

22 NOV 1932

Rpt. C.11.

Index. No. **28775**
(For London Office only.)

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

No 12807.

Computation of Freeboard for Steamer, ~~Sailing Ship, Tanker~~
having **POOP. BRIDGE + FORECASTLE**

(Type of Superstructures.)

Ship's Name **S/S JACOBUS** Nationality and Port of Registry **Batavia** Official Number **144045** Gross Tonnage **1262** Date of Build **1920.5**

Moulded Dimensions: Length **230.0** Breadth **36.5** Depth **18.0**
Moulded displacement at moulded draught = 85 per cent. of moulded depth **2778** tons
Coefficient of fineness for use with Tables **.757**

Port of Survey **Sharpsness**
Date of Survey **Nov. 19/32**
Name of Surveyor **John L. Gwynne**

Particulars of Classification **+100 A1**
Cruiser steam
Cargo bottoms not fitted
S.S. Hull No. 3-1024
S.S. Hull No. 1-1024

Depth for Freeboard (D)		Depth correction		Round of Beam correction	
Moulded depth	18.00	(a) Where D is greater than Table depth (D - Table depth) R = (18.03 - 15.33) 1.769 = + 4.78"		Moulded Breadth (B)	36.50
Stringer plate	.03	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =		Standard Round of Beam = $\frac{B \times 12}{50}$	8.76"
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$		If restricted by superstructures		Ship's Round of Beam	9"
Depth for Freeboard (D) =	18.03			Difference	.24"
				Restricted to	
				Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right)$	$\frac{.24}{4} \times .494 = -.03$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	
Poop enclosed	19.83	19.83	7.0		19.83	Standard Height of Superstructure 6.00
" overhang	5.42	.21			.21	" " R.Q.D.
R.Q.D. enclosed						Deduction for complete superstructure 29.00
" overhang						Percentage covered $\frac{S}{L} = 52.68\%$
Bridge enclosed	68.83	68.83	7.0		68.83	" " $\frac{S_1}{L} = 50.60\%$
" overhang aft	3.74	2.87			2.87	" " $\frac{E}{L} = 50.60\%$
" overhang forward	none					Percentage from Table, Line A. (corrected for absence of forecastle (if required))
Fore enclosed	16.0	24.62	7.6		24.62	Percentage from Table, Line B. 36.60% (corrected for absence of forecastle (if required))
" overhang	12.325					Interpolation for bridge less than 2L (if required)
Trunk aft						Deduction = 29.00 x .366 = - 10.61"
" forward						
Tonnage opening aft						
" forward						
Total	121.16	116.36			116.36	

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.	33.00	1		33.00	36.25	36.25	1		33.00
L from A.P.	14.685	4		58.74	14.4	14.52	4		58.74
L "	3.63	2		7.26	3.2	3.63	2		7.26
Amidships		4					4		
L from F.P.	7.26	2		14.52	7.0	7.01	2		14.02
L "	29.37	4		117.48	28.0	28.04	4		112.16
F.P.	66.00	1		66.00	63.0	63.00	1		63.00
Total				297.00					288.18

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{8.82}{18} \left(.75 - \frac{.2634}{2} \right) = + .24"$

If limited on account of midship superstructure.

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

Mean actual sheer aft = Excess
Mean standard sheer aft = Deficient. (.956)

Mean actual sheer forward = Deficient. (.956)
Mean standard sheer forward =

Length of enclosed superstructure forward of amidships =
" " aft of " =

Sheers Forward.
Standard. Actual.
7.26 3 21.78 7.01 3 21.03
29.37 3 88.11 28.04 3 84.12
66.00 1 66.00 63.00 1 63.00
175.89 168.15

Deduction for Tropical Freeboard.	Deduction for Fresh Water.	TABULAR FREEBOARD
Addition for Winter and Winter North Atlantic Freeboard.	Displacement in salt water at summer load water line	Corrected for Flush Deck (if required)
Depth to Freeboard Deck = 18.03	Δ =	Correction for coefficient $\frac{.68 + .757}{1.36} = \frac{1.437}{1.36}$
Summer freeboard = 2.04	Tons per inch immersion at summer load water line	Depth Correction ... 4.78
Moulded draught (d) = 15.99	T =	Deduction for superstructures ... 10.61
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 4"	Deduction = $\frac{\Delta}{40 T}$ inches = 4"	Sheer correction ... .24
Addition for Winter North Atlantic Freeboard (if required) = 2"		Round of Beam correction ... .03
		Correction for Thickness of Deck amidships ...
		Other corrections, scantlings, etc. ...
		5.02 10.64 - 5.62
		Summer Freeboard = 24.49

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck:— 2'-0 1/2"

Tropical Fresh Water Line above Centre of Disc		Tropical Fresh Water Freeboard
Fresh Water Line		Fresh Water
Tropical Line		Tropical
Winter Line below	4"	Winter
Winter North Atlantic Line		Winter North Atlantic



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PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS									
Description of Hatchway	...	...	...	N ^o 1	N ^o 2				
Dimensions of Hatchway	...	...	...	46' x 18'	61' 4" x 18'				
COAMINGS	Height above Deck	...	...	36"	48"				
	Thickness	{	Sides	...	...		
		{	Ends	...	...		
	Stiffeners	...	...	7 x 3 BA	8 1/2 x 3 BA				
	Brackets, Stays	...	...	4	7				
HATCH BEAMS	Number	...	...	6 (1 frame)	10 (1 frame)				
	Spacing	...	...	6' 6"	5' 6"				
	Scantling and Sketch	...	...	4 x 3 1/2 x 1/2	as for No 1				
	Bearing Surface	...	...	3" x 1/2" for 1/2"	6' x 5' 4"				
FORE AND AFTERS	Number	...	...				
	Spacing	...	...				
	Unsupported Lengths	...	...				
	Scantling* and Sketch	...	...	None					
	Bearing Surface	...	...				
HATCH COVERS	Material	...	...	wood	wood	2 1/2"			
	Thickness	...	...	3"	3				
	How fitted	...	...	F&A	F&A	3"			
	Bearing Surface	...	...	4"	4				
Spacing of Cleats	...	...	...	24"	24"				
Number of Tarpaulins	...	...	...	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?

fore and afters

yes

yes

yes

Particulars of fiddle, funnel and ventilator coamings:—*Same as the attached by drawings*

Stalked gratings ^{remained by hinges} & covered by strong steel covers (1 hinges 2 not hinges).
 Heavy & funnel ventilators in efficient condition.
 Engine skylight of steel strongly constructed.

Particulars of Flush Bunker Scuttles:—

2 scuttles on barge deck of C. Iron screw (second type)
2 do. (on barge)

Particulars of Companionways :—

Particulars of Companionways:— } hinged hand wood door 4'-11" + 2' x 13" sill door 1½" thick
to Crew space in poop. } in steel Companion
 Access to E.R. each side through two hand wood doors connected by short passage, doors 4'-8" + 1'-11" x 19½" sill
 Thickness of doors 1½" Access to Stowhold through steel hinged doors 3'-9" + 1'-9" x 19" sill.

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

1 Kent on forecath deck 15" dia coaming 33" x 34" dia No 1 hold
1 fox & aft deck post vent dia No 1 or 2 hold (Mushroom type)
Kent on forecath clow by wire plug & canvas cover
1 mushroom ventilator in poop in excellent condition.

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

2 C.I. air pipes or fire well deck 20' high x 2½ dia from 5th tank &
12 " " Superstructure " " " " " " " " " " " "

Canvas Covers fitted

Particulars of Gangway Cargo and Coaling Ports :—

None

Particulars of Scuppers and Sanitary Discharge Pipes:—

Sanitary discharges fitted with storm valves
Side scuttles in poop 3 each side 2' below poop deck
manometer 9"

Particulars of Side Scuttles:—

Side scuttles in poop 3 each side 2' below poop deck, 9" deep
with hinged glasses & deadlights

Particulars of Guard Rails:—

Guard rails on forecabin & poop decks 3' 6" high having
2 rows & stanchions spaced 4' 6" apart. Steel bulwarks
on forecabin deck in wells 4' 10" high efficiently constructed
supported

Particulars of Gangways, Lifelines, etc.:—

No gangways. Rope lifelines under bulwarks

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	71' 8"	4' 10"	2' 10" x 15"	4	14	15
Forward Well	46' 0"	4' 10"	3' 0" x 16"	3	12	11.5

Position of each freeing port } After Well:— 12' 0" from poop & 4' 6" from bridge bulkheads } 15" above deck
(and A. position and height above deck edge) } Forward Well:— 8' 0" from bridge & 7' 0" from forecabin }
State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:— } Litter with bars

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	None	32	3x3x35	28"	None	4' 6" x 3' 0"	15"	7' 0"
Bridge, Forward Bulkhead	-	35	7x3x35 & 4 1/2 x 4 1/2 x 35 L	28"	Brackets top & bottom	4' 6" x 2' 8"	17"	7' 0"
Forecastle Bulkhead	None	None						
Deck, Aft	✓							
Deck, Forward	✓							
Exposed Machinery Casings on Fore- board or Raised Quarter Decks								
Exposed Machinery Casings on Super- structure Decks						4' 8" x 1' 11"		
Machinery Casings within Superstruc- tures not fitted with Class I Closing Appliances		5/16	3x2 1/2 x 5/16 O.D.	2' 3"		3' 9" x 1' 9" - 19 1/2"		
Deckhouses on Flush Deck Ships						none		

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

Poop Bulkhead	No openings
Raised Quarter Deck Bulkhead	✓
Bridge, After Bulkhead	3" shifting boards in channels & brass plate half way up
Bridge, Forward Bulkhead	Boiler plate bolts 5 1/2" apart passing through bulkhead plating work bulkhead with padlock door open.
Forecastle Bulkhead	No openings
Exposed Machinery Casings on Free- board or Raised Quarter Decks	No openings
Exposed Machinery Casings on Super- structure Decks	not exposed - doors manipulated both sides
Machinery Casings within Superstruc- tures not fitted with Class I Closing Appliances	No openings
Deckhouses on Flush Deck Ships	

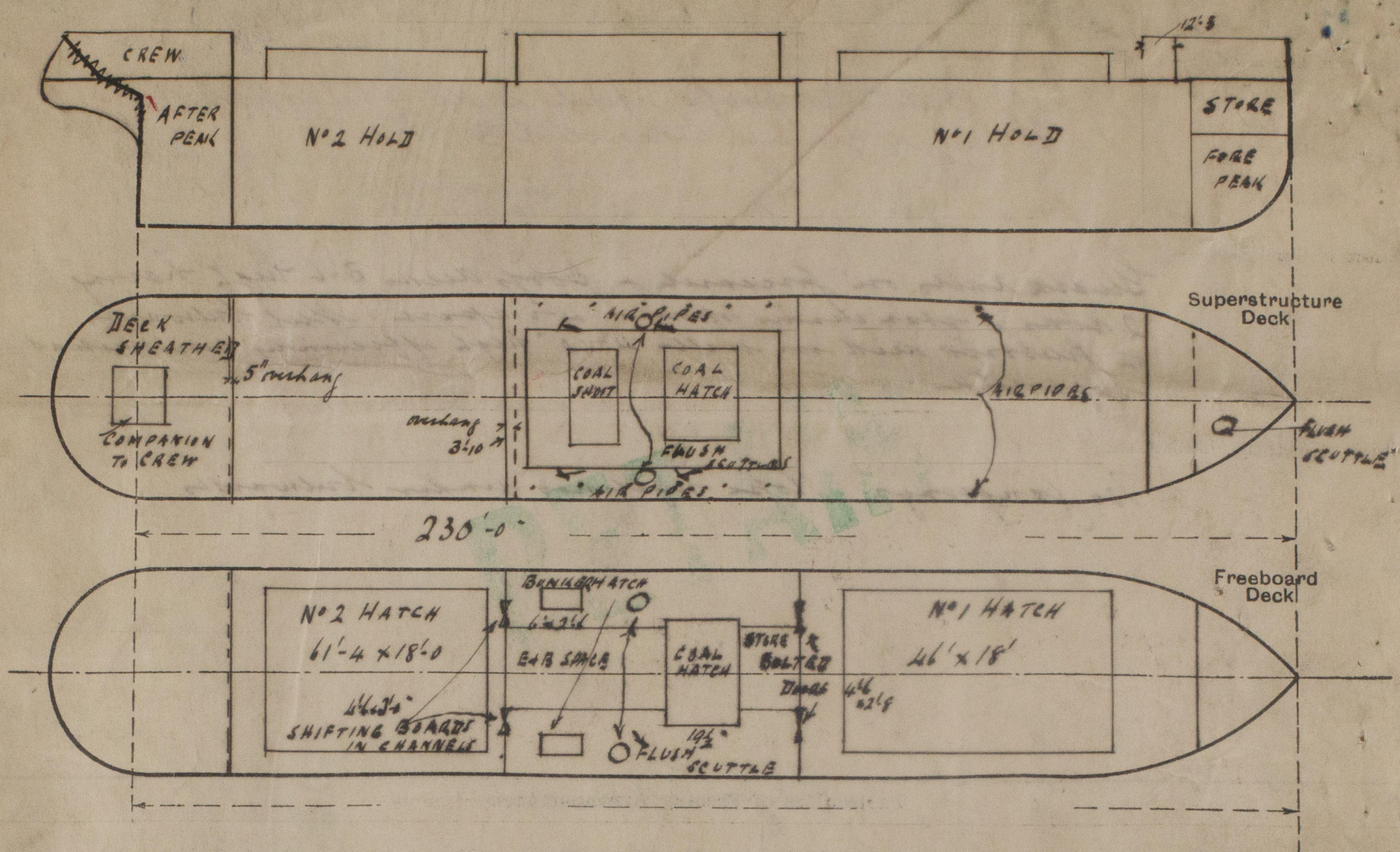


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Jacobus

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:—



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

This survey has been taken afloat & is therefore confined to an examination of the means for closing the openings in the hull & sides of the vessel

	Coaling hatches		
	Casing top		U.O. w/B Space
Size	7'-7" x 12'-1"	5'-6 1/2" x 12'-1"	20 5'-9" x 27"
Coam	21" x 32	21" x 30	10 x 3 1/2 BA
Hatches	2 1/2 w/P	2 1/2 w/P	3 w/P
Hawland	F+D	F+D	F+D
rest	2 3/4"	2 3/4"	3"
Cleats	26"-27"	26"-27"	14"-24"
laspauls	2	2	1

Also two flush bunker scuttles 18" dia with heavy cast iron screw lids are fitted in cargo space

Builder's name and yard number *Messrs Livingston & Cooper Ltd.*

Names of sister ships

Owners *Olsen SS. Co.*

Fee £ *8* : *10* : *0*

Received by me

Exs. *16* : *2*

[Signature]



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