

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Index No. (For London Office only.)

17 JUN 1932

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having Complete Superstructure Deck without Tonnage opening.

(Type of Superstructures.)

Ship's Name <u>S/S "MASILIA"</u> (No 28133 in Reg. Book 1)	Nationality and Port of Registry <u>Swedish</u> <u>Gothenburg</u>	Official Number <u>5917</u>	Gross Tonnage <u>2198</u>	Date of Build <u>1917-8</u>
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Moulded Dimensions: Length 275' Breadth 41' Depth 25.5'

Moulded displacement at moulded draught = 85 per cent. of moulded depth 5220 tons

Coefficient of fineness for use with Tables 0.748

Port of Survey Gothenburg

Date of Survey 15th June 1932

Name of Surveyor H. J. J. J. J.

Particulars of Classification 100 A.1
Sh. deck w. freeb.

Depth for Freeboard (D)	Depth correction	Round of Beam correction
Moulded depth <u>25.5'</u>	(a) Where D is greater than Table depth (D - Table depth) R = <u>(25.54 - 18.33) 2.115 = 15.25</u>	Moulded Breadth (B) <u>41'</u>
Stringer plate (<u>48"</u>) <u>0.4</u>	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =	Standard Round of Beam = $\frac{B \times 12}{50} = 9.84$
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$	If restricted by superstructures	Ship's Round of Beam = <u>12</u>
Depth for Freeboard (D) = <u>25.54</u>		Difference = $\frac{12}{2.16} = 5.56$
		Restricted to
		Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{2.16}{4} = 0.54$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	
Poop enclosed						Standard Height of Superstructure <u>6.25</u>
" overhang						" " R.Q.D.
R.Q.D. enclosed						Deduction for complete superstructure <u>33.5</u>
" overhang						Percentage covered $\frac{S}{L} =$
Bridge enclosed						" " $\frac{S_1}{L} =$
" overhang aft						" " $\frac{E}{L} =$
" overhang forward						Percentage from Table, Line A. (corrected for absence of forecastle (if required))
Forecastle enclosed						Percentage from Table, Line B. (corrected for absence of forecastle (if required))
" overhang						Interpolation for bridge less than 2L (if required)
Trunk aft						Deduction =
" forward						
Tonnage opening aft						
" " forward						
Total						

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product	
A.P.	37.50	1		37.50	30' 32.0	32.0	1		32.00	Mean actual sheer aft = Deficient
$\frac{1}{4}$ L from A.P.	16.69	4		66.76	9' 11.20	11.20	4		44.80	Mean actual sheer forward = Excess
$\frac{2}{4}$ L "	4.12	2		8.24	1' 0	0	2		0	Mean standard sheer aft =
Amidships	-	4		-	0	0	4		0	Mean standard sheer forward =
$\frac{3}{4}$ L from F.P.	8.25	2		16.50	15' 13.60	11.60	2		23.20	Length of enclosed superstructure forward of amidships = Flush deck
$\frac{1}{4}$ L "	33.38	4		133.52	42.5' 41.40	38.40	4		153.60	" " aft of " =
F.P.	75.00	1		75.00	90' 86.50	82.20	1		82.20	
Total				337.42					335.80	

Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{75-S}{2L} \right) = \frac{337.42 - 335.80}{18} \left(\frac{75-0}{2 \times 275} \right) = \frac{1.62}{18} \times 0.136 = 0.012$

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.	Deduction for Fresh Water.	TABULAR FREEBOARD corrected for Flush Deck (if required)
Addition for Winter and Winter North Atlantic Freeboard.	Displacement in salt water at summer load water line	Correction for coefficient $\frac{748+65}{1.36} = 1.428$
Depth to Freeboard Deck = <u>25.54</u>	$\Delta =$	Depth Correction <u>15.25</u>
Summer freeboard = <u>4.88</u>	Tons per inch immersion at summer load water line	Deduction for superstructures
Moulded draught (d) = <u>20.66</u>	T =	Sheer correction <u>0.7</u>
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = <u>5.17</u>	Deduction = $\frac{\Delta}{40T}$ inches	Round of Beam correction <u>5.4</u>
Addition for Winter North Atlantic Freeboard (if required) = <u>2.51</u>	<u>131</u>	Correction for Thickness of Deck amidships
		Other corrections, scantlings, etc.
		Summer Freeboard = <u>58.60</u>

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

Tropical Fresh Water Line above Centre of Disc	262	Tropical Fresh Water Freeboard	1226
Fresh Water Line " "	131	Fresh Water " "	1357
Tropical Line " "	131	Tropical " "	1357
Winter Line below " "	131	Winter " "	1619
Winter North Atlantic Line " "	182	Winter North Atlantic " "	1670

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS									
Description of Hatchway	N ^o 1	N ^o 2	N ^o 3	N ^o 4	N ^o 5	N ^o 6	N ^o 7	N ^o 8	N ^o 9
Dimensions of Hatchway	19' 4" x 18'	21' 8" x 18'	19' 8" x 18'	3' 10" x 3' 11"	4' 1" x 18'	21' 2" x 21' 4"	27' x 27'	4' 10" x 13'	
COAMINGS	Height above Deck	31"	31"	31"	31 1/2"	31 1/2"	12"	20"	7"
	Thickness Sides	44"	44"	44"	38"	40"	38"	30"	46"
	Thickness Ends	44"	44"	44"	38"	40"	38"	30"	46"
	Stiffeners	160 x 65 x 10	170 x 75 x 11						
	Brackets, Stays	None	Fitted						
HATCH BEAMS	Number	3	4	3	None	None	None	None	None
	Spacing	6' 4 1/2"	4' 4"	4' 11"	None	None	None	None	None
	Scantling and Sketch								
	Angles	4"	3"	4 1/4"					
	Web	16"	x	36"					
FORE AND AFTERS	Bearing Surface	3"	3"	3"	fitted	fitted	fitted	fitted	fitted
	Number								
	Spacing								
	Unsupported Lengths								
	Scantling and Sketch								
HATCH COVERS	Material	Wood	Wood	Wood	Wood	Wood	Steel	Wood	
	Thickness	3"	3"	3"	2 1/2"	2"	20"	3"	
	How fitted	F&A	F&A	F&A	F&A	F&A	Hinged	F&A	
	Bearing Surface	3"	3"	3"	2 1/2"	2 1/2"	5"	2 1/4"	
	Spacing of Cleats	21"	21"	21"	17"	24"	15"	24"	
Number of Tarpaulins									
2									

Particulars of fiddle, funnel and ventilator coamings:—

Hinged steel covers are fitted to all fiddle openings.
Vents to engine spaces & funnel in good condition, on top of fiddle casing.

Particulars of Flush Bunker Scuttles:— None fitted.

Particulars of Companionways:—

Access to crew's quarter through steeldeck house aft. having steel doors 4' 8" x 1' 11" capable of being manipulated from both sides, and with a sill 15 1/2" high above wooddeck.

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

2 off 1/2" diam 37" x 28" Wood plugs & canvas covers supplied for all vents.
1" 17" x 37" x 38"

Remainder of vents are built as sawsopost, efficiently constructed & stayed.

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

Height from deck to openings:— 34" to 36". Canvas covers supplied for all air pipes.

Particulars of Gangway Cargo and Coaling Ports:— None fitted.

Particulars of Scuppers and Sanitary Discharge Pipes:—

No scuppers below freeboard deck.
Sanitary Discharge pipes are fitted with N.R.V.

Particulars of Side Scuttles:— Sidelights through ship's sides are fitted with efficient, hinged deadlights.

Particulars of Guard Rails:— Open rails with four horizontal rods and stanchions. High spaced apart.

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	✓					
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 Freeboard or Raised Quarter Deck	None	32"	3 1/2" x 2 1/2" x 30"	30"	Top: None Bolt: Carr. bel. deck.	4' 1" x 1' 11"	15"	7' 9"
Exposed Machinery Casings on Superstructure Decks	✓							
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	✓							
Deckhouses on Flush Deck Ships	None	30"	not accessible woodlining			4' 7 1/2" x 1' 11"	18"	7' 6"

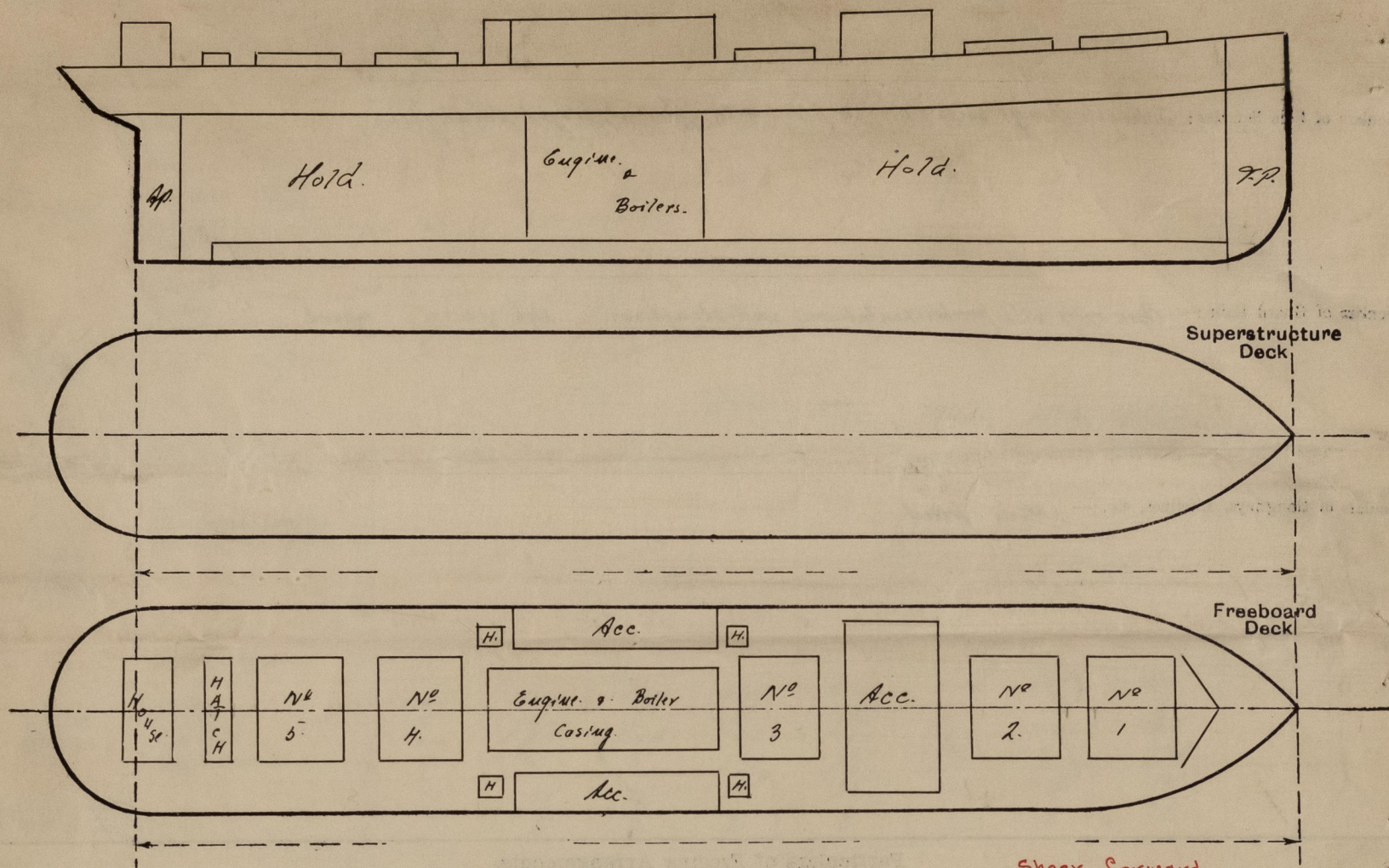
Particulars of Closing Appliances (state if capable of being manipulated from both sides).

Poop Bulkhead	✓
Raised Quarter Deck Bulkhead	✓
Bridge, After Bulkhead	✓
Bridge, Forward Bulkhead	✓
Forecastle Bulkhead	✓
Exposed Machinery Casings on Freeboard or Raised Quarter Deck	Hinged steel doors capable of being manipulated from both sides.
Exposed Machinery Casings on Superstructure Decks	✓
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	✓
Deckhouses on Flush Deck Ships	Hinged wood doors capable of being manipulated from both sides.

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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 shewn on the following sketches:—



Sheer forward.

actual.	86.50	41.40	13.60
standard	75.00	33.38	8.25
Excess	11.50	8.02	5.35
	7.20	5.02	3.35
Standard	75.00	33.38	8.25
Use	82.20	38.40	11.60

Sheer aft 65' 10" 1/2
standard allowance
= 15' 25"

No deck sheathing in way of freeboard marking.
State any special features in the construction of the ship:—

Timber Deck Cargo Freeboards are not requested.

P.S!

As the yard at which this vessel has been built is closed, particulars respecting the displacements and tons per inch immersion could not be ascertained.

This vessel has been surveyed afloat whilst discharging her cargo.

Builder's name and yard number Oscarshamn M.V. Aktieb. Yard No 257

Names of sister ships 1/2 "Algeria" (Stockholm Rep. dated 21-22/3/22)

Owners Rederiaktieb. Svenska Lloyd (K.R. Bokman, Mgr.), Gothenburg

Fee kr. 240.00

Received by me



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