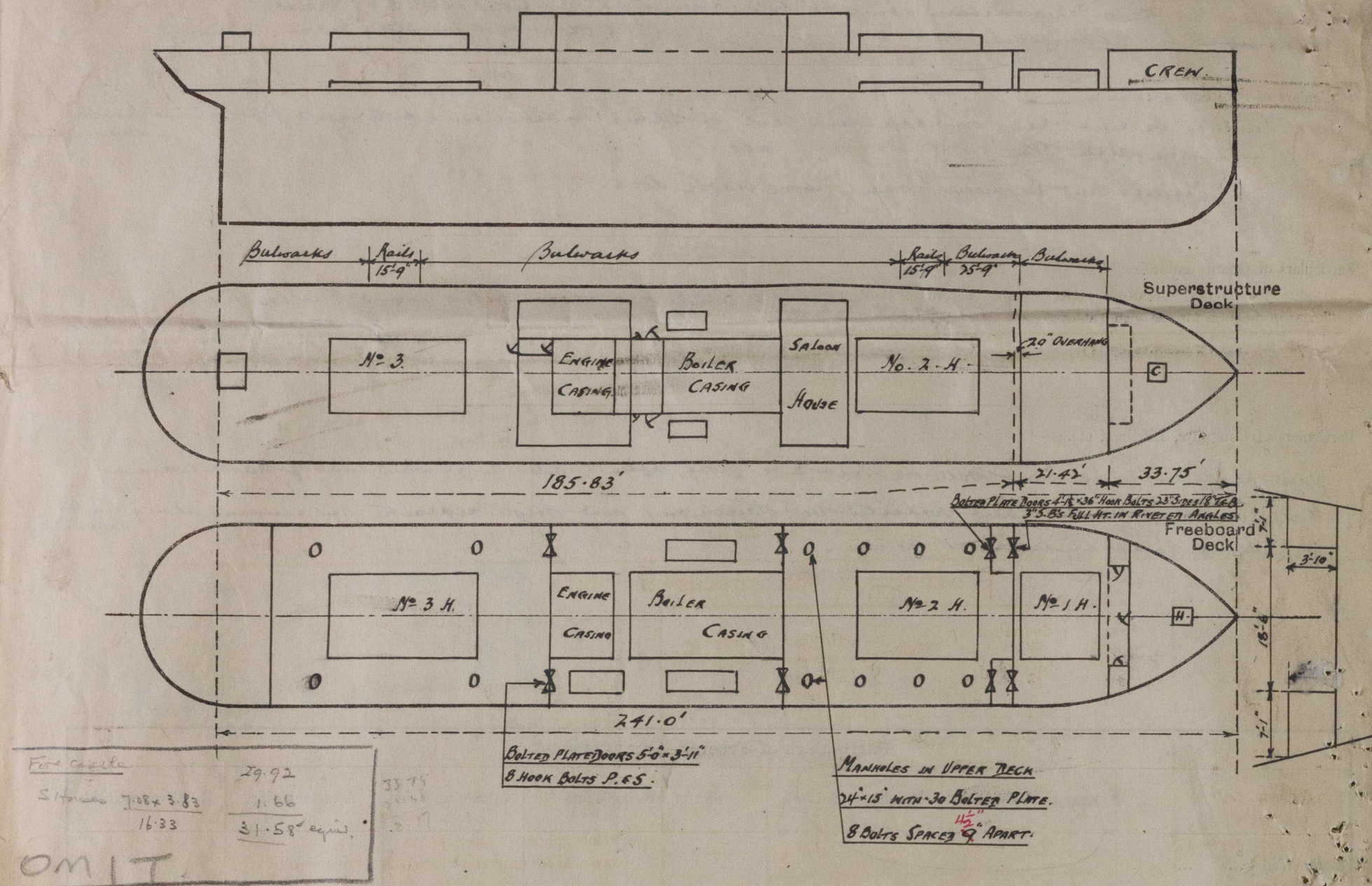
~~No~~ means of closing provided. provided by wood plugs.

Particulars of Gangway Cargo and Coaling Ports:—

NONE

Iceberg

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:—

Upper Deck Cargo Designment Requires

- Rule 82:— After W.B. Tank - no W.T. Centre Division
 Working Water Tank has W.T. "
 E.R. Tank " "
 B.R. " - no " "
 No. 2 D.B. Tank has "
- Rule 83:— Bulwarks 3'3" on bridge - 4'6" in wells. Stays 5 1/2" B.P. spaces 4'0" apart on beams - lugs (double) at deck. Rail 5 x 3 patent Section (Yozack)
- Rule 87:— Steam steering gear amidships. Hand gear aft on bridge deck - no hood - Chains led behind bulwark stays.
- Rules 88 & 89:— Angle lugs riveted to Stinger plate for uprights spaced 7'6" - 8'6" apart.
 Eye plates riveted to Stinger plate 7'6" - 8'6" apart.
 Eye plates riveted to Hatch Side Stiffening Bar 5'6" apart.

No uprights, lashings or guard rails or lifelines on board.

Builder's name and yard number Schiffswerk. Henry Koch. Lubbeck.

Names of sister ships

Owners Leith Hull & Hamburg S.P. Co. Ltd.

Fee £ 8 : 10 : 0.

Received by me

OMIT



© 2020

Lloyd's Register Foundation