

19 SEP 1932

24514

Rpt. C.11.

Index. No.
(For London Office only.)

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

21424

Computation of Freeboard for Steamer, ~~Sailing Ship, Tanker~~

having *R.Q. deck, bridge and funnels*

Port of Survey *Rotterdam*

(Type of Superstructures.)

Date of Survey *15/9 - 1932*

Ship's Name

Nationality and Port of Registry

Gross Tonnage

Date of Build

OSTERLAND

Dutch

1192

2/1916

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

Moulded Dimensions: Length *70.10 m.* Breadth *10.47 m.* Depth *5.207 m.*

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

2448 tonnes

Coefficient of fineness for use with Tables *735*

Particulars of Classification *+100 A1*

S.S. Reg. 3-5.27

Depth for Freeboard (D)		Depth correction		Round of Beam correction	
Moulded depth	<i>5.207 m.</i>	(a) Where D is greater than Table depth (D - Table depth) R =	<i>8.33(5.217 - 4.673) 17.70 = +.080</i>	Moulded Breadth (B)	<i>10.47 m.</i>
Stringer plate	<i>0.010 m.</i>	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =		Standard Round of Beam = $\frac{B \times R}{50}$	<i>2.09</i>
Sheathing on exposed deck				Ship's Round of Beam	<i>0.216 m.</i>
$T \left(\frac{L-S}{L} \right) =$		If restricted by superstructures		Difference	<i>.007</i>
Depth for Freeboard (D) =	<i>5.217</i>			Restricted to	
				Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right)$	<i>-.001</i>

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	
Poop enclosed						Standard Height of Superstructure <i>1.830</i>
„ overhang	<i>25.29</i>					„ „ R.Q.D. <i>1.179</i>
R.Q.D. enclosed	<i>24.12</i>	<i>25.29</i>	<i>1.22</i>	✓	<i>25.29</i>	Deduction for complete superstructure <i>.737</i>
„ overhang						Percentage covered $\frac{S}{L} =$ <i>69.71</i>
Bridge enclosed	<i>16.92</i>	<i>15.75</i>	<i>2.21</i>	✓	<i>15.75</i>	„ „ $\frac{S_1}{L} =$ <i>69.43</i>
„ overhang aft	<i>15.75</i>					„ „ $\frac{E}{L} =$ <i>69.43</i>
„ overhang forward	<i>.44</i>					Percentage from Table, Line A. <i>62.03</i>
F'cle enclosed	<i>7.236</i>	<i>7.44</i>	<i>2.13</i>	✓	<i>7.44</i>	(corrected for absence of forecastle (if required))
„ overhang	<i>10.584</i>	<i>.19</i>			<i>.19</i>	Percentage from Table, Line B. ✓
Trunk aft	<i>3.90</i>					(corrected for absence of forecastle (if required))
„ forward						Interpolation for bridge less than .2L (if required)
Tonnage opening aft						Deduction = <i>.737</i> × <i>.6203</i> = <i>-.457</i>
„ „ forward						
Total	<i>48.87</i>	<i>48.67</i>			<i>48.67</i>	

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product	
A.P.	<i>.838</i>	1		<i>.838</i>	<i>914</i>	<i>.955</i>	1		<i>.955</i>	Mean actual sheer aft = <i>Excess</i>
1/4 L from A.P.	<i>.372</i>	4		<i>1.488</i>	<i>382</i>	<i>.423</i>	4		<i>1.692</i>	Mean standard sheer aft
1/2 L	<i>.92</i>	2		<i>.184</i>	<i>95</i>	<i>.105</i>	2		<i>.210</i>	Mean actual sheer forward = <i>Excess</i>
Amidships	<i>—</i>	4		<i>—</i>	<i>—</i>	<i>—</i>	4		<i>—</i>	Mean standard sheer forward
3/4 L from F.P.	<i>.186</i>	2		<i>.372</i>	<i>218</i>	<i>.218</i>	2		<i>.436</i>	Length of enclosed superstructure forward of amidships = <i>.085</i>
1/4 L	<i>.745</i>	4		<i>2.980</i>	<i>873</i>	<i>.873</i>	4		<i>3.492</i>	„ „ aft of „ = <i>.50</i>
F.P.	<i>1.676</i>	1		<i>1.676</i>	<i>1980</i>	<i>1.980</i>	1		<i>1.980</i>	
Total				<i>7.538</i>					<i>8.765</i>	

Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{.75 - S}{.2L} \right) = \frac{1.227}{18} \left(\frac{.75 - .3485}{.2} \right) = -.027$

If limited on account of midship superstructure. $.027 \times \frac{1.85}{.200} = -.025$

If limited to maximum allowance of 1 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 $\frac{.735 + .680}{1.36} = \frac{1.415}{1.36}$	
Depth to Freeboard Deck =	<i>5.217</i>	$\Delta = 27.36 \text{ tonnes}$			
Summer freeboard =	<i>.350</i>	$\text{Tonnes per inch immersion at summer load water line}$			
Moulded draught (d) =	<i>4.867</i>	$T = 6.32$			
Deduction for Tropical freeboard and addition for		Deduction = $\frac{\Delta}{40 T}$ inches			
Winter freeboard = $\frac{d}{48}$ inches =	<i>.101</i>	$= 108 \text{ cm.}$			
Addition for Winter North Atlantic Freeboard (if required) =		$= 14 \text{ cm.}$			
<i>+ 5 1/2% = 5 cm.</i>					

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

Tropical Fresh Water Line above Centre of Disc	<i>21 cm.</i>	Tropical Fresh Water Freeboard	<i>14</i>
Fresh Water Line	<i>14</i>	Fresh Water	<i>24</i>
Tropical Line	<i>10</i>	Tropical	<i>25</i>
Winter Line below	<i>10</i>	Winter	<i>45</i>
Winter North Atlantic Line	<i>15</i>	Winter North Atlantic	<i>50</i>

28 SEP 1932

5m,3,32.

MARKING FORM
RECEIVED 19 OCT 1932
007865-007873-0208 1/2

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS										
Description of Hatchway			...	...	N°1	N°2	N°3	N°4		
Dimensions of Hatchway			...	...	21'-1" x 22'-1"	30'-8" x 22'-0"	21'-1" x 21'-1"	19'-2" x 20'-0"		
COAMINGS	{	Height above Deck	...	...	43"	45"	43"	45"		
		Thickness	Sides	...	.44	.50	.44	.44		
			Ends	...	.40	.40	.40	.40		
		Stiffeners	...	C 6x3x.56	for all hatchways					
HATCH BEAMS	{	Brackets, Stays	...	...	1	2	1	1		
		Number	...	...	3	5	3	3		
		Spacing	...	...				
		Scantling and Sketch	...	29' x .40" for all hatchways						
			7 1/2 1 1/2	4' x 5' x .40" " " "						
	Bearing Surface	...	...	3	3	3	3			
FORE AND AFTERS	{	Number	...	...				
		Spacing	...	...				
		Unsupported Lengths	...	...				
		Scantling* and Sketch	...	none						
	Bearing Surface	...	...					
HATCH COVERS	{	Material	...	...	pine					
		Thickness	...	...	2 1/2"					
		How fitted	...	longitudinally						
		Bearing Surface	...	4' x 3"						
Spacing of Cleats			...	...	24"	24"	24"	24"		
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? *Yes*
Are tarpaulins in good condition and in accordance with rule requirements? *Yes*
Are lashings provided in accordance with rule requirements? *Yes*

Particulars of fiddley, funnel and ventilator coamings :—

funnel and ventilator coamings:—Tidley and funnel and ventilators
in good condition
Holeholes gratings covered by steel hinged covers.
Engine the light of steel strongly constructed with hinged
deadlights.

Particulars of Flush Bunker Scuttles:—

none

Particulars of Companionways :—

none

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

On Deck	4 Ventilators	36" x 13" x .32
" "	" "	36" x 11" x .32
In Forenoon	3 Ventilators	
On forenoon	2 Ventilators	

They are all clad
in wood peg
cannies

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

On bridge 6	goose-neck	32"
In frame 4	" "	36"
On frame 1	" "	28"
On R. & arch 2	" "	28"

They can all
be done by w.
plugs and so
on.

Particulars of Gangway Cargo and Coaling Ports :—

none

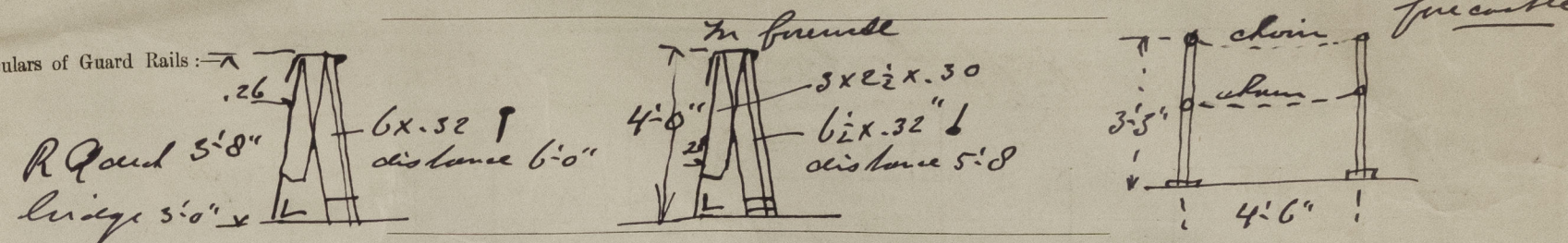
Particulars of Scuppers and Sanitary Discharge Pipes:— 4 Scuppers on R. & deck
3 " in forewell

On SB 2 sanitary discharge pipes of metal with non return valves.
On PS 1 " " " " " " see sketch.

Particulars of Side Scuttles:—

sidelights in fore-castle and bridge
hinges deadlights fitted.

Particulars of Guard Rails :



Particulars of Gangways, Lifelines, etc. :—

Over hatchways lifeline 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 <i>R. Guard</i>	<i>79.12</i> ✓	<i>3'-8"</i>	<i>3.25 x 1.66</i>	<i>4</i>	<i>21.50</i> ✓	<i>15.8 sq ft.</i>
Forward Well	<i>69.8</i>	<i>4'-0"</i>	<i>3.25 x 1.66</i>	<i>4</i>	<i>21.50</i> ✓	<i>14 sq ft.</i>

State position of each freeing port ... } After Well: *2 feet 8" above deck*
 { Forward Well: *10 1/2" above deck*
 State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such: — *2 rods 7/8"*

Additional area where sheer is less than standard.

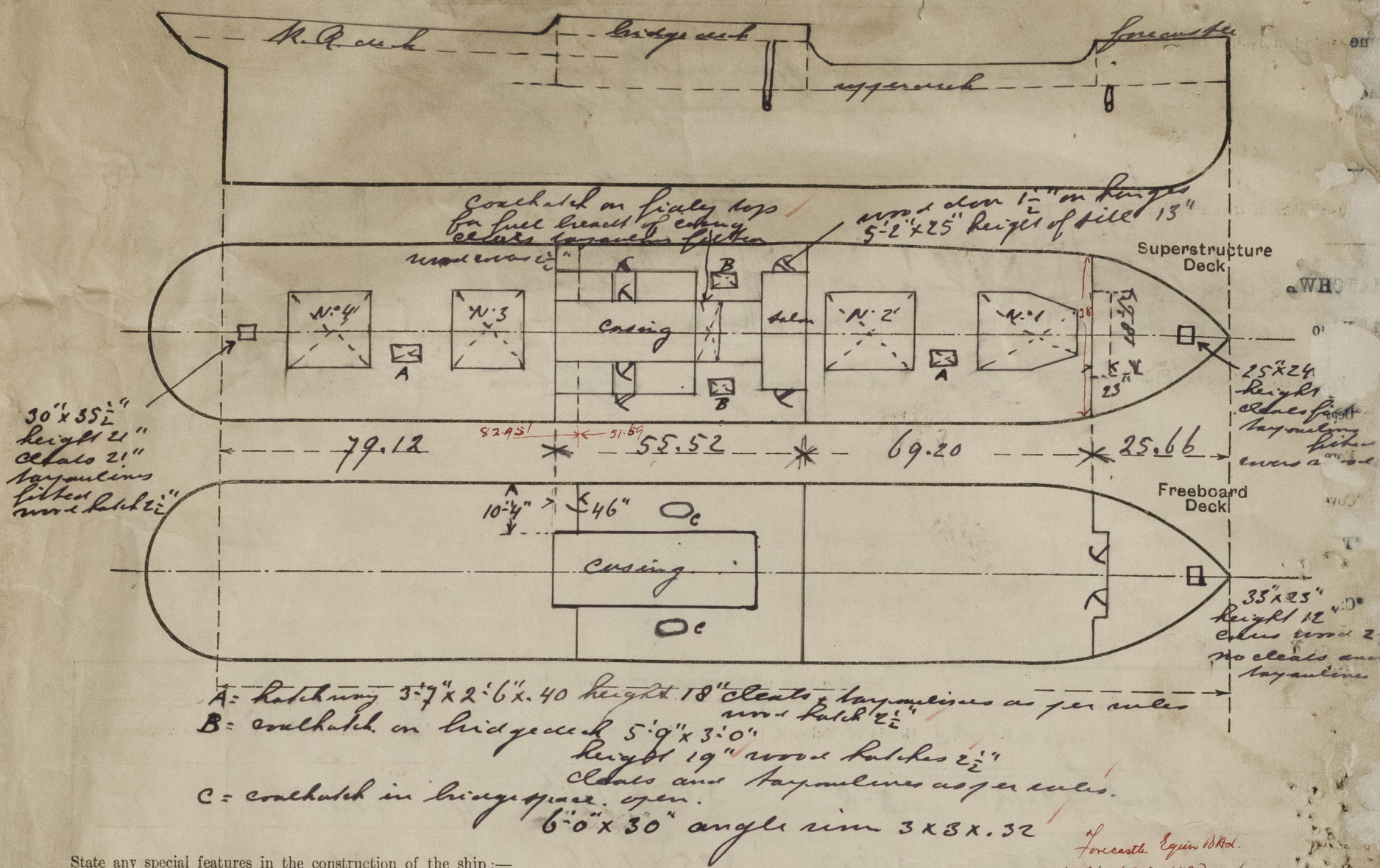
Particulars of Superstructures, Trunks, Casings, Deckhouses.

	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 ... }	.30	.26	L 3 1/2 x 3 x .32	33"	none	none		
Bridge, Forward Bulkhead ... }	.34	.30	L 6 1/2 x 3 x .40	30"	bushes	none	—	
Forecastle Bulkhead ... ..	.30	.30	L 3 x 2 1/2 x .28	+ 28"	none	4' 11" x 2' 0"	10	
Trunk, Aft								
Trunk, Forward								
Exposed Machinery Casings on Fore- board or Raised Quarter Decks ...								
Exposed Machinery Casings on Super- structure Decks ...	.30		3 x 2 1/2 x .22	+ 30"	none	5' 2" x 2' 0"	15"	7' 0" x 5' 0"
Machinery Casings within Superstruc- tures 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	}	none		
Bridge, After Bulkhead			...	...
Bridge, Forward Bulkhead	...	...	none	
Forecastle Bulkhead	...	...	...
Exposed Machinery Casings on Free-board or Raised Quarter Decks	...	...	...	Steel casings on hinges manipulated from both sides.
Exposed Machinery Casings on Super-structure Decks	...	...	...	Steel casings on hinges manipulated from one side.
Machinery Casings within Superstruc-tures not fitted with Class I Closing Appliances	...	...	...
Decompression on Flush Deck Ships	...	...	...

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:—

The vessel has been examined afloat. As this yard is no longer in existence, particulars of these etc. could not be obtained.

A plan with displacement scale for your guidance has been enclosed herewith.

Builder's name and yard number *N. V. Werf Rijkse & Co*

Names of sister ships ☒

Owners *Schepvaart en Heenkolen Maatschappij*

Fee *f 102.00* Received by me *J. Herwerden*



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