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Section 4

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Rpt. C.11

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having

*Shelter deck with tonnage opening*Port of Survey *London*

(Type of Superstructures.)

Date of Survey *29th April 20. 1932*

Ship's Name

Nationality and Port of Registry

Official Number

Gross Tonnage

Date of Build

*Carmarthen Coast.**British
Liverpool**147.175**961**1921-12*Name of Surveyor *Thomas E. Souders*

Moulded Dimensions: Length *211.75* Breadth *33.50* Depth *14'-6"*
 Moulded displacement at moulded draught = 85 per cent. of moulded depth. *1838* tons
 Coefficient of fineness for use with Tables *.736*

Particulars of Classification *+100A-1
Shelter deck with freeboard*

Depth for Freeboard (D)

Moulded depth ... *14.5*
 Stringer plate *60* ... *04*
 Sheathing on exposed deck
 $T \left(\frac{L-S}{L} \right) =$
 Depth for Freeboard (D) = *14.54*

Depth correction

(a) Where D is greater than Table depth
 $(D - \text{Table depth}) R =$
(14.54 - 14.115) 1629 = +.68
 (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) *33.5*
 Standard Round of Beam = $\frac{B \times 12}{50} =$ *8.04*
 Ship's Round of Beam = *8.50*
 Difference *.46*
 Restricted to
 Correction = $\frac{\text{Diff}}{4} \times (1 - \frac{S_1}{L}) = \frac{.46}{4} (1 - .987) =$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...	<i>20.875</i>	<i>20.875</i>	<i>4'-6"</i>		<i>20.875</i>
" overhang ...	<i>2-0</i>	<i>1-00</i>	<i>4'-6"</i>		<i>1-00</i>
R.Q.D. enclosed ...					
" overhang ...					
Bridge enclosed ...	<i>182.875</i>	<i>182.875</i>			<i>182.875</i>
" overhang aft ...	<i>182-102</i>		<i>4'-6"</i>		
" overhang forward ...					
Fore enclosed ...	<i>2-0</i>	<i>1-50</i>	<i>4'-6"</i>		<i>1-50</i>
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...	<i>4-0</i>	<i>2.75</i>	<i>4'-6"</i>		<i>2.75</i>
" " forward ...					
Total ...	<i>211.75</i>	<i>209.00</i>			<i>209.00</i>

Standard Height of Superstructure *6.00*" " R.Q.D. *27.175*Deduction for complete superstructure *27.175*Percentage covered $\frac{S}{L} =$ *100%*" " $\frac{S_1}{L} =$ *98.70*" " $\frac{E}{L} =$ *98.70*

Percentage 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 = *27.175 + 98.40 = -26.74*

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	<i>31.175</i>	1		<i>31.17</i>	<i>31</i>	<i>25.25</i>	1		<i>43.25</i>
$\frac{1}{2}$ L from A.P. ...	<i>13.87</i>	4		<i>55.48</i>	<i>13</i>	<i>18.44</i>	4		<i>77.00</i>
$\frac{2}{3}$ L " ...	<i>3.43</i>	2		<i>6.86</i>	<i>3</i>	<i>3.84</i>	2		<i>9.52</i>
Amidships ...		4					4		
$\frac{2}{3}$ L from F.P. ...	<i>6.86</i>	2		<i>13.72</i>	<i>7</i>	<i>6.60</i>	2		<i>17.26</i>
$\frac{1}{2}$ L " ...	<i>27.75</i>	4		<i>111.00</i>	<i>26.2</i>	<i>26.46</i>	4		<i>139.88</i>
F.P. ...	<i>62.35</i>	1		<i>62.35</i>	<i>60</i>	<i>60.50</i>	1		<i>78.50</i>
Total ...	<i>210.545</i>			<i>280.58</i>					<i>365.41</i>

Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{75-S}{2L} \right) = \frac{84.83}{18} \left(\frac{75-5}{2} \right) = -1.18$

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.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = *14.54*
 Summer freeboard = *.16*
 Moulded draught (d) = *14.38*

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = *3.59 = 3\frac{1}{2}*Addition for Winter North Atlantic Freeboard (if required) = *2"*

Deduction for Fresh Water.

Displacement in salt water at summer load water line

 $\Delta =$ *2215*

Tons per inch immersion at summer load water line

 $T =$ *14.39*Deduction = $\frac{\Delta}{40T}$ inches $=$ *3.85* $=$ *3\frac{3}{4}*

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

Depth Correction ...

Deduction for superstructures ...

Sheer correction ...

Round of Beam correction ...

Correction for Thickness of Deck amidships ...

Other corrections, scantlings, etc. ...

Summer Freeboard = *-1.09*

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 " " ...

9-MAY 1932

RECEIVED MARKING FORM

Lloyd's Register Foundation

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS										
Description of Hatchway			No 1 SH'D	No 2 SH'D	No 1 UR'D	No 2 UR'D	Lonnage	Bunker H on Bt. Dk.		
Dimensions of Hatchway			35'-4" x 12'	30' x 12'	35'-7" x 12'	30' x 12'	4' x 12'	4' x 10'		
COAMINGS	{	Height above Deck	33	33	9" BA	9" BA	12"	9" BA		
		Thickness	Sides	48	48	40	40	144	40	
			Ends	46	46	40	40	144	40	
		Stiffeners	7 x 3" BA	7 x 3" BA	-	-	-	-	-	
Brackets, Stays			-	-	-	-	-	-		
HATCH BEAMS	{	Number	4	6	4	6	/	/		
		Spacing	4'-6"	4'-4"	4'-6"	4'-4"				
		Scantling and Sketch	16" x 30" As No 1		13" x 40" As No 1					
		Bearing Surface	3 x 3 x 40 3 1/2		3 x 3 x 44 3 1/2					
FORE AND AFTERS	{	Number	/				/	/		
		Spacing								
		Unsupported Lengths								
		Scantling* and Sketch								
Bearing Surface			/				/			
HATCH COVERS	{	Material	P	Ashy		Ashy		P	P	
		Thickness	3" x 2 1/2"					2 1/2"	2 1/2"	
		How fitted	3" a					3" a	3" a	
		Bearing Surface	3"					3"	3"	
Spacing of Cleats			24"	24"	24"	24"	none	24"		
Spacing of Tarpaulins			3"	3	4 1/2	4 1/2	-	2		
* Are wood fore and afters steel shod at all bearing surfaces? <i>Yes</i>										
Are battens and wedges efficient and in good condition? <i>Yes</i>										
Are tarpaulins in good condition and in accordance with rule requirements? <i>Yes</i>										
Are lashings provided in accordance with rule requirements? <i>Fittings on Hatch stiffeners but no bars</i>										

Particulars of fiddley, funnel and ventilator coamings:—

Stokehold gratings covered by strong hinged steel covers
 Fiddley vents &c in efficient condition
 Engine Skylights of steel strongly constructed.

Particulars of Flush Bunker Scuttles:—

Strongly constructed cast iron scuttles P&S, with gratings, & fitted with bayonet joints, on Shelter deck under bugge.

Particulars of Companionways:—

None.

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

On Deck:-
 5 at 6" x 36" high to CHL & Acc^m.
 2 at 6" x 36" " (Swan necks) to Acc^m.
 2 at 8" x 36" " " " "
 2 at 3" x 7" " " " "
 1 at 6" x 9" " " " "

On Shelter Deck:-

1 P&S 16" x 36" high to forehold
 1 P 16" x 3" " secured to Bt. front.
 1 at 8" x 36" high to aft hold
 3 at 15" x 36" " " " " between decks
 1 at 6" x 11" " to aft store (swan necks)
 1 at 6" x 11" " " " " "

Ventilators are fitted with wood plugs & canvas covers. (~~on Swan neck vents~~)

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

Forehold:-
 1 at 3" x 24" high to 4. Peak }
 1 at 2" x 24" " " No 1 DB }

Efficient closing appliances are provided

On Shelter Deck:-
 2 at 2" x 24" high to DB }
 2 at 2" x 16" " " DB }
 4 at 3" x 24" high to DB }
 1 at 3" x 18" " " A.P. }

Particulars of Gangway Cargo and Coaling Ports:—

1 P&S in Forward Tween deck:- Water tight Cargo doors between Shelter & Upper decks, efficiently constructed.

Particulars of Scuppers and Sanitary Discharge Pipes —

3 P.S. in Shelter tween decks having gunmetal storm valves at ships side discharging near the L.W.L. (ditto) } These scuppers are blanked off at deck closed permanently by riveted spirit plates.
 1 P.S. in Lonnage Space ditto }
 Bath discharges in Bridge & Poop house fitted with plug & open end storm valve at shell & flap. } All discharge have "File fitted with storm valve." above upper deck

Particulars of Side Scuttles:

All side scuttles strongly constructed and fitted with fixed deadlights
 4/ The freeing ports in the Lonnage well have been permanently closed by riveted plates, the original scupper pipe in the Lonnage well replaced by a screw down non-return valve 5" dia. capable of being operated from the shell side

Particulars of Guard Rails:—

Guard Rails on Forecastle 3'-0" high, 3 rods & stanchions 6' apart
 " Shelter D. Ford 3'-6" " 3 " " 10' " with stays
 " " Aft. 3'-6" " 3 " " 4'-6" "

Particulars of Gangways, Lifelines, etc.:—

None fitted

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 (Lonnage)	8'-0"	4'-6"	3' x 18"	1	45	✓
Forward Well ...	—	—	—	—	—	—

State position of each freeing port ... } After Well:— Central ; 12" ✓
 (F. and A. position and height above deck edge) } Forward Well:— —

State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:— Hinged plate cover. ✓

Additional area where sheer is less than standard. —

Particulars of Superstructures, Trunks, Casings, Deckhouses.

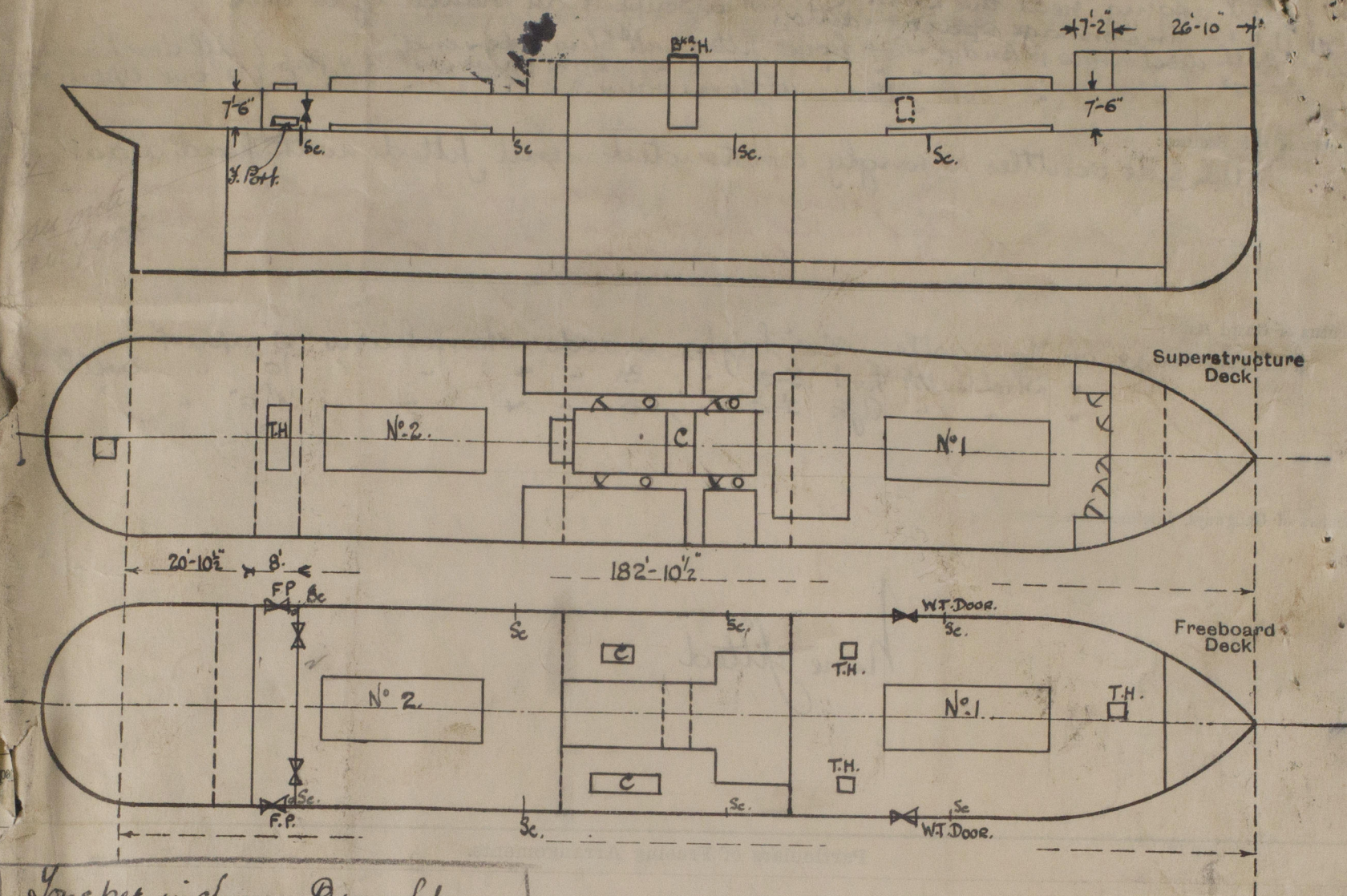
	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Poop Bulkhead ...	Vert. Pl.	.30	4 1/2 x 3 x .30	30"	Riveted to deck bar.	—	—	7'-6"
Raised Quarter Deck Bulkhead ...								
Bridge, After Bulkhead ...	" "	.30	4 1/2 x 3 x .30	24"	none	2 @ 4'-6" x 36"	18"	7'-6"
Bridge, Forward Bulkhead ...								
Forecastle Bulkhead ...	36" x 30	.30	4 x 3 x .34	—	none.	2 @ 5' x 2' 3 @ 4'9" x 2'	18"	7'-3"
Trunk, Aft ...								
Trunk, Forward ...								
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...	24" x .30	.30	3 x 3 x .34	Continuous	—	none.	—	7'-6"
Exposed Machinery Casings on Super-structure Decks ...	36" x 30	.25	3 x 3 x .34	30"	—	2 P.S. @ 4'-6" x 22"	18"	7'-3"
Machinery Casings within Superstructures not fitted with Class I Closing Appliances ...								
Deckhouses on Flush Deck Ships ...								

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

Poop Bulkhead ...	— no openings
Raised Quarter Deck Bulkhead ...	
Bridge, After Bulkhead ...	2 @ 30" steel plates secured by hook bolts 12" apart to channel bar frames.
Bridge, Forward Bulkhead ...	—
Forecastle Bulkhead ...	2 Hinged steel doors operated from both sides 3 " " " " " " " "
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...	—
Exposed Machinery Casings on Super-structure Decks ...	Hinged steel doors operated from both sides.
Machinery Casings within Superstructures not fitted with Class I Closing Appliances ...	—
Deckhouses on Flush Deck Ships ...	—

Cammarthen Coast

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:—



Long per inch	Draught
14.0 ft	14.38
13.0	14.25
12.0	14.11

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

Small Hatches.

Upper Deck 40' 3' 2' x 2' x 9" high
Aft. 2' 2' x 2' x 9"

All fitted with wood covers, clips & battens. *and one tarpaulin*

Shelter B^d Aft. 2' 3' x 2' 9" x 18"

" " For^d (in 4' cle) 2' 6" x 3' 6" x 9" high

Bunker Hatch on W^d B^d

8' 5' x 2' x 9" high

Std. 12' x 2' x 9"

and one tarpaulin

This survey has been held while the vessel was in Dry Dock.

OK IT

Builder's name and yard number Androssan B.B. & Shipbuilding Co. No. 316.

Names of sister ships

Owners Coast Lines Ltd.

Fee 6 : 16 : 0

Received by me

2/3/32

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