

WRECK

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Index No. 32785
(For London Office only.)

MAY 1932

 Computation of Freeboard for Steamer, Sailing Ship, Tanker
 having POOP - Bridge & Forecastle
Port of Survey Newcastle

(Type of Superstructures.)

Date of Survey 27th May, 1932

Ship's Name

Nationality and Port of Registry

Official Number

Gross Tonnage

Date of Build

AMBERTONBritish
Newcastle14947453771928-7Name of Surveyor P. D. BroadacreMoulded Dimensions: Length 409.50 Breadth 53.66 Depth 31.50Moulded displacement at moulded draught = 85 per cent. of moulded depth (26.92) 12891 tonsCoefficient of fineness for use with Tables 7.67Particulars of Classification +100 A1.

Depth for Freeboard (D)

Moulded depth 31.50Stringer plate 0.03

Sheathing on exposed deck

$$T \left(\frac{L-S}{L} \right) =$$

Depth for Freeboard (D) = 31.53

Depth correction

(a) Where D is greater than Table depth
(D - Table depth) R = $(31.53 - 27.30) 3.00$
12.69(b) Where D is less than Table depth (if allowed)
(Table depth - D) R =

If restricted by superstructures

Round of Beam correction

Moulded Breadth (B) 53.66Standard Round of Beam = $\frac{B \times 12}{50} =$ 12.88Ship's Round of Beam = 13.2Difference = 0.32

Restricted to

Correction = $\frac{\text{Diff}^{\circ}}{4} \times \left(1 - \frac{S_1}{L} \right) =$ 0.62 (5062) 0.08

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
S. House 3 x <u>15</u>	<u>34.5</u>				
Poop enclosed ...	<u>33.6</u>	<u>34.50</u>	<u>8'0"</u>		<u>34.50</u>
" overhang ...	<u>+ 4"</u>				
R.Q.D. enclosed ...					
" overhang ...					
Bridge enclosed ...	<u>118.25</u>	<u>118.25</u>	<u>8'0"</u>		<u>118.25</u>
" overhang aft ...	<u>+ 5'9"</u>	<u>4.31</u>			<u>4.31</u>
" overhang forward ...	<u>+ 9'7"</u>	<u>3.7</u>			<u>3.7</u>
Fore enclosed ...	<u>44.04</u>	<u>45.02</u>	<u>8'0"</u>		<u>45.02</u>
" overhang ...	<u>+ 8"</u>				
S. House 3 x <u>15</u>					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" " forward ...					
Total ...	<u>204.27</u>	<u>202.45</u>			<u>202.45</u>

Standard Height of Superstructure 7.50

" " R.Q.D. ...

Deduction for complete superstructure 42.00Percentage covered $\frac{S}{L} =$ 49.88" " $\frac{S_1}{L} =$ 49.43" " $\frac{E}{L} =$ 49.43Percentage from Table, Line A.
(corrected for absence of forecastle (if required))Percentage from Table, Line B.
(corrected for absence of forecastle (if required)) 35.51

Interpolation for bridge less than 2L (if required)

Deduction = 14.91

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	<u>50.95</u>	1		<u>50.95</u>	<u>76.00</u>	<u>76.00</u>	1		<u>76.00</u>
$\frac{1}{4}$ L from A.P. ...	<u>22.67</u>	4		<u>90.68</u>	<u>32.50</u>	<u>33.57</u>	4		<u>134.28</u>
$\frac{2}{4}$ L " ...	<u>5.60</u>	2		<u>11.20</u>	<u>8.50</u>	<u>8.39</u>	2		<u>16.78</u>
Amidships ...		4					4		
$\frac{3}{4}$ L from F.P. ...	<u>11.21</u>	2		<u>22.42</u>	<u>13.00</u>	<u>13.57</u>	2		<u>27.14</u>
$\frac{1}{4}$ L " ...	<u>45.34</u>	4		<u>181.36</u>	<u>53.50</u>	<u>54.30</u>	4		<u>217.20</u>
F.P. ...	<u>101.90</u>	1		<u>101.90</u>	<u>120.00</u>	<u>120.00</u>	1		<u>120.00</u>
Total ...				<u>458.51</u>					<u>591.40</u>

Correction = $\frac{\text{Difference between sums of products}}{18} \left(75 - \frac{S}{2L} \right) =$ 132.89

If limited on account of midship superstructure.

Mean actual sheer aft = Excess
Mean standard sheer aftMean actual sheer forward = Excess
Mean standard sheer forwardLength of enclosed superstructure forward of amidships = $\frac{54.25}{409.5} =$ 13.25" " aft of " = $\frac{64.00}{409.5} =$ 15.63Deduction for Tropical Freeboard.
Addition for Winter and Winter North Atlantic Freeboard.Depth to Freeboard Deck = 31.53Summer freeboard = 6.10Moulded draught (d) = 25.43

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = 6.36 6.4

Addition for Winter North Atlantic Freeboard (if required =

Deduction for Fresh Water.

Displacement in salt water at summer load water line

 $\Delta =$

Tons per inch immersion at summer load water line

T =

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

=

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

 $\frac{7.67 + 0.65}{1.36} = \frac{1.447}{1.36}$ Depth Correction 12.69Deduction for superstructures 14.91Sheer correction 3.70Round of Beam correction 0.08

Correction for Thickness of Deck amidships

Other corrections, scantlings, etc.

Summer Freeboard = 73.22

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

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

 Tropical Fresh Water Freeboard
 Fresh Water " "
 Tropical " "
 Winter " "
 Winter North Atlantic " "

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Lloyd's Register

Foundation

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS																			
← Upper Deck → ← Bridge Deck → ← Upper Deck → Fore Peak Casings																			
Description of Hatchway	...	...	No1	No2	No3	No4	No5	No3	2 ESCAPE HATCH	2 COAL HATCH	2 COAL HATCH	2 TO FORE PEAK	2 COAL HATCH	2 COAL HATCH	4 ESCAPE HATCH	2 TO FORE PEAK	2 TO STORE	2 TO COAL HATCH	
Dimensions of Hatchway	...	...	31'6" x 20'	33'0" x 20'	22'0" x 22'	30'3" x 20'	30'3" x 20'	33'0" x 18'	2'5" x 2'5"	5'6" x 3'10"	8'0" x 3'11"	4'0" x 4'0"	5'3" x 4'0"	7'9" x 4'0"	2'0" x 2'0"	4'0" x 3'10"	3'8" x 3'5"	6'0" x 18'0"	
COAMINGS	{	Height above Deck	51"	51"	30"	48"	48"	30"	27"	30"	30"	27"	30"	30"	27"	28"	19"	32"	
		Thickness { Sides	44"	44"	44"	44"	44"	44"	44"	38"	44"	44"	44"	44"	44"	44"	38"	40"	32"
		Stiffeners	7x3x40 BA	8x4x42 BA	8x4x42 BA	8x4x42 BA	8x4x42 BA	8x4x42 BA	8x4x42 BA	10x3x48 BA	10x3x48 BA	10x3x48 BA	10x3x48 BA	10x3x48 BA	10x3x48 BA	10x3x48 BA	10x3x48 BA	10x3x48 BA	
		Brackets, Stays	6x3x42 BA	6x3x42 BA	6x3x42 BA	6x3x42 BA	6x3x42 BA	6x3x42 BA	6x3x42 BA	6x3x42 BA	6x3x42 BA	6x3x42 BA	6x3x42 BA	6x3x42 BA	6x3x42 BA	6x3x42 BA	6x3x42 BA	6x3x42 BA	
HATCH BEAMS	{	Number	5	5	5	5	5	2	3	3	3	3	3	3	3	3	3	3	
		Spacing	5'3"	5'6"	5'0"	5'0"	5'0"	5'0"	5'0"	5'0"	5'0"	5'0"	5'0"	5'0"	5'0"	5'0"	5'0"	5'0"	5'0"
		Scantling and Sketch	19" x 36"	19" x 36"	18" x 36"	18" x 36"	18" x 36"	18" x 36"	18" x 36"	18" x 36"	18" x 36"	18" x 36"	18" x 36"	18" x 36"	18" x 36"	18" x 36"	18" x 36"	18" x 36"	18" x 36"
		Bearing Surface	3/2"	3/2"	3/2"	3/2"	3/2"	3/2"	3/2"	3/2"	3/2"	3/2"	3/2"	3/2"	3/2"	3/2"	3/2"	3/2"	3/2"
FORE AND AFTERS	{	Number																	
		Spacing																	
		Unsupported Lengths																	
		Scantling* and Sketch																	
HATCH COVERS	{	Material	W.P.	W.P.	W.P.	W.P.	W.P.	W.P.	W.P.	W.P.	W.P.	W.P.	W.P.	W.P.	W.P.	W.P.	W.P.	W.P.	
		Thickness	3"	3"	3"	3"	3"	3"	3"	3"	3"	3"	3"	3"	3"	3"	3"	3"	3"
		How fitted	F.A.	F.A.	F.A.	F.A.	F.A.	F.A.	F.A.	F.A.	F.A.	F.A.	F.A.	F.A.	F.A.	F.A.	F.A.	F.A.	
		Bearing Surface	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Spacing of Cleats	...	...	...	24"	24"	24"	24"	24"	16"	26"	26"	17"	24"	24"	18"	28"	24"		
Number of Tarpaulins	...	...	...	3	3	3	3	3	3	3	3	3	3	3	3	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?

yes.

yes.

2 ring-bolts on each side of each hatch

Particulars of fiddley, funnel and ventilator coamings:—

Tridley gratings are fitted with hinged steel covers. ✓
 E.R. skylight is steel. ✓
 Tridley & funnel vents good. ✓

Particulars of Flush Bunker Scuttles:—

None.

Particulars of Companionways :—

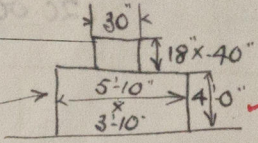
Bridge:- Entrance to midship accom ⁰²⁸ in steel house with hinged teals door operating both sides. Sill 21" ✓

Poof:- steel companion with hinged wood door operating both sides. Sill 15" ✓

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

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

Fore deck:-	2 @ 18" dia	led to hood	Coaming	18" x 38" ✓
Weeks	4 @ 30" dia	as per sketch		
	1 @ 10" "	led to tunnel	Coaming	27" x 30" ✓
Bridge:-	2 @ 17" "	" "	" "	28" x 38" ✓
	4 @ 22" "	" "	" "	30" x 40" ✓
Pool.	2 @ 18" "	" "	" "	27" x 38" ✓



The ventilators are in accordance with Rule requirements wood plugs & canvas covers. ✓

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

Weels:- 5@ 3-5" dia led to D.B. tanks x 36" to mouth.
Bridge:- 9@ 4" " " " " " " " " " "
Poop:- 2@ 3" " " " aft peak x 18" " "

Closing - wood plugs.

Particulars of Gangway Cargo and Coaling Ports :—

None.

Particulars of Scuppers and Sanitary Discharge Pipes —

W.C. discharge's lead 0 lb. 3. Storm valves fitted ✓
 Scupper from bridge T. deck to E.R. bilge fitted with cork on lower end —

Particulars of Side Scuttles:

Hinged dead lights fitted in Poop- bridge & foreck decks ✓

Particulars of Guard Rails:—

Poop & foreck decks:- 2 tier rails 3'6" high. Stans. sh. 5'6" - 6'0" apart. ✓
 Bridge:- 3 " " 3'7" " " 5'3" apart. ✓
 Wells - bulwarks 3'4" high. Stans. 6'x3 1/2'x46L sh. 6'0" apart. ✓

Particulars of Gangways, Lifelines, etc.:—

Wire life line set up with screw fitted on fore & aft wells. ✓
 (Note:- sockets are fitted on each side of deck with interchangeable stanchions & lines) ? sufficient

Particulars of Freeing Arrangements.

	Length of Bulwark	Height of Bulwark	Size of Freeing Ports	Number each side	Area each side	Rule area each side
After Well	98'-6" ✓	3'-4"	20'09" x 70' 22'56" x 70' 16'25" x 70'	1	41.12 ✓	19.70 ✓
Forward Well	103'-6" ✓	3'-4"	20'00" x 75' 29'75" x 75'	1	37.31 ✓	20.70 ✓
State position of each freeing port { After Well:— 12'0"-43'0", 76'0" from aft bridge bulkhead. } 1/4" above decks. (F. and A. position and height above deck edge) { Forward Well:— 16'0" & 58'0" " side house end. State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such. — Additional area where sheer is less than standard.						

Particulars of Superstructures, Trunks, Casings, Deckhouses.

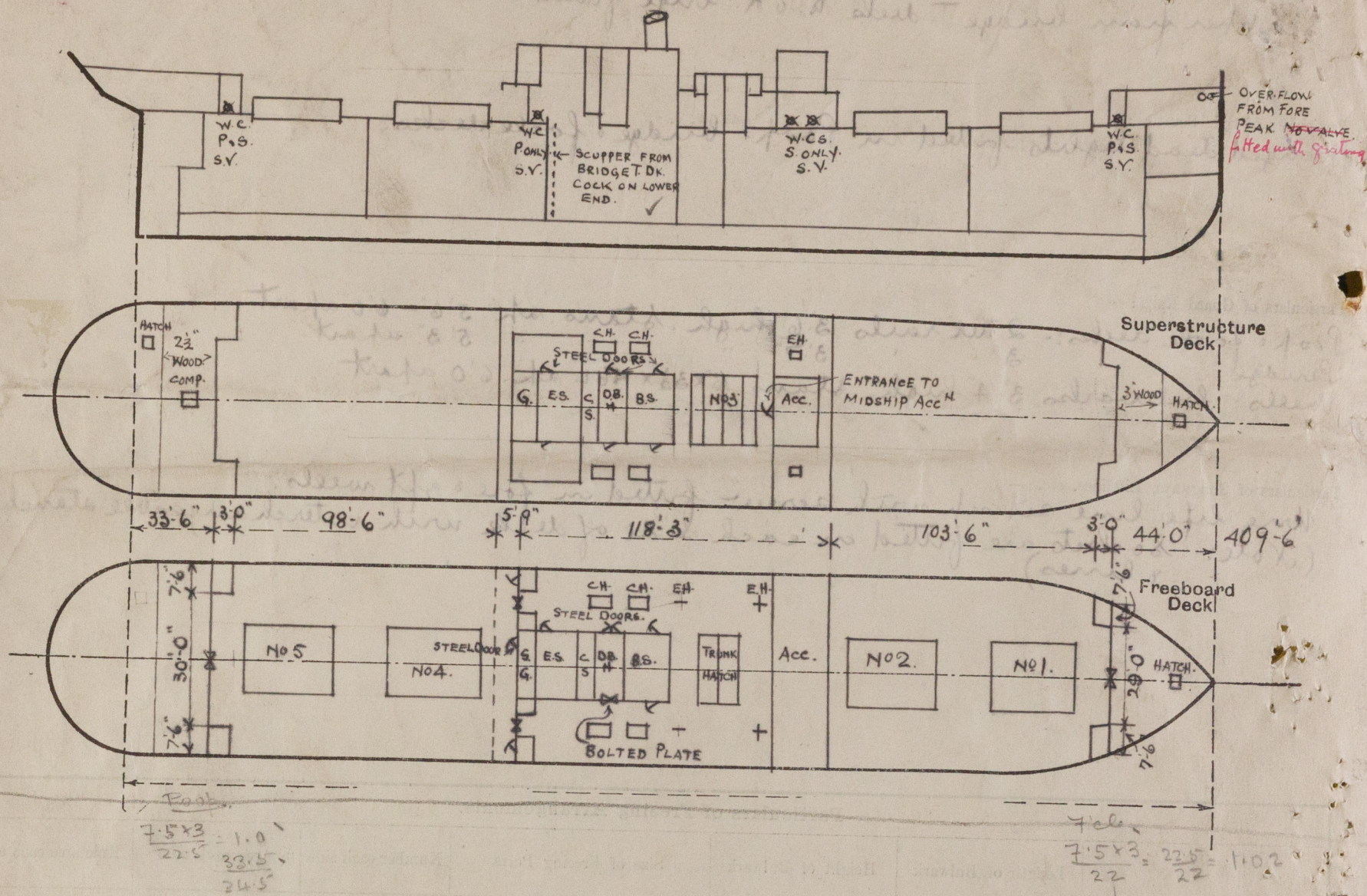
	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Poop Bulkhead	40" ✓	36" ✓	6"x3"x40BA	24" ✓	Lugs.	1) 4'6" x 36" 3) 4'5" x 23"	18" ✓	
Raised Quarter Deck Bulkhead ...	✓							
Bridge, After Bulkhead	—	30" ✓	3 1/2"x3"x32"	40" ✓	None.	2) 4'6" x 36" 3) 4'5" x 23"	18" ✓	
Bridge, Forward Bulkhead	44" ✓	40" ✓	9"x3 1/2"x43BA	30"-36" ✓	Lugs.	None	—	
Forecastle Bulkhead	36" ✓	32" ✓	3"x3"x38"	36" ✓	None.	1) 4'6" x 36" 2) 4'6" x 24"	18" ✓	
Trunk, Aft	✓							
Trunk, Forward	✓							
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...	✓							
Exposed Machinery Casings on Superstructure Decks	36" ✓	30" ✓	3 1/2"x3"x32"	33" ✓	None.	6) 4'5" x 23"	15"-19" ✓	8'0" ✓
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	42" ✓	32" ✓	3 1/2"x3"x32"	33" ✓	None.	2) 4'4" x 23" 1) 4'10" x 7'9"	18" ✓	
Deckhouses on Flush Deck Ships ...	✓							

Particulars of Closing Appliances (state if capable of being manipulated from both sides).

Poop Bulkhead	1.F.H.R.C. & 3" boards. 3 hinged steel doors - operating both sides. ✓
Raised Quarter Deck Bulkhead ...	✓
Bridge, After Bulkhead	2.F.H.R.C. with 3" boards. 3 hinged steel doors - operating both sides. ✓
Bridge, Forward Bulkhead	Intact. ✓
Forecastle Bulkhead	1.F.H.R.C. with 3" boards. 2 hinged steel doors - operating both sides. ✓
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...	✓
Exposed Machinery Casings on Superstructure Decks	6 hinged steel doors - operating both sides. ✓
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	2 hinged steel doors - operating both sides. 1 double hinged steel door - operating inside only (Closed with dogs) to D.B. house. ✓
Deckhouses on Flush Deck Ships ...	

N 486-0342 1/2

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:—

No Timber Assignment required.

Ex Draft.	Ex. Dish.	T.P.I.
23'-6"	11189	42-83
24'-0"	11446	43-00
24'-6"	11705	43-16
25'-0"	11964	43-16

Vessel examined in dry-dock.

Builder's name and yard number

Short Bros. Ltd.

Names of sister ships

Owners *Carlton S.S. Co. Ltd.*

Fee £ *13* : *12* : *0*

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