

Lloyd's Register of Shipping.
SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having

Poop, Bridge and Forecastle
with overboard discharges from upper tween-deck.

(Type of Superstructures.)

Port of Survey

London

Date of Survey

7th Oct 1935

Name of Surveyor

Chas. H. Sticks

Ship's Name

"MASULA"

Nationality and Port of Registry

British
Glasgow

Official Number

141904

Gross Tonnage

7326

Date of Build

1919-6

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

+100 A1

P.S. Hull No. 1-35

Depth for Freeboard (D)	Depth correction	Round of Beam correction
Moulded depth	(a) Where D is greater than Table depth (D—Table depth) R =	Moulded Breadth (B)
Super plate		Standard Round of Beam = $\frac{B \times 12}{50}$ =
Height on exposed deck $T \left(\frac{L-S}{L} \right) =$	(b) Where D is less than Table depth (if allowed) (Table depth—D) R =	Ship's Round of Beam =
Depth for Freeboard (D) =	If restricted by superstructures	Difference
		Restricted to
		Correction = $\frac{\text{Diff}^e}{4} \times \left(1 - \frac{S_1}{L} \right)$ =

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	Standard Height of Superstructure
Poop enclosed						" " R.Q.D.
" overhang						Deduction for complete superstructure
R.Q.D. enclosed						Percentage covered $\frac{S}{L}$ =
" overhang						" " $\frac{S_1}{L}$ =
Bridge enclosed						" " $\frac{E}{L}$ =
" overhang aft						Percentage from Table, Line A.
" overhang forward						(corrected for absence of forecastle (if required))
Forecastle enclosed						Percentage from Table, Line B.
" overhang						(corrected for absence of forecastle (if required))
Trunk aft						Interpolation for bridge less than 2L (if required)
" forward						Deduction =
Tonnage opening aft						
" " forward						
Total						

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
... ..		1				1	
Midship A.P.		4				4	
"		2				2	
Midships		4				4	
From F.P.		2				2	
"		4				4	
... ..		1				1	
Total							

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 1½ 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 =

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

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

Second

HATCHWAYS ON ~~FREEBOARD~~ AND SUPERSTRUCTURE DECK

Description of Hatchway	...	...	Nº 1	Nº 2	Nº 4	Nº 5					
Dimensions of Hatchway	...	...	27' x 18'	31'6" x 18'	31'6" x 18'	22'6" x 18'					
COAMINGS	{	Height above Deck	...	3"	3"	3"	3"				
		Thickness	{	40	40	40	40				
		Sides	...								
		Ends	...								
		Stiffeners	...	-	-	-	-				
		Brackets, Stays	...	-	-	-	-				
HATCH BEAMS	{	Number	...	5	6	6	4				
		Spacing	...	even	even	even	even				
		Scantling and Sketch	...	4 x 3 x .40	4 x 3 x .40	4 x 3 x .40	4 x 3 x .40				
				15' x 3 1/4"	15' x 3 1/4"	15' x 3 1/4"	15' x 3 1/4"				
		Bearing Surface	...	4 x 3 x .40	4 x 3 x .40	4 x 3 x .40	4 x 3 x .40				
				3 1/2"	3 1/2"	3 1/2"	3 1/2"				
FORE AND AFTERS	{	Number	...								
		Spacing	...								
		Unsupported Lengths	...								
		Scantling* and Sketch	...								
		Bearing Surface	...								
HATCH COVERS	{	Material	...	3" W.P.	3" W.P.	3" W.P.	3" W.P.				
		Thickness	...								
		How fitted	...	F&A	F&A	F&A	F&A				
		Bearing Surface	...	3"	3"	3"	3"				
Spacing of Cleats	...	...	...	...	...	...	...
Number of Tarpaulins	...	...	...	...	...	...	...
				2	2	2	2				

*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 ?

Double Tarpaulin

Existing wood sill bolted to deck

Wood covers partly caulked down.

Particulars of fiddley, funnel and ventilator coamings :—

Particulars of Flush Bunker Scuttles :—

Particulars of Companionways :—

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

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

Particulars of Gangway Cargo and Coaling Ports :—



Existing Tweendeck scuppers blanked off and 5" dia overboard scuppers discharging about 3'0 below second deck fitted as follows:- 1 each side port in N°1 Tweendeck; 2 each side port in N°2 Tweendeck; 3 each side port in N°4 Tweendeck; 2 each side port in N°5 Tweendeck. These heavy pattern gunmetal discharges have non return screw down valves operated from above the Upper Deck with watertight gland at Upper Deck and positive arrangement to show whether the valve is open or shut.

Particulars of Side Scuttles:- 12" dia side scuttles of approved heavy pattern, having hinged dead lights have been fitted in Upper Deck Sheerstrake about 9'0 centres above the Second Deck:- 6 each side port in N°1 Tweendeck; 4 each side port in N°2 Tweendeck; 6 each side port in N°4 Tweendeck and 3 each side port in N°5 Tweendeck.

Particulars of Guard Rails:-

Particulars of Gangways, Lifelines, etc.:-

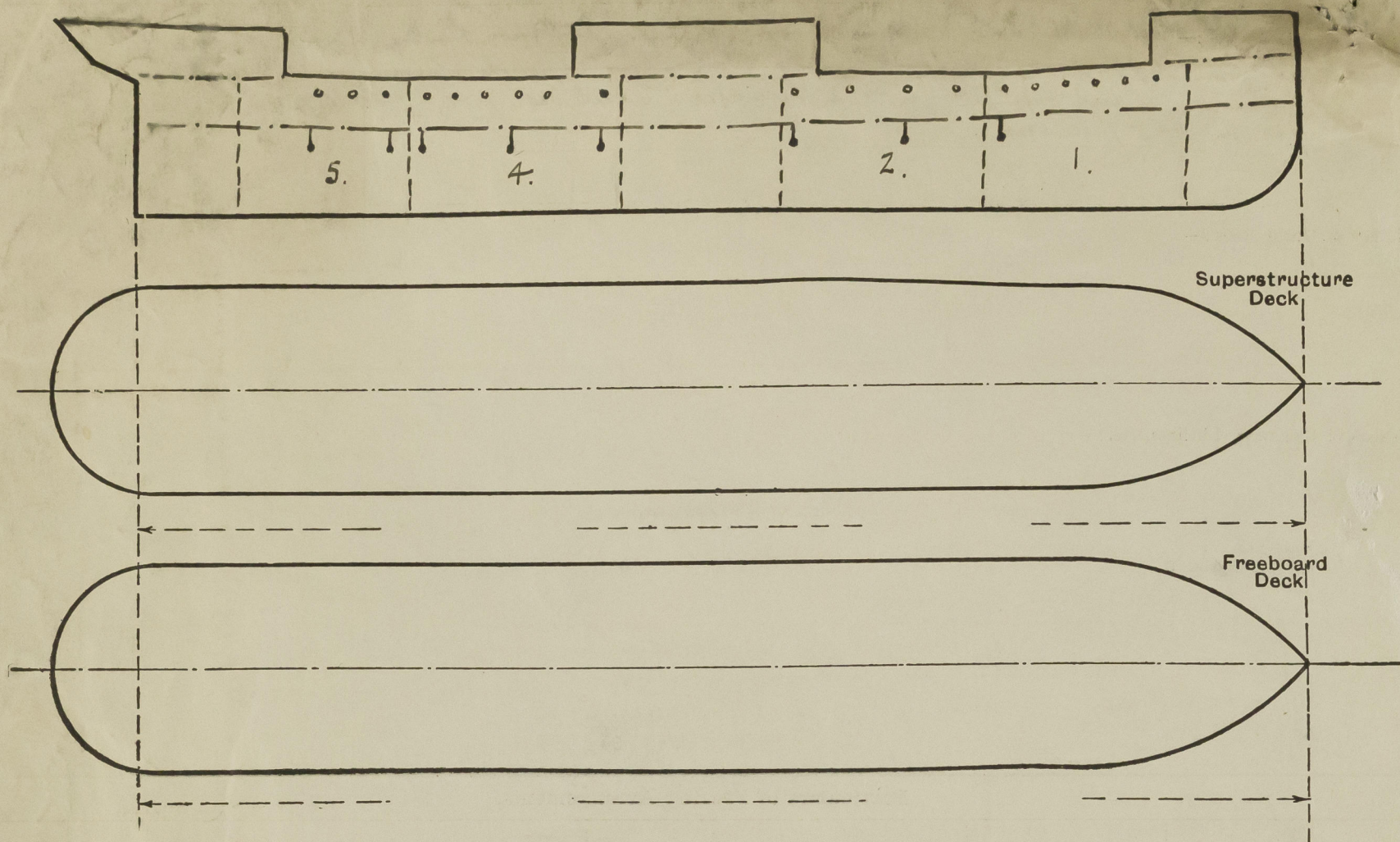
Particulars of Freeing Arrangements.						
	Length of Bulwark	Height of Bulwark	Size of Freeing Ports	Number each side	Area each side	Rule area each side
After Well						
Forward Well						
State position of each freeing port { After Well:- (F. and A. position and height above deck edge) { Forward Well:- State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:- 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								
Raised Quarter Deck Bulkhead ...								
Bridge, After Bulkhead								
Bridge, Forward Bulkhead								
Forecastle Bulkhead								
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								
Deckhouses on Flush Deck Ships ...								
Particulars of Closing Appliances (state if capable of being manipulated from both sides).								
Poop Bulkhead								
Raised Quarter Deck Bulkhead ...								
Bridge, After Bulkhead								
Bridge, Forward Bulkhead								
Forecastle Bulkhead								
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								
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 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:—

Freeboard Renewal Survey^{now} held on completion of
S.S. No. 1 at Hull.

The above alterations have been effected for a Special
Charter to convey horses in the upper tween deck. On
completion of Charter, the vessel will revert to her
previous type by effective closing of the 5" overboard
scuppers from tween deck etc.

Builder's name and yard number

Names of sister ships

Owners

British India Ste. Nav. Co. Ltd.

Fee £

5

(Altin)

Received by me

2/

28 OCT 1935



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