

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having Bridge

Port of Survey London

Date of Survey 2nd June 1932

Name of Surveyor Thomas E. Sowden

Particulars of Classification +100 A-1 with freeboard.

(Type of Superstructures.)

Ship's Name "Dominia" Nationality and Port of Registry Russian British London Official Number 148,708 Gross Tonnage 9273 Date of Build 1926-6

Moulded Dimensions: Length 475 Breadth 58-9 Depth 40-9

Moulded displacement at moulded draught = 85 per cent. of moulded depth 21800 tons

Coefficient of fineness for use with Tables 789

Depth for Freeboard (D)	Depth correction	Round of Beam correction
Moulded depth ... <u>40.75</u>	(a) Where D is greater than Table depth (D - Table depth) R = <u>(40.97 - 31.67)3 = 27.9</u>	Moulded Breadth (B) <u>58.75</u>
Stringer plate <u>60</u> ... <u>05</u>	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =	Standard Round of Beam = $\frac{B \times 12}{50} = \underline{14.10}$
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) = \frac{3}{12} (1 - 30.56) = \underline{17}$	If restricted by superstructures	Ship's Round of Beam = <u>14.50</u>
Depth for Freeboard (D) = <u>40.97</u>		Difference <u>40</u>
		Restricted to
		Correction = $\frac{\text{Diff}^e}{4} \times \left(1 - \frac{S_1}{L} \right) = \underline{4.08}$

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 ...					
Bridge enclosed ...	<u>145-2</u>	<u>108.87</u>	<u>8-0</u>		<u>108.87</u>
" overhang aft ...					
" overhang forward ...					
F'cle enclosed ...					
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" forward ...					
Total ...	<u>145.16</u>	<u>108.87</u>			<u>108.87</u>

Standard Height of Superstructure 7.5

" " R.Q.D. 42

Deduction for complete superstructure 42

Percentage covered $\frac{S}{L} = \underline{30.56}$

" " $\frac{S_1}{L} = \underline{22.92}$

" " $\frac{E}{L} = \underline{22.92}$

Percentage from Table, Line A.
(corrected for absence of fore-castle (if required))

Percentage from Table, Line B. 9.54 (no f'cle)
(corrected for absence of fore-castle (if required))

Interpolation for bridge less than 2L (if required) ✓

Deduction = 42 × 0.954 = 4.01

Plotted

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	<u>57.5</u>	1		<u>57.50</u>	<u>37.5</u>	<u>37.5</u>	1		<u>37.50</u>
$\frac{1}{8}$ L from A.P. ...	<u>25.59</u>	4		<u>102.36</u>	<u>15</u>	<u>13</u>	4		<u>52.00</u>
$\frac{2}{8}$ L " ...	<u>6.32</u>	2		<u>12.64</u>	<u>4</u>	<u>-1.7</u>	2		<u>-3.40</u>
Amidships ...		4					4		
$\frac{3}{8}$ L from F.P. ...	<u>12.64</u>	2		<u>25.28</u>	<u>10.5</u>	<u>14.8</u>	2		<u>29.60</u>
$\frac{4}{8}$ L " ...	<u>51.18</u>	4		<u>204.72</u>	<u>42.5</u>	<u>42.8</u>	4		<u>171.20</u>
F.P. ...	<u>115.00</u>	1		<u>115.00</u>	<u>103.5</u>	<u>103.5</u>	1		<u>103.50</u>
Total ...				<u>517.50</u>					<u>390.40</u>

Mean actual sheer aft = Defic

Mean standard sheer aft = Defic

Mean actual sheer forward = Defic

Mean standard sheer forward = Defic

Length of enclosed superstructure forward of amidships = Sheer defic

" " aft of " = ✓

Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{75-S}{2L} \right) = \frac{127.175 - 152.8}{18} = \underline{+4.22}$

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.

Addition for Winter and Winter North Atlantic Freeboard.

IN WAY OF MARKING

Depth to Freeboard Deck = 41.00

Summer freeboard = 11.96

Moulded draught (d) = 29.04

Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 7.26 7/4

Addition for Winter North Atlantic Freeboard (if required) =

Deduction for Fresh Water.

Displacement in salt water at summer load water line

 $\Delta = \underline{18049}$

Tons per inch immersion at summer load water line

T = 57.39Deduction = $\frac{\Delta}{40T}$ inches= 7.867 3/4

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient 789+681.36Depth Correction ... 27.90Deduction for superstructures ... 4.01Sheer correction ... 4.22Round of Beam correction ... 0.08Correction for Thickness of Deck amidships ... 36Other corrections, scantlings, etc. ... 12.71Mean 1.7Total 203.12 = 36Summer Freeboard = 143.5087.88.632SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck:—

Tropical Fresh Water Line above Centre of Disc	... <u>15</u> ...
Fresh Water Line	... <u>7 3/4</u> ...
Tropical Line	... <u>7 1/4</u> ...
Winter Line below	... <u>7 1/4</u> ...
Winter North Atlantic Line	... <u>7 1/4</u> ...

Tropical Fresh Water Freeboard ... 10-8 1/2Fresh Water " ... 11-3 3/4Tropical " ... 11-4 1/4Winter " ... 12-6 3/4Winter North Atlantic " ... 12-6 3/4

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS						
Description of Hatchway	N ^o . 1 U.B.*	N ^o 2 U.B.*	N ^o 3 U.B.*	N ^o 4 U.B.*	N ^o 5 U.B.*	
Dimensions of Hatchway	11'-0" x 11'-3"	14' x 11'	14' x 11'	14' x 11'	14' x 11'	
COAMINGS { Height above Deck	24	18	18	18	18"	
{ Thickness { Sides	44	44				
{ Ends	44	44				
{ Stiffeners	44	44				
{ Brackets, Stays	1 B.A.	-				
HATCH BEAMS { Number	1	2				
{ Spacing	5'-7½"	4'-8"				
{ Scantling and Sketch						
{ Bearing Surface	3	3				
FORE AND AFTERS { Number						
{ Spacing						
{ Unsupported Lengths						
{ Scantling* and Sketch						
{ Bearing Surface						
HATCH COVERS { Material	Pine	Pine				
{ Thickness	3	3				
{ How fitted	X-a	X-a				
{ Bearing Surface	3"	3"				
Spacing of Cleats	20"	24"				
Number of Tarpaulins	2	2				

*Are wood fore and afters steel shod at all bearing surfaces? Yes.

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:—

Huddley gratings fitted with hinged plate covers ✓
 Engine Skylights of steel strongly constructed ✓
 Ventilator & funnel coamings in efficient condition ✓

Particulars of Flush Bunker Scuttles:—

None

Particulars of Companionways :—

[illegible]

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

Fore decks:-		Aft Decks:-	
1 @ 18" x 36" high	To hold	1 S.N. 7" x 4" x 14" high	To turn D ⁿ
2 @ 15 x 36	Turn D ⁿ	6 @ 12" x 30"	"
1 M.V. 12" x 10"	Up fore	4 @ 9" x 30"	"
1 @ 18" x 30"	Gold	2 @ 18" x 30"	"
1 @ 12" x 25"	Turn D ⁿ	1 @ 9" x 26"	"
3 @ 12" x 36"	"		
1 @ 9" x 36"	"		
2 @ 8" x 36"	"		
1 M.V. 8" x 12"	"		

All Vents fitted with wood plugs

All Vents fitted with wood plugs & canvas covers.

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

[illegible]

Particulars of Gangway Cargo and Coaling Ports:—

None.

"Dominia"

Particulars of Scuppers and Sanitary Discharge Pipes:—

Discharges from all spaces above and below the freeboard deck led below the freeboard deck & fitted with Storm valves at ship side and flap valves at unmet ends ✓

Particulars of Side Scuttles :—

Below Keelboard deck fitted with permanent hinged deadlights & plugs
Above " " " " portable plugs. ✓

Particulars of Guard Rails :—

On Forward & After Decks:- 4'-2" high with 3 rods & wood rail. Stanchions 4'-8" apart.

Particulars of Gangways, Lifelines, etc. :—

Access to all compartments is possible through the Upper tween decks
No lifelines 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						
Forward Well						

Open rails clear of Bridge

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	15" x 32	26	3 x 2½ x 34	32"	Rwd to deck angles	Open alleyway	-	8'-0"
Bridge, Forward Bulkhead	15" x 48	44	8½ x 3½ x 50 BA	24" x 36"	Lugs T & R	205'6" x 3'0"	12"	8'-0"
Forecastle Bulkhead								
Trunk, Aft								
Trunk, Forward								
Exposed Machinery Casings on Free-board or Raised Quarter Decks	15" x 36	34	3½ x 3 x 36	33	Contin.	205'6" x 2'0"	14	8'-0"
Exposed Machinery Casings on Superstructure Decks	12 x 36	34	3½ x 3 x 36	33	"	205'9" x 2'	13	7'-9"
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).

Part of Ship	Particulars
Poop Bulkhead	...
Raised Quarter Deck Bulkhead	...
Bridge, After Bulkhead	...
Bridge, Forward Bulkhead	...
Forecastle Bulkhead	...
Exposed Machinery Casings on Free-board or Raised Quarter Decks	...
Exposed Machinery Casings on Super-structure Decks	...
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	...
Deckhouses on Flush Deck Ships	...

Particulars	Particulars
3" Shifting Boards 27" high in riveted channels.	
2 hinged steel doors (in 2 halves) operated from both sides ✓	
2 Steel Doors (in 2 halves) to E.R. Operated from both sides. ✓	
2 Hinged Steel doors Operated from both Sides. ✓	

Small Hatches:-

Fbd D^r. Ford.

	4' x 3' x 11" high	with cleats batten covers & tarpaulins,	to Y. Peak.	✓
	2 or 9' x 4'-4" x 21"	" " " "	" " " "	
" " Afr.	4'-0" x 4'-0" x 19"	" " " "	" " " "	tween decks ✓
	5'-6" x 6'-0" x 22"	" " " "	" " " "	" " " "

This survey was carried out afloat. The vessel being laid up.
The S.S. h.o.t. is complete except for the testing of h.o.4 Deep Tank and the F.W tanks and will be completed before the vessel is again commissioned.

Builder's name and yard number. Messrs Swan Hunter & Wigham Richardson Ltd No 1216

Names of sister ships

Telegraph. Construction & Maintenance Co. (Sir G. R. Clarke Mgr)

Fee £ 17 : 0 : 0 Received by me

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