

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Index. No. ~~14650~~
(For London Office only.)

14670.

20 MAY 1932

Computation of Freeboard for Steamer, Sailing Ship, Tanker
having Forester, Poop & Long HousePort of Survey Southampton

(Type of Superstructures.)

Date of Survey 19.5.32

Ship's Name

Nationality and Port of Registry

Official Number

Gross Tonnage

Date of Build

ARMADALE CASTLEBritish London118350129731903-11Name of Surveyor G. A. Dryden Turner

Moulded Dimensions: Length

Breadth

Depth

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

tons

Coefficient of fineness for use with Tables

Particulars of Classification F1100 #1No. 3-9.9.

Depth for Freeboard (D)

Moulded depth

Stringer plate

Sheathing on exposed deck

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

Depth for Freeboard (D) =

Depth correction

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

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

$$\text{Ship's Round of Beam} =$$

Difference

Restricted to

$$\text{Correction} = \frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) =$$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed			8		
" overhang					
" R.Q.D. enclosed					
" overhang					
Bridge enclosed					
" overhang aft					
" overhang forward					
File enclosed <u>then</u>			8		
" overhang					
Trunk aft					
" forward					
Tonnage opening aft					
" " forward					
Total					

Standard Height of Superstructure

" " R.Q.D.

Deduction for complete superstructure

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

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

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

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 =

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P.		1				1	
$\frac{1}{8}L$ from A.P.		4				4	
$\frac{3}{8}L$ "		2				2	
Amidships		4				4	
$\frac{3}{8}L$ from F.P.		2				2	
$\frac{1}{8}L$ "		4				4	
F.P.		1				1	
Total							

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

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 = Ft.

Summer freeboard =

Moulded draught (d) =

Deduction for Tropical freeboard and addition for

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

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 =

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

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 =

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

WS42-00671/2

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS						
Description of Hatchway	MT Hatch	NP 2 Hatch	NP 3 Hatch	NP 4 Hatch	Baggage Hold	Return 3 x 4
Dimensions of Hatchway	10 x 11	20 x 16	12 x 12	10 x 12	5 x 12	
COAMINGS	Height above Deck	24"	20"	20"	20"	20"
	Thickness	1/2"	1/2"	1/2"	1/2"	1/2"
	Sides					
	Ends					
HATCH BEAMS	Stiffeners					
	Brackets, Stays					
	Number	1	One			
	Spacing		1/2"			
FORE AND AFTERS	Scantling and Sketch					
	Bearing Surface					
	Number	One	Three	Three	Three	
	Spacing		Equal			
HATCH COVERS	Unsuported Lengths					
	Scantling and Sketch					
	Bearing Surface					
	Material	Slab	Wood	Wood	Wood	Wood
HATCH COVERS	Thickness	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"
	How fitted					
	Bearing Surface					
	Spacing of Cleats	2 ft	2 ft	2 ft	2 ft	2 ft
HATCH COVERS	Number of Tarpaulins	2	3	3	3	3

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

Are battens and wedges efficient and in good condition? *Yes*
 Are tarpaulins in good condition and in accordance with rule requirements? *Yes*
 Are lashings provided in accordance with rule requirements? *Yes*

Particulars of fiddle, funnel and ventilator coamings:

*Ventilators on fiddle & funnel coamings especially constructed
 Funnels on top of casing (1" high built on deck) protected fore & aft by strong wood bulkheads
 Engine room skylight on boat deck, steel with thick flaps & bulwarks*

Particulars of Flush Bunker Scuttles: *4 Aside, 2 ft diam, Strong Cast iron lids with locking bar & bolt*

Particulars of Companionways:

*Forecastle to deck double steel door in steel casing, 4 x 5.5, 12" sills
 operated from both sides*

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

*Forecastle 1 of 6 - 2 1/2 x 1/2 casing
 3 of 10 - 2 1/2 x 1/2 casing
 1 of 9 - 2 1/2 x 1/2 casing
 2 of 11 - 2 1/2 x 1/2 casing
 4 of 12 - 2 1/2 x 1/2 casing
 2 of 13 - 2 1/2 x 1/2 casing
 1 of 14 - 2 1/2 x 1/2 casing
 1 of 15 - 2 1/2 x 1/2 casing
 1 of 16 - 2 1/2 x 1/2 casing
 1 of 17 - 2 1/2 x 1/2 casing
 1 of 18 - 2 1/2 x 1/2 casing
 1 of 19 - 2 1/2 x 1/2 casing
 1 of 20 - 2 1/2 x 1/2 casing
 1 of 21 - 2 1/2 x 1/2 casing
 1 of 22 - 2 1/2 x 1/2 casing
 1 of 23 - 2 1/2 x 1/2 casing
 1 of 24 - 2 1/2 x 1/2 casing
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 1 of 98 - 2 1/2 x 1/2 casing
 1 of 99 - 2 1/2 x 1/2 casing
 1 of 100 - 2 1/2 x 1/2 casing*

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

*Boiler Air Pipes, goose neck, 2 1/2", wood plug, 4 canvas covers
 3 of 10 - 2 1/2" casing
 1 of 11 - 2 1/2" casing
 1 of 12 - 2 1/2" casing
 1 of 13 - 2 1/2" casing
 1 of 14 - 2 1/2" casing
 1 of 15 - 2 1/2" casing
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 1 of 98 - 2 1/2" casing
 1 of 99 - 2 1/2" casing
 1 of 100 - 2 1/2" casing*

Particulars of Gangway Cargo and Coaling Ports:

12 Coaling Ports aside. Hinged & secured by bolts 2-6 x 2-6

Particulars of Scuppers and Sanitary Discharge Pipes:

*All Sanitary Discharge, gun metal & ships side with non return valve, iron & lead pipe
 Deck scupper iron*

Particulars of Side Scuttles:

Strong gun metal fitted with deadlights

Particulars of Guard Rails:

Fore & poop, 4 bar rail, 3-10" high with stanchions 4' apart

Particulars of Gangways, Lifelines, etc.:

*Hand rail at side of long house, both sides
 Lifelines fitted between Forecastle and midship stowage*

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	375	1'	4' 9" x 1' 4"	5	31.59	75.6
Forward Well						

State position of each freeing port

(F. and A. position and height above deck edge)

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.

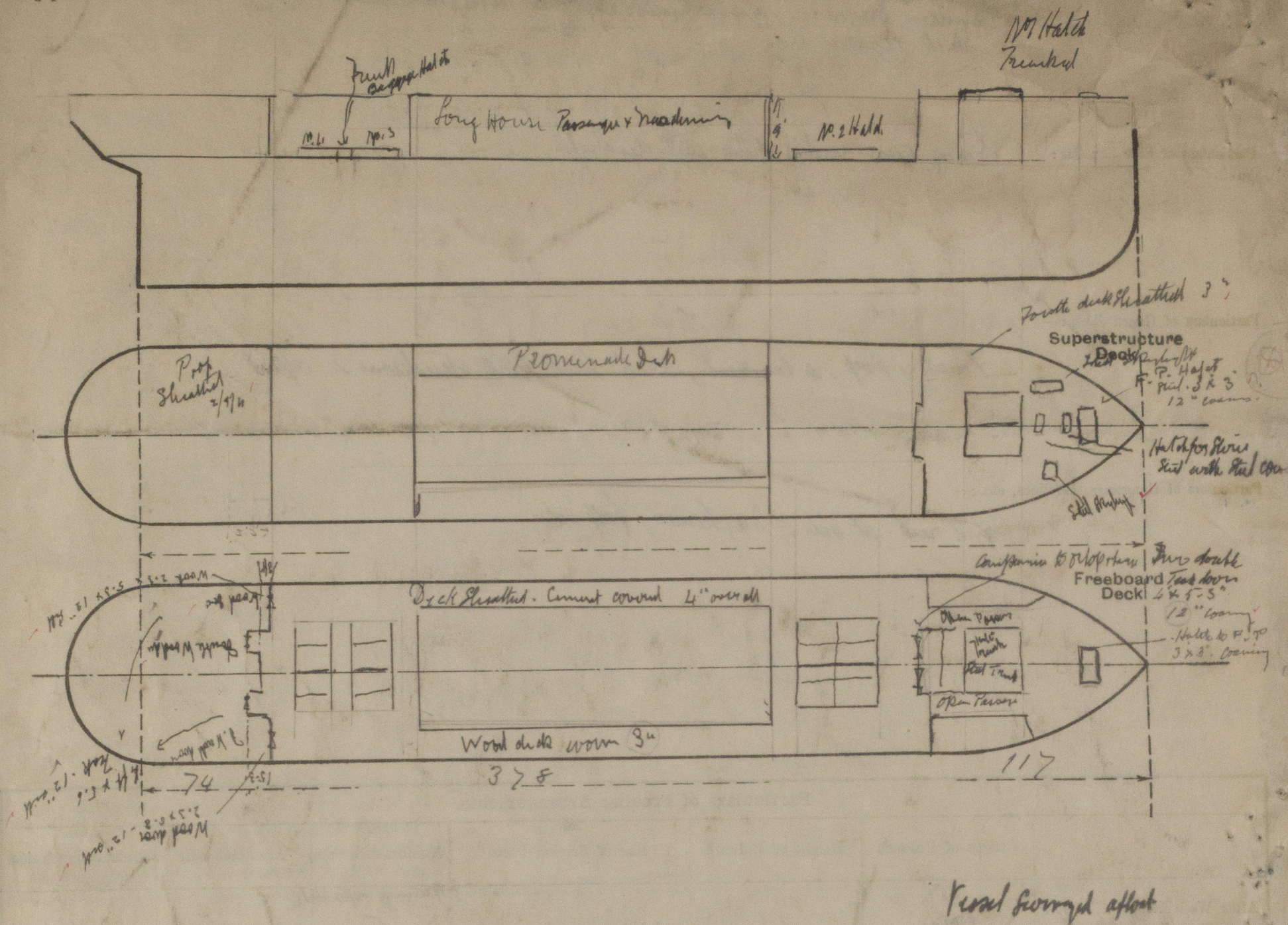
Particulars of Superstructures, Trunks, Casings, Deckhouses.

	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Poop Bulkhead	5/8"	3/8"	6" x 2 1/2"	2-6"	Long	2 double doors 4' 6" x 2' 6" & single door 2-6 x 6"	12"	8'
Raised Quarter Deck Bulkhead								
Bridge, After Bulkhead								
Bridge, Forward Bulkhead								
Forecastle Bulkhead								
Trunk, Aft								
Trunk, Forward								
Exposed Machinery Casings on Freeboard or Raised Quarter Decks	3/8"	3/8"	4 x 3	2-6"	Angled & connected to transverse	See sketch	10"	9'
Exposed Machinery Casings on Superstructure Decks								
Machinery Casings within Superstructures not fitted with Class I Closing Appliances								
Deckhouses on Flush Deck Ships								

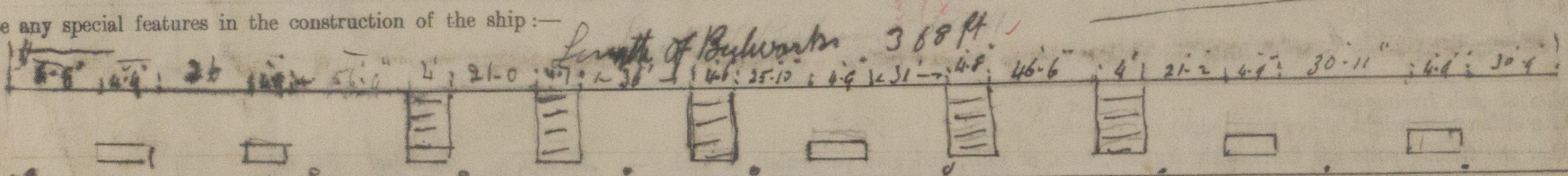
Particulars of Closing Appliances (state if capable of being manipulated from both sides).

Poop Bulkhead	Double bulk door opening from both sides & single door, do do
Raised Quarter Deck Bulkhead	
Bridge, After Bulkhead	
Bridge, Forward Bulkhead	
Forecastle Bulkhead	
Exposed Machinery Casings on Freeboard or Raised Quarter Decks	Double bulk door opening from both sides, protected by sliding steel door & steel door opening casing
Exposed Machinery Casings on Superstructure Decks	
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	
Deckhouses on Flush Deck Ships	

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:—

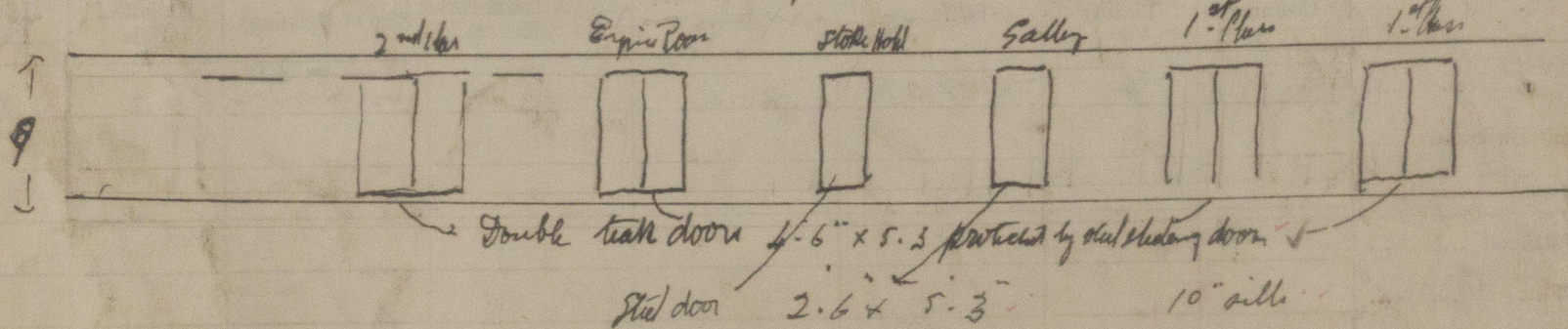


State any special features in the construction of the ship:—

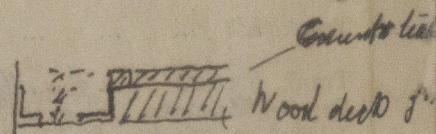


5 Framing Ports 4.9" x 1.4"
 5 Opening with rule 7" apart
 Bottom edge of Port opening 1.4" above waterway

14 Deck scupperns each 6 x 6"



Upper deck sheathed 3" Pls side. Port side covered by cement & half balling in way of deckhouse



Builder's name and yard number

Fairfield S. B. & Eng. Co.

Names of sister ships

Owners

Messrs The Union Castle Mail S.S. Co. Ltd

Fee £

17 : 0 : 0

Received by me



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