

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

B.T. COPY

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Index. No. 32910
(For London Office only.)

Computation of Freeboard for Steamer, Sailing Ship, Tanker

Complete superstructure with Ponnage Opening

Port of Survey London

(Type of Superstructures.)

Date of Survey May 26.30.31 3 June 32

Ship's Name

Nationality and Port of Registry

Official Number

Gross Tonnage

Date of Build

ALMA

British
London

160615

7983
8400

1928

Name of Surveyor Charles W. Hunter

Moulded Dimensions: Length 475.3

Breadth 63.0

Depth 34.9

8149

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

18102 tons

Efficient of fineness for use with Tables

.716

Particulars of Classification +100A1 with 8/16"

Depth for Freeboard (D)

Depth correction

Round of Beam correction

Moulded Breadth (B) 63.0

Standard Round of Beam = $\frac{B \times 12}{50} = 15.12$

Ship's Round of Beam = 15.34

Difference 63

Restricted to

Correction = $\frac{\text{Diff}}{4} \times (1 - \frac{S_1}{L}) = \frac{63}{4} \times 0.0058 = \text{NIL}$

Depth for Freeboard (D) = 34.79

(a) Where D is greater than Table depth
(D - Table depth) R =

$(34.79 - 31.69) \times 3.0 = 9.30$

(b) Where D is less than Table depth (if allowed)
(Table depth - D) R =

If restricted by superstructures

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Pop enclosed ...	24.28	24.28	8'-7"	-	24.28
„ overhang ...			+ 3" sh.		
R.Q.D. enclosed ...					
„ overhang ...					
Bridge enclosed ...					
„ overhang aft ...					
„ overhang forward ...	445.52	445.52	8'-7"	-	445.52
„ overhang ...			+ 3" sh.		
Trunk aft ...					
„ forward ...					
Tonnage opening aft ...	5.50	2.75	8'-7"	-	2.75
„ forward ...					
Total ...	475.30	472.55			472.55

Standard Height of Superstructure 7'-6"

R.Q.D.

Deduction for complete superstructure 42.00

Percentage covered $\frac{S}{L} = 100$

$\frac{S_1}{L} = 99.42$

$\frac{E}{L} = 99.42$

Percentage from Table, Line A.
(corrected for absence of forecastle (if required)) 99.28

Percentage from Table, Line B.
(corrected for absence of forecastle (if required))

Interpolation for bridge less than 2L (if required)

Deduction = $42.00 \times 99.28 = 41.70$

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
from A.P. ...	57.53	1		57.53	31.25	55.50	1		55.50
„	25.60	4		102.40	24.7	24.69	4		98.76
„	6.33	2		12.66	6.15	6.17	2		12.34
amidships ...		4					4		
from F.P. ...	12.66	2		25.32	11.8	11.85	2		23.70
„	51.20	4		204.80	47.4	47.40	4		189.60
„	115.06	1		115.06	107.5	107.50	1		107.50
Total ...				517.77					585.56

Correction = $\frac{\text{Difference between sums of products}}{18} = \frac{67.79}{18} = 3.77$

If limited on account of midship superstructure.

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

Deduction for Tropical Freeboard.
Deduction for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = 34.79

Summer freeboard = 5.33

Moulded draught (d) = 29.46

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = 7.36 = 7 1/4"

Deduction for Winter North Atlantic Freeboard (if required) = NIL

Deduction for Fresh Water.

Displacement in salt water at summer load water line

$\Delta = 18202$

Tons per inch immersion at summer load water line

T = 60.4

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

= 7.53

7 1/2"

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient $\frac{716 + 680}{1.36} = 1.396$

1.36

Depth Correction ... 9.30

Deduction for superstructures ... 41.70

Sheer correction ... 94.3

Round of Beam correction ...

Correction for Thickness of Deck amidships ...

Other corrections, scantlings, etc. ...

9.30 42.64 - 33.34

Summer Freeboard = 64.05

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

Tropical Fresh Water Line above Centre of Disc ...	14 3/4"
Fresh Water Line ...	7 1/2"
Tropical Line ...	7 1/4"
Winter Line below ...	7 1/4"
Winter North Atlantic Line ...	7 1/4"

Tropical Fresh Water Freeboard ...	5' - 4"
Fresh Water ...	4' - 1 1/4"
Tropical ...	4' - 28 1/2"
Winter ...	4' - 8 1/4"
Winter North Atlantic ...	5' - 11 1/4"

RECEIVED 12 AUG 1937

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PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS											
Description of Hatchway			N°1	N°2	N°3	N°4	N°5	N°1	N°2	N°3	N°4
Dimensions of Hatchway			29'3" x 20'	30'3" x 20'	24'9" x 20'	30'3" x 20'	24'9" x 20'	29'3" x 20'	30'3" x 20'	24'9" x 20'	30'3" x 20'
COAMINGS	Height above Deck	...	30"	30"	30"	30"	30"	29"	29"	29"	29"
	Thickness	Sides	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"
	Thickness	Ends	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"
	Stiffeners	...	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"
Brackets, Stays			Bull angle stiff					NONE			
HATCH BEAMS	Number	...	5	5	4	5	4	5	5	4	5
	Spacing	...	4'11"	5'	5'	5'	5'	4'11"	5'	4'	5'
	Scantling and Sketch	...	4x3x44	4x3x44	4x3x44	4x3x44	4x3x44	4x3x5	4x3x5	4x3x44	4x3x5
	Bearing Surface	...	18x36	13x34	13x34	13x34	13x34	13x34	13x34	18x36	13x34
FORE AND AFTERS	Number	...	3	3	3	3	3	3	3	3	3
	Spacing	...	4'11"	5'	5'	5'	5'	4'11"	5'	4'	5'
	Unsupported Lengths	...	18x36	13x34	13x34	13x34	13x34	13x34	13x34	18x36	13x34
	Scantling* and Sketch	...	4x3x44	4x3x44	4x3x44	4x3x44	4x3x44	4x3x5	4x3x5	4x3x44	4x3x5
Bearing Surface			18x36	13x34	13x34	13x34	13x34	13x34	13x34	18x36	13x34
HATCH COVERS	Material	...	White Pine	White Pine	White Pine	White Pine	White Pine	White Pine	White Pine	White Pine	White Pine
	Thickness	...	2 3/4" to 3"	2 3/4" to 3"	2 3/4" to 3"	2 3/4" to 3"	2 3/4" to 3"	2 3/4" to 3"	2 3/4" to 3"	2 3/4" to 3"	2 3/4" to 3"
	How fitted	...	7 in. 3/4" aft	7 in. 3/4" aft	7 in. 3/4" aft	7 in. 3/4" aft	7 in. 3/4" aft	7 in. 3/4" aft	7 in. 3/4" aft	7 in. 3/4" aft	7 in. 3/4" aft
	Bearing Surface	...	18x36	13x34	13x34	13x34	13x34	13x34	13x34	18x36	13x34
Spacing of Cleats			24"	24"	24"	24"	24"	24"	24"	24"	24"
Number of Tarpaulins			2	2	2	2	2	2	2	2	2
*Are wood fore and afters steel shod at all bearing surfaces?			✓								
Are battens and wedges efficient and in good condition?			4/15								
Are tarpaulins in good condition and in accordance with rule requirements?			4/15								
Are lashings provided in accordance with rule requirements?			4/15								

Particulars of fiddle, funnel and ventilator coamings:—

Fiddle Vents in efficient condition
Engine skylight of steel efficiently constructed
No overhead gratings this being a Motor vessel.

Particulars of Flush Bunker Scuttles:—

None.

Particulars of Companionways:—

Entrance to Forepeak in topgallant forecabin steel door 12" sill
Entrance to Hold at aft end of topgallant forecabin steel door 22" sill
Entrance to Foremast house & similar door at aft end of main mast house steel door 18" sill
Entrance to holds on superstructure deck aft end of foremast house steel door 18" sill
Entrance to tunnel escape fire end of poop house steel door 16" sill
Entrance to Steering gear on poop house steel door 16" sill
Entrance to 6 ft. in Midship house on superstructure deck steel door 16" sill
Entrance to 6 ft. in Midship house on superstructure deck steel door 16" sill

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

One vent 12" x 7" x 5" on topgallant forecabin to Lower Peak
Two vents 20" x 36" x 4" on topgallant forecabin to Hold
Fourteen vents 20" x 36" x 4" on superstructure decks to Hold
Nine vents 9" x 15" dia x 36" x 34 on superstructure deck to Cofferdam deck head & store rooms
Five vents 10" x 15" dia x 36" x 34 on superstructure deck to foremast house (mushroom covers)
Two vents 20" x 36" x 4" these two vents are aft of bridge house on superstructure deck 12" high & well supported

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

Fifty air pipes 2 1/2 to 4" dia 16 to 22 high from DB, deep tank, cofferdam, etc.
One air pipe on topgallant forecabin 14" x 4" dia to forepeak.

All air pipes closed with canvas covers

Particulars of Gangway Cargo and Coaling Ports:—

Three W.T. meat ports each side between Foreboard deck and 2" deck 26" x 24" efficiently constructed.



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Port Alma

Particulars of Scuppers and Sanitary Discharge Pipes:—

Eight scuppers each side from Superstructure deck discharging above deck
 Four scuppers each side from Foreboard deck Wood plugs at inner end No storm valves fitted
 All both sanitary discharge pipes fitted with storm valves at ship's side and efficient traps
 at inner end.

Particulars of Side Scuttles:—

All side scuttles of substantial construction & fitted with hinged dead lights —

Particulars of Guard Rails:—

Guard rails on Topgallant forecastle deck 3'9" high 3 bars & stanchions spaced 5' apart.
 Guard rails on forward & after ends on superstructure decks 3'9" high 4 bars & stanchions
 spaced 5' apart.
 Steel bulwarks on superstructure deck amidships 3'9" high efficiently constructed
 and supported.

Particulars of Gangways, Lifelines, etc.:—

None.

Particulars of Freeing Arrangements.

	Length of Bulwark	Height of Bulwark	Size of Freeing Ports	Number each side	Area each side	Rule area each side
Well ... <i>Lovage Opening</i>			27" x 12"	One	2.25 sq ft.	
Well ...						

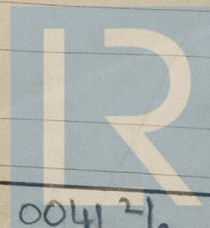
Position of each freeing port ... } After Well:— *For end of Lovage opening height above deck 11"*
 A. position and height above deck edge) } Forward Well:—
 Whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:— *Steel hinged shutters no bars.*
 Local area 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
Bulkhead ...	✓	.25	angles 4x3x3	36"	None	5'x4'	14"	8'6"
Quarter Deck Bulkhead ...								
After Bulkhead ...	✓	.25	4x3x3	36"	None	5'x4'	14"	8'6"
Forward Bulkhead ...								
Bulkhead ...								
ft ...								
Forward Machinery Casings on Free- or Raised Quarter Decks ...								
Machinery Casings on Super- structure Decks ...								
Casings within Superstruc- ture not fitted with Class I Closing devices ...	✓	.3	4x3x3	3'9"	None	None	None	8'6"
Casings on Flush Deck Ships ...								

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

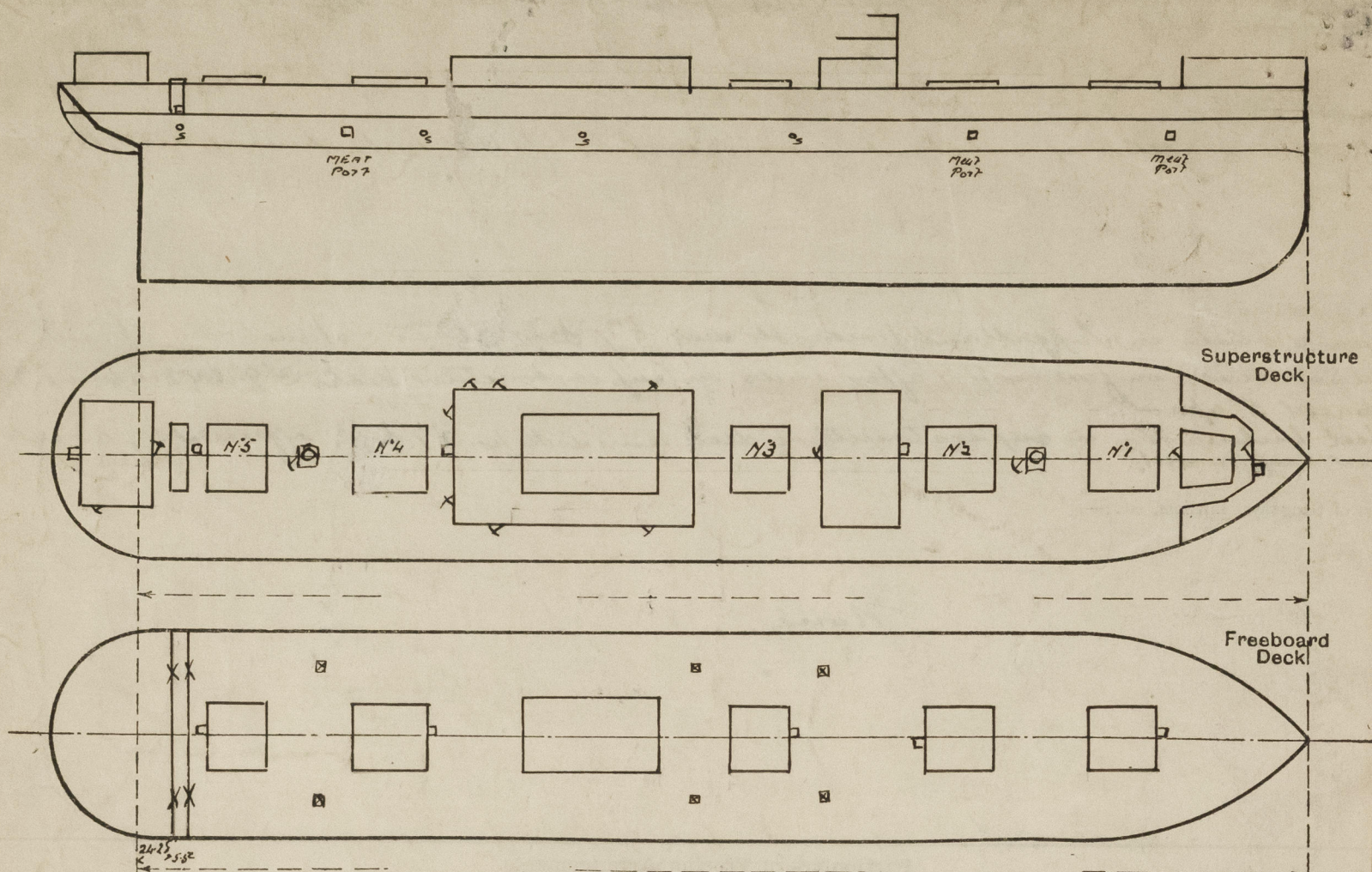
Bulkhead ...	Weather boards in riveted channels full height of opening
Quarter Deck Bulkhead ...	
After Bulkhead ...	Weather boards in riveted channels full height of opening
Forward Bulkhead ...	
Bulkhead ...	
Machinery Casings on Free- or Raised Quarter Decks ...	
Machinery Casings on Super- structure Decks ...	
Casings within Superstruc- ture not fitted with Class I Closing devices ...	No openings
Casings 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 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 steel, no sheathing.

Vessel examined afloat & in dry dock, survey confined to advancement of SB N:1 and Freeboard. (The vessel is now under survey at this Port and the greater part of the The vessel trades between the United Kingdom & Australia. will be carried out.)

State any special features in the construction of the ship: *Small Hatchways*

	POSITION	No.	COAMING	BATTENING DOWN ARRANGEMENTS
SUPERSTRUCTURE DECK	To Forepeak 3'x3'	1	24" x 36"	Wood covers
	Aft of N:2 28" x 35"	1	24" x 36"	Wood covers cleats battens & tarpaulins
	To of N:4 28" x 35"	1	24" x 36"	do do do do do
	Aft of N:5 28" x 21"	1	24" x 36"	do do do do do
	Aft of Post house 3'1" x 3'10"	1	25" x 5"	Steel W.T. cover hinged clamp fastened.
	TONNAGE OPENING	1	5'5" x 20" 9" BA	Whiteline 3" thick F1011, Gun tarpaulins
FREEBOARD DECK	To of N:1 2'10" x 4'2"	1	9" BA -	Wood covers cleats battens and tarpaulins
	Aft of N:2 2'10" x 4'2"	1	9" BA -	do do do do do do
	To of N:3 2'6" x 3'	1	9" BA -	do do do do do do
	To of N:4 2'10" x 4'2"	1	9" BA -	do do do do do do
	Aft of N:5 2' x 3'	1	9" BA -	do do do do do do
	To of N:3 26" x 24"	2	9" BA -	Steel W.T. cover hinged clamp fastened.
	Aft of N:3 26" x 24"	2	9" BA -	do do do do do do
	To of N:5 26" x 24"	2	9" BA -	do do do do do do

Builder's name and yard number *Swan Hunter & Wigham Richardson Yd. N:1341.*

Names of sister ships *Port Fairy*

Owners *Commonwealth & Dominion Line Ltd.*

Fee £ *15 : 6 : 0* Received by me *1/3/32*

29-5 1/2 ✓
13 1/4 ✓

29-7 1/4 BK ✓

18489

4 3/4 x 60.5

18202



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