

12 DEC 1932

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, ~~Sailing Ship, Tanker~~  
 having ~~Pe. S. on deck~~ *Pop. Bridge & Forecastle*

Port of Survey *Bombay*Date of Survey *22<sup>nd</sup> Nov 1932*Name of Surveyor *J. Kelly*Particulars of Classification *100 A1  
Shelter deck with  
freeboard.*

Ship's Name *"SALAWATI"* 129.94  
 Nationality and Port of Registry *Dutch Amsterdam*  
 Gross Tonnage *6688* 1920-9  
 Moulded Dimensions: Length *419.75* Breadth *54.5* Depth *36.6* *shelter dk.*  
 Moulded displacement at moulded draught = 85 per cent. of moulded depth  
 Coefficient of fineness for use with Tables *772*

Depth for Freeboard (D)  
 Moulded depth ... 10.973  
 Stringer plate ... 0.18  
 Sheathing on exposed deck  
 $T \left( \frac{L-S}{L} \right) =$   
 Depth for Freeboard (D) = 10.991

Depth correction  
 (a) Where D is greater than Table depth  
 (D-Table depth) R =  
 8.33 (10.991 - 8.529) 30 = 615  
 (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) 16.61  
 Standard Round of Beam =  $\frac{B \times 12}{50} = 3.32$   
 Ship's Round of Beam = 13.29  
 Difference 11  
 Restricted to  
 Correction =  $\frac{\text{Diff}}{4} \times \left( 1 - \frac{S_1}{L} \right) = \frac{11}{4} \times 7419 = -2$

## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed <i>Equip.</i>	11.82	11.82	2210	22.290	11.73
" overhang ...	52	26	+ 63	"	26
R.Q.D. enclosed					
" overhang ...					
Bridge enclosed	7.92	7.92	2290	✓	7.92
" overhang aft ...	.91	.45			.45
" overhang forward	12.57	12.57	2210	22.290	12.13
F'cle enclosed					
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" forward					
Total	33.74	33.02			32.49

Standard Height of Superstructure 2290

" " R.Q.D. 10671

Deduction for complete superstructure

Percentage covered  $\frac{S}{L} = 26.37$ " "  $\frac{S_1}{L} = 25.81$ " "  $\frac{E}{L} = 25.40$ 

Percentage from Table, Line A. 12.70

(corrected for absence of forecastle (if required))

Percentage from Table, Line B. 16.10

(corrected for absence of forecastle (if required))

Interpolation for bridge less than 2L (if required)

Deduction = 1067 x 1375 = 147

## SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	1320	1	1320	1018	1448	1448	1	1448	1448
$\frac{1}{2}$ L from A.P. ...	587	4	2348	47	662	662	4	2648	2648
$\frac{2}{3}$ L " ...	147	2	294	112	165	165	2	330	330
Amidships ...		4		0			4		
$\frac{2}{3}$ L from F.P. ...	293	2	586	5	323	323	2	646	646
$\frac{1}{2}$ L " ...	1173	4	4692	24	1294	1294	4	5176	5176
F.P. ...	2639	1	2639	56	2768	2768	1	2768	2768
Total			11879					13016	

Correction =  $\frac{\text{Difference between sums of products}}{18} = \frac{1137}{18} = 63.17$ 

If limited on account of midship superstructure. YES - NIL

 $(.75 - \frac{S}{2L}) = \frac{1137}{18} = 63.17$   
 $(.75 - \frac{1318}{2616}) = -39$   
 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 = 10.99  
 Summer freeboard = 2.70  
 Moulded draught (d) = 8.29

## Deduction for Tropical freeboard and addition for

Winter freeboard =  $\frac{d}{4}$  inches = 2.07

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

= 17 %

## TABULAR FREEBOARD corrected for Fresh Deck (if required)

Correction for coefficient

 $\frac{772 + 1.68}{1.36} = \frac{1.452}{1.36}$ 

	+	-
Depth Correction	615	-
Deduction for superstructures	-	147
Sheer correction	-	-
Round of Beam correction	-	2
Correction for Thickness of Deck amidships	-	-
Other corrections, scantlings, etc.	-	-
	128	
	743	149
Summer Freeboard =	2700	

Depth Correction ... 615

Deduction for superstructures ... 147

Sheer correction ...

Round of Beam correction ... 2

Correction for Thickness of Deck amidships ...

Other corrections, scantlings, etc. ...

Summer Freeboard = 2700

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, ~~Wood~~ Steel, Deck: - 270 %

Tropical Fresh Water Line above Centre of Disc ... 36.34 %  
 Fresh Water Line " " ... 19.17 %  
 Tropical Line " " ... 17 %  
 Winter Line below " " ... 17 %  
 Winter North Atlantic Line " " ...

Tropical Fresh Water Freeboard ... 234  
 Fresh Water ... 251  
 Tropical ... 253  
 Winter ... 287  
 Winter North Atlantic ...

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MARKING FORM MARKING FORM

RECEIVED 24 MAY 1934 RECEIVED 12 JUN 1933

The scantlings of the ship are considered suitable for the freeboards assigned.

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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	No 6				
Dimensions of Hatchway			28'-2"x20'	30'-4"x20'	13'-0"x20'	13'-0"x20'	30'-4"x20'	23'-10"x20'				
COAMINGS	{	Height above Deck	30	30	30	30	30	30				
		Thickness	Sides	.44	.5	.44	.44	.5	.44			
			Ends	.44	.44	.44	.44	.44	.44			
		Stiffeners	7 1/2 x 3 B.R.	do	do	do	do	do	do			
		Brackets, Stays	NIL	✓	✓	✓	✓	✓	✓			
HATCH BEAMS	{	Number	5	5	2	2	5	4				
		Spacing	4'-8"	5'-0"	4'-4"	4'-4"	5'-0"	4'-9"				
		Scantling and Sketch										
			17 x 1 1/2 x 34	19 x 1 1/2 x 36	15 x 9 x 34	15 x 9 x 34	19 x 1 1/2 x 36	18 x 1 1/2 x 34				
		Bearing Surface	4 x 3 x .44 angles 3 1/2 x 1 1/2	4 x 3 x .44 angles 3 1/2 x 1 1/2	4 x 3 x .44 angles 3 1/2 x 1 1/2	4 x 3 x .44 angles 3 1/2 x 1 1/2	4 x 3 x .44 angles 3 1/2 x 1 1/2	4 x 3 x .44 angles 3 1/2 x 1 1/2				
FORE AND AFTERS	{	Number										
		Spacing										
		Unsupported Lengths										
		Scantling* and Sketch										
		Bearing Surface										
HATCH COVERS	{	Material	Pine									
		Thickness	3"									
		How fitted	F + R	do	do	do	do	do				
		Bearing Surface	3"									
Spacing of Cleats			23"									
Number of Tarpaulins			3 work + 2 spare	do	do	do	do	do				
*Are wood fore and afters steel shod at all bearing surfaces? <input checked="" type="checkbox"/> Yes												
Are battens and wedges efficient and in good condition? <input checked="" type="checkbox"/> Yes												
Are tarpaulins in good condition and in accordance with rule requirements? <input checked="" type="checkbox"/> Yes												
Are lashings provided in accordance with rule requirements? <input checked="" type="checkbox"/> Yes												

Particulars of fiddley, funnel and ventilator coamings:— No gratings. Single funnel containing scummers + daisy funnel.

2-22" dia ventilators to Engine Room, boaming 5'0" high

2-30" dia " " " " " 5'0" high

2-30" dia " " " " " 8'0" high

Particulars of Flush Bunker Scuttles:—

NIL

Particulars of Companionways:—

NIL

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

15"-18"-21" dia ventilators on freeboard deck to holds + tween boamings 3'0" high fitted with wood plugs + canvas covers.

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

5 3/4" dia C.I. air pipes—goose necks 2'4" high in way of bulwarks. Fitted with wood plugs + canvas hoods.

Particulars of Gangway Cargo and Coaling Ports:—

Four cargo ports to tween decks on each side 4'0" x 2'6". Hinged + secured by heavy strongbacks



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Particulars of Scuppers and Sanitary Discharge Pipes:—

3" scupper pipes from shelter deck to ship's side  
no storm valves fitted.

Storm valves fitted to sanitary discharges

Particulars of Side Scuttles:—

15" dia side scuttles in accommodation  
fitted with C.I. deadlights.

Particulars of Guard Rails:—

Three bar guard rails on poop & fore-cle  
3' 9" high.

Particulars of Gangways, Lifelines, etc.:—

Life lines can be rigged for the  
safety of the crew.

Particulars of Freeing Arrangements.

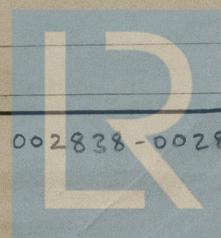
	Length of Bulwark	Height of Bulwark	Size of Freeing Ports	Number each side	Area each side	Rule area each side
After Well ...	136'-6" <sup>214.37</sup>	3'-6"	{ 1-6'-9" x 2' 4-10'-2" 1-5'-6" x 2' 1-3'-2"	7	122.5	25 42.87
INWAY OF MIDSHIP REC	49'-6"	3'-6"	{ 1-10'-2" 1-4'-2" x 2"	3	34	✓
Forward Well ...	77'-6" <sup>97.62</sup>	3'-6"	{ 3-10'-2" 1-7'-9" x 2"	4	75.5	16 19.52
State position of each freeing port (F. and A. position and height above deck edge) } After Well: F 10'-3" 16'-9" 17'-9" 19'-3" 19'-6" 25'-6" 14'-3" 9'-3" A F 9'-6" 14'-9" 22'-6" 9'-9" A Forward Well: F 17'-3" 14'-9" 13'-3" 9'-9" 11'-6" A State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:— Double horizontal bars & one vertical bar. — one extra freeing port on port side amidships. Additional area where sheer is less than standard. ✓ Height above deck - 6"						

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'-3" x 7/16"	7/16"	3 x 3 x 3/8"	2'-3"	✓	5'-0" x 1'-10"	18"	7'-3"
Raised Quarter Deck Bulkhead ...								
Bridge, After Bulkhead ...	3'-0" x 7/16"	7/16"	3 x 3 x 3/8" 30" 8 1/2" Stiffeners behind paneling		✓	4'-10" x 2'-2"	18"	7'-6"
Bridge, Forward Bulkhead ...	3'-0" x 7/16"	7/16"	6 x 3 x 3/8" 30" 8 1/2" Stiffeners behind paneling		Stiff	4'-10" x 2'-2"	18"	7'-6"
Forecastle Bulkhead ...	18" x 3/8"	1/4"	3 x 3 x 3/8" 30" 8 1/2" 2 F & A BULKHEADS		✓	4'-9" x 3'-0"	18"	7'-3"
Trunk, Aft ...								
Trunk, Forward ...								
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...	18" x 2"	3/8"	3 1/2" x 3"	2'-6"	✓	5'-0" x 2'-0"	18"	
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).

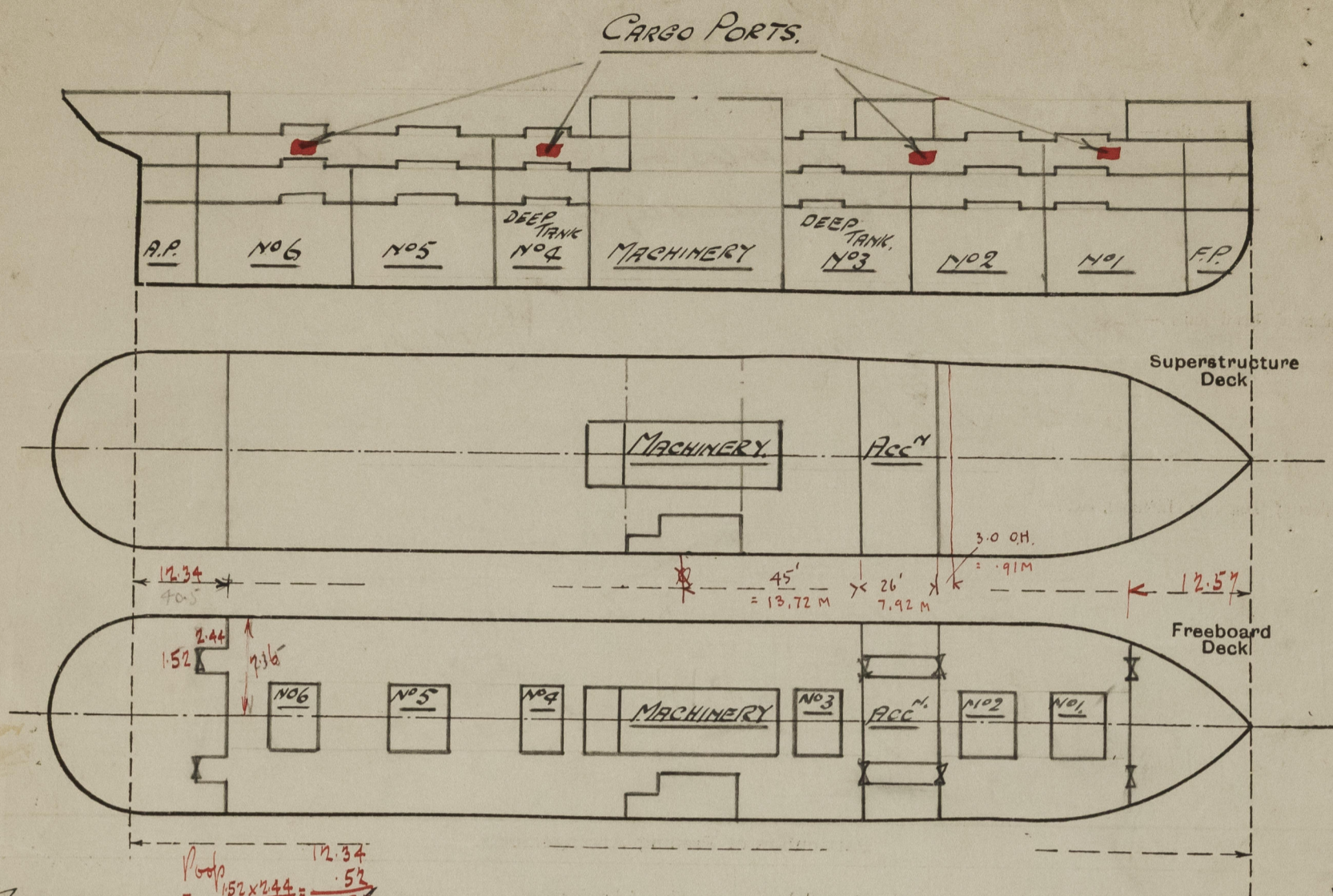
Poop Bulkhead ...	Hinged steel doors secured by handles & locks.
Raised Quarter Deck Bulkhead ...	✓
Bridge, After Bulkhead ...	Teak wood doors secured by handles & locks.
Bridge, Forward Bulkhead ...	Steel doors secured by cleats Operated aft side only. } Bridge accommodation.
Forecastle Bulkhead ...	Steel doors secured by hook bolts & dogs - operated from outside.
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...	Steel doors secured by handles & locks - operated both sides
Exposed Machinery Casings on Superstructure Decks ...	Steel skylights - hand operated.
Machinery Casings within Superstructures not fitted with Class I Closing Appliances ...	No openings.
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 shewn on the following sketches:—



Truboard deck unsketched except in bridge accommodation.

State any special features in the construction of the ship:— Vessel converted from steamer to motor ship. Only one original bunker hatch in use. Remainder have been permanently plated & rivetted.

Bridge accommodation extends to ships side. Forward bulkhead openings closed by water tight shut doors.

Particulars taken when vessel was in dry dock  
for condition survey.

Builder's name and yard number.

### Names of sister ships

Owners *Stoomv. Maats. Nederland*

Fee £ *Rupers* 6:50/- Received by me