

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Index. No. 31722
(For London Office only.)

APR 10 1937

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having a BridgePort of Survey Amsterdam

(Type of Superstructures.)

Date of Survey 9th of April 1937

Ship's Name

Nationality and Port of Registry

Official Number

Gross Tonnage

Date of Build

S.S. "DOMINIA"
now "NIKOLAI EJOF"RUSSIAN92731926VLADIVOSTOK6 moName of Surveyor H. P. JonkerMoulded Dimensions: Length 475-0 Breadth 50-9 Depth 40-9Moulded displacement at moulded draught = 85 per cent. of moulded depth 21000 tonsCoefficient of fineness for use with Tables .789Particulars of Classification +100A1with freeboard

Depth for Freeboard (D)

Moulded depth ... 40.75Stringer plate05Sheathing on exposed deck .25 $T \left(\frac{L-S}{L} \right) = .25 \times .6977 = .17$ Depth for Freeboard (D) = 40.94

Depth correction

(a) Where D is greater than Table depth
(D - Table depth) R = $(40.94 - 31.64) R = 27.9$ (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) 58.75Standard Round of Beam = $\frac{B \times 12}{50} = 14.10$ Ship's Round of Beam = 14.50Difference .40

Restricted to

Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.40}{4} \times .6977 = -.07$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...					
" overhang ...					
R.Q.D. enclosed ...					
" overhang ...	<u>143.59</u>				
Bridge enclosed <u>equivalent</u>	<u>142-4 1/2</u>	<u>143.59</u>	<u>8-0</u>	<input checked="" type="checkbox"/>	<u>143.59</u>
" overhang aft ...	<u>2-9 1/2</u>				
" overhang forward					
F'ble enclosed ...					
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" " forward					
Total ...	<u>143.59</u>	<u>143.59</u>			<u>143.59</u>

Standard Height of Superstructure 7.50" " R.Q.D. ☒Deduction for complete superstructure 42.00Percentage covered $\frac{S}{L} = 30.23$ " " $\frac{S_1}{L} = 30.23$ " " $\frac{E}{L} = 30.23$ Percentage from Table, Line A. ☒(corrected for absence of forecastle (if required)) ☒Percentage from Table, Line B. 19.19 - 5 = 14.19(corrected for absence of forecastle (if required)) ☒Interpolation for bridge less than 2L (if required) ☒Deduction = 42.00 \times 14.19 = 5.96

SHEER CORRECTION.

Plotted

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	<u>54.50</u>	1		<u>54.50</u>	<u>37 1/2</u>	<u>37.5</u>	1		<u>37.50</u>
1/8 L from A.P. ...	<u>25.59</u>	4		<u>102.36</u>	<u>15</u>	<u>13.0</u>	4		<u>52.00</u>
2/8 L " ...	<u>6.32</u>	2		<u>12.64</u>	<u>4</u>	<u>-1.4</u>	2		<u>-3.40</u>
Amidships ...	-	4		-	0	-	4		-
3/8 L from F.P. ...	<u>12.64</u>	2		<u>25.28</u>	<u>10 1/2</u>	<u>14.8</u>	2		<u>29.60</u>
1/8 L " ...	<u>51.18</u>	4		<u>204.72</u>	<u>42 1/2</u>	<u>42.8</u>	4		<u>171.20</u>
F.P. ...	<u>115.00</u>	1		<u>115.00</u>	<u>103 1/2</u>	<u>103.5</u>	1		<u>103.50</u>
Total ...				<u>514.50</u>					<u>390.40</u>

Mean actual sheer aft = Deficient
Mean standard sheer aftMean actual sheer forward = Deficient
Mean standard sheer forwardLength of enclosed superstructure forward of amidships = } Deficient
" " aft of " = } sheers.Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{127.1}{18} \left(.75 - \frac{.1516}{.5984} \right) = + 4.22$ If limited on account of midship superstructure. ☒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.

IN WAY OF MARKING

Depth to Freeboard Deck $\Delta =$ 41.00 Ft.Summer freeboard = 4.96Moulded draught (d) = 29.0427.50

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = 7.26 = 7 1/46.87 = 6 3/4Addition for Winter North Atlantic Freeboard (if required) = ☒

Deduction for Fresh Water.

Displacement in salt water at summer load water line

 $\Delta =$ 18049 - 17020

Tons per inch immersion at summer load water line

 $T =$ 54.39 - 56.5Deduction = $\frac{\Delta}{40T}$ inches $= \frac{1029}{2576} = .399$ 1.53 = 1 1/2

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient .789 + .68
1.36Depth Correction ... 27.90Deduction for superstructures ... 5.96Sheer correction ... 4.22Round of Beam correction07Correction for Thickness of Deck amidships36Other corrections, scantlings, AND TO ... 33.15 44.65

CORRESPOND TO A SUMMER MOULDED DRAUGHT OF 27'6"

Summer Freeboard = 43.56 - 162.00

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

Tropical Fresh Water Line above Centre of Disc ... 14 1/4Fresh Water Line " " ... 7 1/2Tropical Line " " ... 6 3/4Winter Line below " " ... 6 3/4Winter North Atlantic Line " " ☒Tropical Fresh Water Freeboard ... 12' 3 3/4"Fresh Water " " ... 12' 10 1/2"Tropical " " ... 12' 11 1/4"Winter " " ... 14' 0 3/4"Winter North Atlantic " " ☒

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MARKING FORM
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PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS									
Description of Hatchway	N°1	N°2	N°3	N°4	N°5	To store rooms above fore peak	On after deck to tween deck		
Dimensions of Hatchway	24-9 x 20-0	30-8 1/2 x 20-0	25-1 1/2 x 20-0	24-6 x 20-0	24-6 x 20-0	4-0 x 3-0	6-0 x 5-6		
COAMINGS	Height above Deck	24"	10"	10"	10"	11"	21"	all above wood deck	
	Thickness	.44	.44	.44	.44	.44	.44		
	Sides	.44	.44	.44	.44	.44	.44		
	Stiffeners	9 x 3 1/2 x 50	✓	✓	✓	✓	✓		
HATCH BEAMS	Number	4	5	4	4	5			
	Spacing	4-11 1/2	5-1 1/2	5-0 1/4	5-0 1/4	4-7			
	Scantling and Sketch	4 x 3 x .44	4 x 3 x .44	4 x 3 x .44	4 x 3 x .44	4 x 3 x .44	✓		
	Bearing Surface	10 x .36	14 x .36	14 x .36	14 x .36	14 x .36	✓		
FORE AND AFTERS	Number	✓	✓	✓	✓	✓			
	Spacing	✓	✓	✓	✓	✓			
	Unsupported Lengths	✓	✓	✓	✓	✓			
	Scantling and Sketch	✓	✓	✓	✓	✓			
HATCH COVERS	Material	pine	pine	pine	pine	pine	pine		
	Thickness	3"	3"	3"	3"	3"	3"		
	How fitted	longitudinal	longitudinal	longitudinal	longitudinal	longitudinal	longitudinal		
	Bearing Surface	4"	4"	4"	4"	4"	4"		
Spacing of Cleats	24	24	24	24	24	24	24		
Number of Tarpaulins	2	2	2	2	2	2	2		

Particulars of fiddle, funnel and ventilator coamings:—
Triobley gratings fitted with hinged plate covers
Engine room skylights of steel, strongly constructed
Ventilators & funnel, coamings in efficient condition

Particulars of Flush Bunker Scuttles:—

none

Particulars of Companionways:—
Steel companion way between N°1 & 2 hatchway 6-6 x 4-6 x 7-3 high steel hinged doors 5-0 x 4-0 sill 12" above wood deck, operated from both sides
Steel companion way between N°2 & 3 hatchway 8-6 x 8-6 x 8-0 high wood hinged doors 5-0 x 2-2 x 1 3/4 teak with 1 panel sill 12" above wood deck operated from both sides
Steel companion way between N°4 & 5 hatchway 6-7 x 2-5 x 5-8 high wood hinged door 4-4 x 2-0 x 1 3/4 teak with 1 panel sill 12" above wood deck operated from both sides
Companion built in steel deck house on after deck, wood hinged doors 5-4 x 2-0 x 1 3/4 teak with 1 panel sill 12" above wood deck operated from both sides
Companion way in bridge space, built in engine room casing wood door 5-0 x 2-0 x 1 3/4 teak sill 15" operated from both sides

Particulars of Ventilators in exposed positions on freeboard and superstructure decks:—
On fore board, deck to store room, fore one mushroom vent 9 1/2 x 12 diam
To hold and tween decks: 3 vent: 36 x 18 diam x 40, 2 vent: 36 x 15 diam x 40, 1 vent: 36 x 12 diam x 36, 2 vent: 36 x 9 diam x 32
2 vent: 8-6 x 18 diam x 40 bracketed to bridge front bulkhead, one mushroom vent: 13 x 6 diam x 36
On after deck: to hold & tween decks: 1 vent: 35 x 18 diam x 40, 3 vent 30 x 18 diam x 40, 2 vent 30 x 12 diam x 36
3 vent: 30 x 9 diam x 36, 2 vent 26 x 9 diam x 36, one gooseneck vent: 7 x 4 x 14 high x 26
one vent 8-6 x 18 diam x 40 bracketed to after bridge bulkhead
On bridge deck 26 gooseneck vent 7 x 4 x 14 high x 26 and 26 mushroom vent: 10 x 8 diam x 40

Particulars of Air Pipes in exposed positions on freeboard, raised quarter, or superstructure decks:—
On forward deck: Air pipes to fore peak tank, deep tank and double bottom tanks 16 x 3 diam
On after deck: Air pipes to after peak tank 20 x 5 diam to deep tanks & double bottom tanks 16 x 3 diam & 14 x 2 1/2 diam
On 15 hold deck: Air pipes to fresh water tanks 4 of 14 x 2 1/2 diam and of 14 x 3 diam to 6 air pipes to 6 oil fuel bunkers 2 of 15 x 4 diam
All air pipes are provided with canvas covers for closing the openings

Particulars of Gangway Cargo and Coaling Ports:—

All ventilator coamings are provided with wooden hatches and canvas covers for closing the openings
All gooseneck ventilators are provided with canvas covers for closing the openings

Particulars of Scuppers and Sanitary Discharge Pipes:—
Freeboard deck: on forward and after deck, and in way of bridge space, discharging through ship side by 4 scupper pipes about 4-0 below freeboard deck
All sanitary discharge pipes from spaces, built on freeboard deck, discharging through ship side below freeboard deck, storm valves fitted in steel castings to shell
Upper tween deck discharge through ship side by 10 scupper pipes 2 1/2 diam on S.B., P.S. about 18" below tween deck, only storm valve's fitted, space here, no deck permanently closed by solid plates & supplied to the bilges

Particulars of Side Scuttles:—

Side Scuttles below freeboard deck are fitted with permanent hinged deadlights
Side Scuttles in bridge space are fitted with portable dead lights

Particulars of Guard Rails:—

On Freeboard deck: On forward and after deck open rail 4-2 high 3" rods, stanchions spaced 4-8 apart
On Bridge deck: open rail 3-9 high 3" rods, stanchions spaced 4-0 apart

Particulars of Gangways, Lifelines, etc.:—

Access to all compartments is possible through the upper tween deck
no life lines or gangways fitted on weather deck

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 Deck			open rail			
Forward Well Deck			open rail	✓		

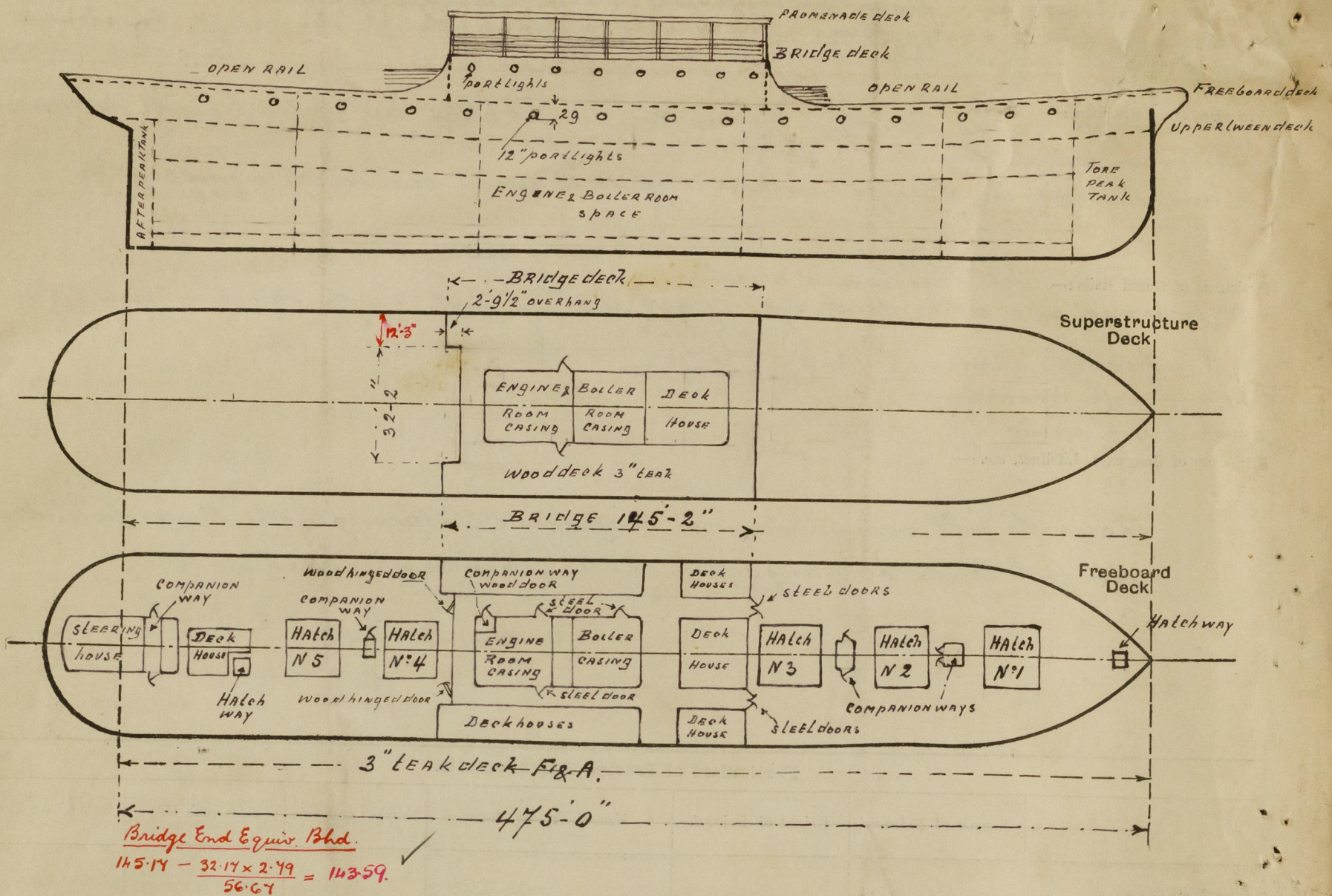
State position of each freeing port (F. and A. position and height above deck edge) { After Well:—
 State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:—
 Additional area where sheer is less than standard.

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	15 x 32	.30	4 x 3 x .40	24	✓	5-6 x 2-5	12"	8-0"
Bridge, Forward Bulkhead	15 x 40	.44	8 1/2 x 3 1/2 x .50	24 to 36	✓	5-6 x 3-0	12"	8-0"
Forecastle Bulkhead								
Trunk, Aft								
Trunk, Forward								
Exposed Machinery Casings on Freeboard or Raised Quarter Decks								
Exposed Machinery Casings on Superstructure Decks	12 x 36	.34	4 3/2 x 3 x .36	33"	Continuous	5-9 x 2-0	9"	7-9"
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	15 x 36	.34	4 3/2 x 3 x .36	33"	Continuous	5-3 x 2-0	14"	8-0"
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	two hinged wood doors 2" pine, operated from both sides
Bridge, Forward Bulkhead	two hinged steel doors (in 2 halves) operated from both sides
Forecastle Bulkhead	
Exposed Machinery Casings on Freeboard or Raised Quarter Decks	
Exposed Machinery Casings on Superstructure Decks	2 steel doors to engine room, operated from both sides
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	2 steel doors (in 2 halves) to engine room operated from both sides
Deckhouses on Flush Deck Ships	1 steel door (in 2 halves) to stoke hold operated from both sides

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:—

The vessel has been examined afloat, converted in a ordinary cargo steamer, and all alteration in connection therewith have all been carried out as per approved plan

Builder's name and yard number Messrs. Swan, Hunter, Wigham Richardson Ltd. Yard N° 1216

Names of sister ships ✓

Owners GOSTREST DALSTROI

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