

# DISCLOSED SECTION

## Lloyd's Register of Shipping.

### SURVEYS FOR FREEBOARD.

Index. No. 25949  
(For London Office only.)

25949

No. 435

Computation of Freeboard for Steamer, ~~Sailing Ship, Tanker~~  
having POOP, BRIDGE & FORECASTLE.

(Type of Superstructures.) new m/f T 11/1/49

Port of Survey CALCUTTA

Date of Survey 1.6.32.

Name of Surveyor J. Sesbek

Particulars of Classification +100A.1.

Ship's Name S.S. WARRIALDA Nationality and Port of Registry BRITISH - LONDON. Official Number 142587. Gross Tonnage 3149 Date of Build 1918-7.

Moulded Dimensions: Length 331 Breadth 46.5 Depth 25.5

Moulded displacement at moulded draught = 85 per cent. of moulded depth 7251 tons

Coefficient of fineness for use with Tables .761

ho 3 - 9.30

Depth for Freeboard (D)	Depth correction	Round of Beam correction
Moulded depth ... .. <u>25.50</u>	(a) Where D is greater than Table depth (D - Table depth) R = <u>(25.50 - 22.066) 2.55 = 8.854</u>	Moulded Breadth (B) <u>46.5</u>
Stringer plate ... .. <u>-0.38</u>	(b) Where D is less than Table depth (if allowed) (Table depth - D) R = <u>✓</u>	Standard Round of Beam = $\frac{B \times 12}{50} = 11.16$
Sheathing on exposed deck $T \left( \frac{L-S}{L} \right) =$ <u>✓</u>	If restricted by superstructures <u>✓</u>	Ship's Round of Beam = <u>11.75</u>
Depth for Freeboard (D) = <u>25.538</u>		Difference <u>.59</u>
		Restricted to <u>.08</u>
		Correction = $\frac{\text{Diff}^e}{4} \times \left( 1 - \frac{S_1}{L} \right) = .077$

## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)	
Poop enclosed ... ..	<u>32.92</u>	<u>32.92</u>	<u>4.5</u>		<u>32.92</u>	Standard Height of Superstructure <u>6.9 3/4</u>
" overhang ... ..						" " R.Q.D. <u>✓</u>
R.Q.D. enclosed						Deduction for complete superstructure <u>37.4</u>
" overhang						Percentage covered $\frac{S}{L} = .4824$
Bridge enclosed ... ..	<u>98.00</u>	<u>98.00</u>	<u>4.5</u>		<u>98.00</u>	" " $\frac{S_1}{L} = .4824$
" overhang aft ... ..						" " $\frac{E}{L} = .4824$
" overhang forward						Percentage from Table, Line A. (corrected for absence of forecastle (if required))
F'cle enclosed ... ..	<u>28.75</u>	<u>28.75</u>	<u>4.5</u>		<u>28.75</u>	Percentage from Table, Line B. (corrected for absence of forecastle (if required)) <u>34.47%</u>
" overhang ... ..						Interpolation for bridge less than 2L (if required)
Trunk aft ... ..						Deduction = <u>12.89</u> $37.4 \times 34.47\% = -12.91$
" forward ... ..						
Tonnage opening aft ... ..						
" " forward						
Total ... ..	<u>159.67</u>	<u>159.67</u>			<u>159.67</u>	

## SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ... ..	<u>43.1</u>	1		<u>43.1</u>	<u>48</u>	<u>51.00</u>	1		<u>48</u>
1/4 L from A.P. ... ..	<u>19.18</u>	4		<u>76.72</u>	<u>20</u>	<u>22.12</u>	4		<u>80</u>
2/4 L " ... ..	<u>9.74</u>	2		<u>19.48</u>	<u>5</u>	<u>5.53</u>	2		<u>10</u>
Amidships ... ..	<u>0</u>	4		<u>0</u>	<u>0</u>	<u>0</u>	4		<u>0</u>
3/4 L from F.P. ... ..	<u>9.48</u>	2		<u>18.96</u>	<u>10.45</u>	<u>11.06</u>	2		<u>21.5</u>
1/4 L " ... ..	<u>38.36</u>	4		<u>153.44</u>	<u>44.25</u>	<u>44.24</u>	4		<u>176.96</u>
F.P. ... ..	<u>86.20</u>	1		<u>86.20</u>	<u>102</u>	<u>102.00</u>	1		<u>102</u>
Total ... ..				<u>389.90</u>					<u>438.5</u>

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) = \frac{451.62}{18} \left( .75 - \frac{24.12}{144} \right) = 1.43$

If limited on account of midship superstructure.

Mean actual sheer aft = Excess 1.08

Mean standard sheer aft = Excess 1.16

Mean actual sheer forward = Excess 1.16

Mean standard sheer forward = Excess 1.16

Length of enclosed superstructure forward of amidships = .235

" " aft of " = .247

If limited to maximum allowance of 1 1/2 ins. per 100 ft.

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = 25.54

Summer freeboard = 4.03

Moulded draught (d) = 21.51

Deduction for Tropical freeboard and addition for

Winter freeboard =  $\frac{d}{4}$  inches = 5.38 = 5 1/2

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

$=$

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient  $\frac{.761 + .68}{1.36} = \frac{1.441}{1.36}$

	+	-
Depth Correction ... ..	<u>8.83</u>	
Deduction for superstructures ... ..		<u>12.91</u>
Sheer correction ... ..		<u>1.80</u>
Round of Beam correction ... ..		<u>.08</u>
Correction for Thickness of Deck amidships ... ..		
Other corrections, scantlings, etc. ... ..		
	<u>8.83</u>	<u>14.79</u>

Summer Freeboard = 48.04 .36

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 " " ... ..	<u>3' 6 3/4</u>
Winter " " ... ..	<u>4' 5 3/4</u>
Winter North Atlantic " " ... ..	

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## PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS										
Description of Hatchway	...	...	No. 1.	No. 2.	No. 3.	No. 4.	No. 5.			
Dimensions of Hatchway	...	...	26-6 23-0	26-6 23-0	16-3 18-0	26-6 23-0	26-6 23-0			
COAMINGS	{	Height above Deck	30.	30.	8 x 3 = 1/2 B.A.	30.	30.			
		Thickness { Sides	44.		44.					
		{ Ends	44.	- do -	44.	- do -				
		Stiffeners	9 x 3 x 7/16 B.A.		9 x 3 x 7/16 B.A.					
Brackets, Stays		3 x 3 x 3/8 L		3 x 3 x 3/8 L						
HATCH BEAMS	{	Number	5.	5.	3.	5.	5.			
		Spacing	4'-0"	4'-0"	4'-6"	4'-0"	4'-0"			
		Scantling and Sketch	3 1/2 x 3 1/2 x .44 angles 21" x .38	- do -	3 1/2 x 3 1/2 x .44 angles 18 1/2" x .32	3 1/2 x 3 1/2 x .44 angles 21" x .38	- do -			
		Bearing Surface	3 1/2" x 1 1/2"	3 1/2" x 1 1/2"	3 1/2" x 1 1/2"	3 1/2" x 1 1/2"	3 1/2" x 1 1/2"			
FORE AND AFTERS	{	Number								
		Spacing								
		Unsupported Lengths								
		Scantling* and Sketch								
Bearing Surface										
HATCH COVERS	{	Material	PINE							
		Thickness	2 1/2.	- do -	- do -	- do -	- do -			
		How fitted	angles							
		Bearing Surface	80.5 sq. ft.	80.5 sq. ft.	54.5 sq. ft.	80.5 sq. ft.	80.5 sq. ft.			
Spacing of Cleats										
Number of Tarpaulins										
*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?										

Particulars of fiddley, funnel and ventilator coamings :

Single tunnel - fiddled fitted with gratings - lined steel storm covers also  
protected by 1/4 inch steel casing 4'-9" high  
2 - 30 inch diameter vent pipes to stockhold - casing 5'-0" high  
" - 16 " " " " " 3'-0" "  
1 - 24 " " " " " 3'-0" "

Particulars of Flush Bunker Scuttles:—

1 7 1

Particulars of Companionways :—

- 712 -

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

16 inch diameter penklats to holes - height of coaming 3'-0" - .25 plating.  
wood plugs & canvas covers provided

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

2 1/2" inch dia Swan-neck H.L. pipes - 1'-9" high.


wood plugs provided

Particulars of Gangway Cargo and Coaling Ports :—

— Hil —



Particulars of Scuppers and Sanitary Discharge Pipes —

9 - 6" x 3"  scuppers on each side of vessel - short steel bends passing through holes -  
All sanitary discharges fitted with storm valves -

Particulars of Side Scuttles:

— Nil —

Particulars of Guard Rails:—

Guard rails on poop & fore-castle only - plank rail 3'-6" high -

Particulars of Gangways, Lifelines, etc.:—

— Nil —

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 ... ..	86.5'	3'-9"	3'-6" x 1'-9"	3.	18.375	17.4 <sup>3</sup>
Forward Well ... ..	87'	3'-9"	3'-6" x 1'-9"	3.	18.375	17.4
State position of each freeing port ... .. } After Well:— Poop (F. and A. position and height above deck edge) } Forward Well:— F.C.L.E. 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.						
			18'-8"      29'-0"      36'-0"      14'-3" 16'-0"      28'-6"      29'-6"      13'-0"	BRIDGE BRIDGE		
				4 BARS — 1'-1" ABOVE DECK —		

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 ... ..	3" x 3" x 3/8"	3/8"	6" x 3 1/2" x 3/8"	2'-3"	NIL	2'-0" x 4'-0"	18"	9'-6"
Raised Quarter Deck Bulkhead ...								
Bridge, After Bulkhead ... ..	3" x 3" x 3/8"	1/4"	3" x 3" x 3/8"	2'-6"	NIL	2'-3" x 4'-0"	2'-0"	9'-6"
Bridge, Forward Bulkhead ... ..	3" x 3" x 3/8"	3/8"	8" x 3" x 1/16 B.R.	2'-4"	Brackets 1'-0" x 1'-0" x 3/8"	2'-0" x 4'-6"	18"	9'-6"
Fore-castle Bulkhead ... ..	3" x 3" x 3/8"	1/4"	3" x 3" x 3/8"	2'-9"	NIL	3'-6" x 4'-0"	2'-0"	9'-6"
Trunk, Aft ... ..								
Trunk, Forward ... ..								
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...								
Exposed Machinery Casings on Super-structure Decks ... ..								
Machinery Casings within Superstructures not fitted with Class I Closing Appliances ... ..	18"	3/8"	3 1/2" x 3" x 3/8"	2'-4"	NIL	2'-0" x 4'-6"	18"	9'-6"
Deckhouses on Flush Deck Ships ...								

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

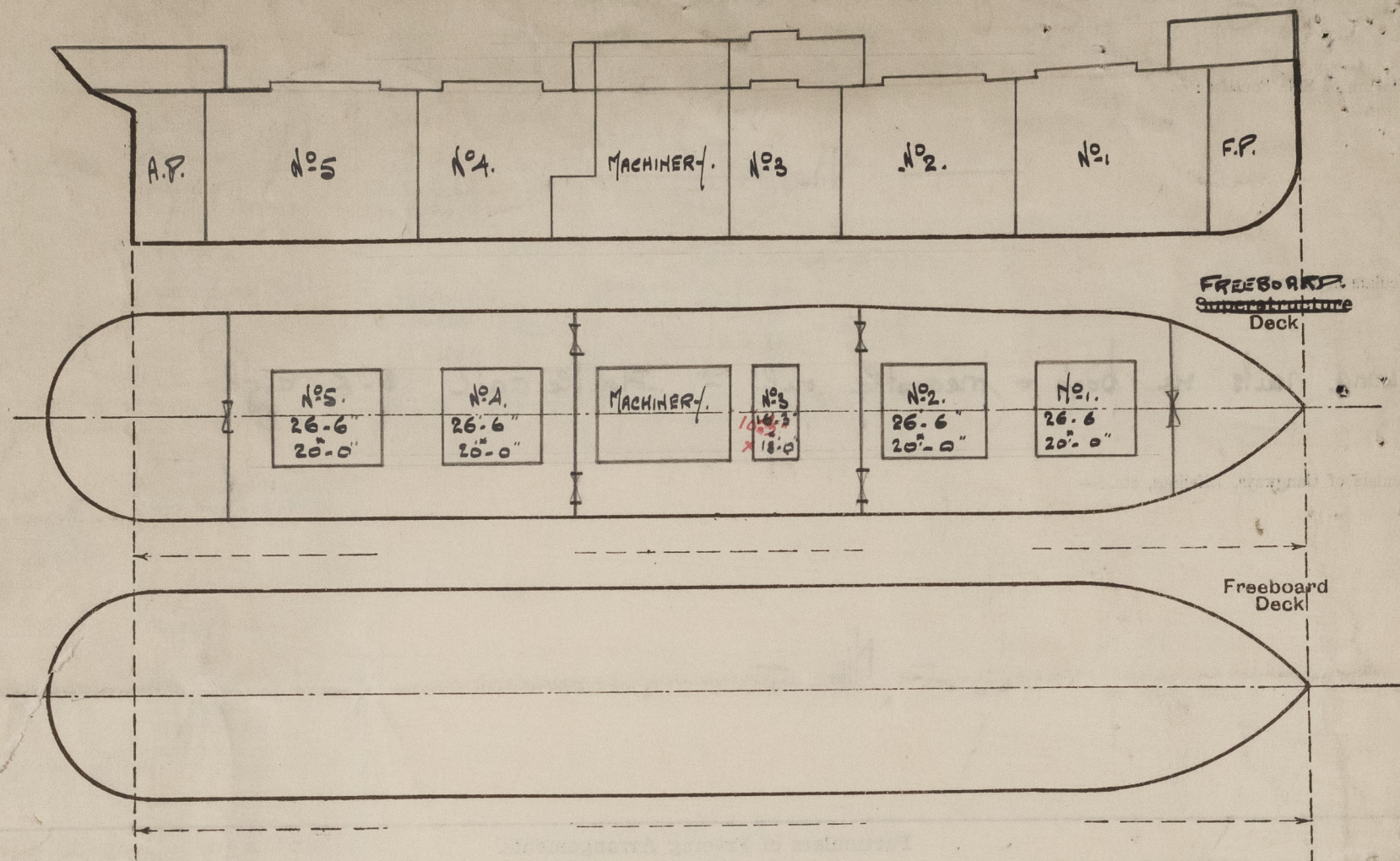
Poop Bulkhead ... ..	Poop Bulkhead:— One hinged steel door on centre line to crew quarters
Raised Quarter Deck Bulkhead ...	secured by dogs operated from both sides -
Bridge, After Bulkhead ... ..	Bridge After Bulkhead:— Two louver doors 2 1/2" storm boards full height -
Bridge, Forward Bulkhead ... ..	Bridge Forward Bulkhead:— Two hinged steel doors secured by dogs operated from both sides -
Fore-castle Bulkhead ... ..	Fore-castle Bulkhead:— One opening on centre line - closed by hinged teakwood door -
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...	
Exposed Machinery Casings on Super-structure Decks ... ..	
Machinery Casings within Superstructures not fitted with Class I Closing Appliances ... ..	E.R. Casings:— Two entrances on bridge deck - two in bridge space fitted with hinged steel doors - steel skylight hand operated -
Deckhouses on Flush Deck Ships ...	

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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:



Freeboard deck unsheathed -

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

Particulars taken when vessel was in dry dock for condition survey -  
(Full particulars not given - figures available not accurate - see table 11.5.32)

Builder's name and yard number

Names of sister ships

Owners

British India Steam Navigation Co

Fee

Supers 265/-

Received by me

J. F. Fickett



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