

Rpt. C.11.

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, Sailing Ship, Tanker
having RAISED QUARTER DECK BRIDGE & FORECASTLE.
(Type of Superstructures.)

Port of Survey LIVERPOOL.

Date of Survey DEC. 1932.

Name of Surveyor J. Skelton

Particulars of Classification * 100A1.
55 Liv. No. 2-28.

Ship's Name LADY THOMAS Nationality and Port of Registry BRITISH LIVERPOOL. Official Number 143633. Gross Tonnage 294. Date of Build 1920-4.

Moulded Dimensions: Length 23.35 Breadth 23.5 Depth 11.1
Moulded displacement at moulded draught = 85 per cent. of moulded depth 529 tons
Coefficient of fineness for use with Tables .679 68 lowest in Table

Depth for Freeboard (D)		Depth correction		Round of Beam correction	
Moulded depth	11.08	(a) Where D is greater than Table depth (D - Table depth) R =		Moulded Breadth (B)	23.5
Stringer plate	11.1	(11.1 - 8.22) .949 = + 2.74		Standard Round of Beam = $\frac{B \times 12}{50}$	5.64
Sheathing on exposed deck	11.1	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =		Ship's Round of Beam	5.75
T $\left(\frac{L-S}{L}\right)$ =		If restricted by superstructures		Difference	.11
Depth for Freeboard (D) =	11.1			Restricted to	
				Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L}\right)$	$\frac{.11}{4} \times .3719 =$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	
Poop enclosed ...	✓					Standard Height of Superstructure <u>6.0</u>
„ overhang ...	✓					„ „ R.Q.D. <u>3.155</u>
R.Q.D. enclosed ...	46.00	46.00	3.2		46.00	Deduction for complete superstructure <u>18.335</u>
„ overhang ...	✓					Percentage covered $\frac{S}{L} =$ <u>63.44</u>
Bridge enclosed ...	9.00	9.00	7.0		9.00	„ „ $\frac{S_1}{L} =$ <u>62.81</u>
„ overhang aft ...	✓					„ „ $\frac{E}{L} =$ <u>62.81</u>
„ overhang forward ...	21.70	21.70	6.9		21.70	Percentage from Table, Line A. <u>50.77</u>
F'cle enclosed <u>Equival</u> ...	20.0	20.0				(corrected for absence of forecastle (if required))
„ overhang ...	3.3	.77			.77	Percentage from Table, Line B.
Trunk aft ...						(corrected for absence of forecastle (if required))
„ forward ...						Interpolation for bridge less than .2L (if required) ✓
Tonnage opening aft ...						Deduction = <u>- 9.31</u>
„ „ forward						
Total ...	78.25	77.47			77.47	

SHEER CORRECTION.

Station	Standard Ordinate	S	Product	Actual Ordinate	Effective Ordinate	S	Product	
A.P. ...	22.33	1	22.33	21.00	21.00	1	21.00	Mean actual sheer aft = <u>Deficient</u> > 75%
$\frac{1}{2}$ L from A.P. ...	9.94	4	39.76	9.08	9.08	4	36.32	Mean actual sheer forward = <u>Even</u>
$\frac{3}{4}$ L „ ...	2.45	2	4.90	2.26	2.26	2	4.52	Mean standard sheer forward
Amidships ...		4				4		Length of enclosed superstructure forward of amidships = <u>nil</u>
$\frac{3}{4}$ L from F.P. ...	4.91	2	9.82	5.22	5.22	2	10.44	„ „ aft of „ = <u>4.46</u>
$\frac{1}{2}$ L „ ...	19.88	4	79.52	20.93	20.93	4	83.72	
F.P. ...	44.67	1	44.67	48.50	48.50	1	48.50	
Total ...			201.00				204.50	

Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{.75 - S}{2L}\right) = \frac{3.5}{18} \left(\frac{.75 - .3172}{.4328}\right) = -.08$
If limited on account of midship superstructure. $\frac{.046}{.200} = -.02$ If limited to maximum allowance of $1\frac{1}{2}$ 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 ✓
Depth to Freeboard Deck = <u>11.1</u>	Δ =	
Summer freeboard = <u>.48</u>	Tons per inch immersion at summer load water line	Depth Correction ... <u>2.74</u>
Moulded draught (d) = <u>10.63</u>	T =	Deduction for superstructures ... <u>9.31</u>
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = <u>2.66 = 2$\frac{3}{4}$</u>	Deduction = $\frac{\Delta}{40T}$ inches =	Sheer correction ... <u>.02</u>
Addition for Winter North Atlantic Freeboard (if required) =		Round of Beam correction ... <u>.01</u>
		Correction for Thickness of Deck amidships ...
		Other corrections, scantlings, etc. ...
		2.74 9.34 - 6.60
		Summer Freeboard = <u>5.73</u>

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

Tropical Fresh Water Line above Centre of Disc ...	Tropical Fresh Water Freeboard ...
Fresh Water Line „ „ ...	Fresh Water „ „ ...
Tropical Line „ „ ...	Tropical „ „ ...
Winter Line below „ „ ...	Winter „ „ ...
Winter North Atlantic Line „ „ ...	Winter North Atlantic „ „ ...

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS									
Description of Hatchway	...	...	...	ONE ONLY.					
Dimensions of Hatchway	...	...	...	35'-0" X 13'-0"					
COAMINGS	{	Height above Deck	...	30"					
		Thickness { Sides	...	44.					
		Thickness { Ends	...	44.					
		Stiffeners	...	8x3x38 B.A.					
Brackets, Stays	...	7"x30 B.P. <i>Red</i>							
HATCH BEAMS	{	Number	...	6					
		Spacing	...	5'-0"					
		Scantling and Sketch	...	7" 12"x44. JL 3x3x38 L5.					
		Bearing Surface	...	2 3/4"					
FORE AND AFTERS	{	Number	...						
		Spacing	...						
		Unsupported Lengths	...						
		Scantling* and Sketch	...	NONE.					
Bearing Surface	...								
HATCH COVERS	{	Material	...	W.P.					
		Thickness	...	2 1/2"					
		How fitted	...	F.A.					
		Bearing Surface	...	3"					
Spacing of Cleats	...	...	...	18"					
Number of Tarpaulins	...	...	...	2					
<p>*Are wood fore and afters steel shod at all bearing surfaces? <input checked="" type="checkbox"/></p> <p>Are battens and wedges efficient and in good condition? <i>Yes.</i></p> <p>Are tarpaulins in good condition and in accordance with rule requirements? <i>Yes.</i></p> <p>Are lashings provided in accordance with rule requirements? <i>Yes.</i></p>									

Particulars of fiddley, funnel and ventilator coamings:—

Grating covered with efficient hinged plate.
 Funnel & Vent. coamings in good condition.
 E.R. sky light. fastenings & glass light broken.

Particulars of Flush Bunker Scuttles:—

NONE.

Particulars of Companionways:—

NONE.

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

1^c 36" Coaming 8" Dia 5/16" T. to fore peak space. Metal Cap & canvas cover.
 2nd 5" " 6" " Mushroom. to Fore accommodation.
 1st 36" " 12" " 7/16" T. to Hold. Wood plug & canvas cover.

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

1^c 22" high. 3" Dia F.P. Space
 1^c 24" " 2" " F.P. Tank.
 1^c 9" 2" A.P. Tank.

Efficient Closing Appliances.

Particulars of Gangway Cargo and Coaling Ports:—

NONE.



© 2021

Lloyd's Register Foundation

Particulars of Scuppers and Sanitary Discharge Pipes:—

Sanitary Discharges. 2 1/2" below R.Q.D. also below Forecastle.
5" Dia fitted with Copper Valves.
Scupper marked "5" on plan

Particulars of Side Scuttles:—

9" Dia in forecstle, deadlights fitted.

Particulars of Guard Rails:—

Forecstle head. 3'-0" high. 4'-0" between stanchions. 2 rods.
3'-4" Bulwarks on Forecstle Well. R.Q.D.

Particulars of Gangways, Lifelines, etc.:—

~~NONE.~~

Stanchions, eyebolt lifelines available for use in any part of the ship which might have to be used by the crew in the regular working of the vessel.

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 R.Q.D. ...	46'-0"	3'-4"	3'-8 1/2" x 1'-6"	2 } 2.	11.0 7.75 sq ft	11.1 11.5 sq ft.
Forward Well ...	45'-1"	3'-4"	2'-7" x 1'-6"	3.	11.62 sq ft.	11'-00" sq ft.
State position of each freeing port ... After Well R.Q.D. — 16'-2" — 13'-9" — 8'-10" — B.D.G.E. (F. and A. position and height above deck edge) Forward Well: — B.D.G.E. 16'-3" — 9'-4" — 13'-1" — State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:— Apr. F.P. of Forecstle Well. one bar. all other shutters. 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 ...	7/16"	3/8"	Wood sheathed	30"	✓	None.	✓	3'-10"
Bridge, Forward Bulkhead ...	✓	1/4"	do.	30"	✓	None	✓	7'-0"
Forecastle Bulkhead ...	5/16"	1/4"	3 x 3 x 3.	30"	None	4'-4" x 1'-10"	18"	6'-9"
Trunk, Aft ...	✓							
Trunk, Forward ...	✓							
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...	5/16"	1/4"	2 1/2 x 2 1/2 x 25.	24"	12" x 12" Brackets	4'-6" x 1'-10"	24"	7'-0"
Exposed Machinery Casings on Super-structure 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 ...	✓
Raised Quarter Deck Bulkhead ...	✓
Bridge, After Bulkhead ...	No openings
Bridge, Forward Bulkhead ...	No openings
Forecastle Bulkhead ...	1 st 15. Wood doors efficiently constructed. Operated with side. 1 st Steel. Operated outside only.
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...	2 nd 25 1/2 Lvg. Sp. Steel doors fastening operated with side. Port. apr. St. apr. Wood.
Exposed Machinery Casings on Super-structure Decks ...	✓
Machinery Casings within Superstructures not fitted with Class I Closing Appliances ...	✓
Deckhouses on Flush Deck Ships ...	✓

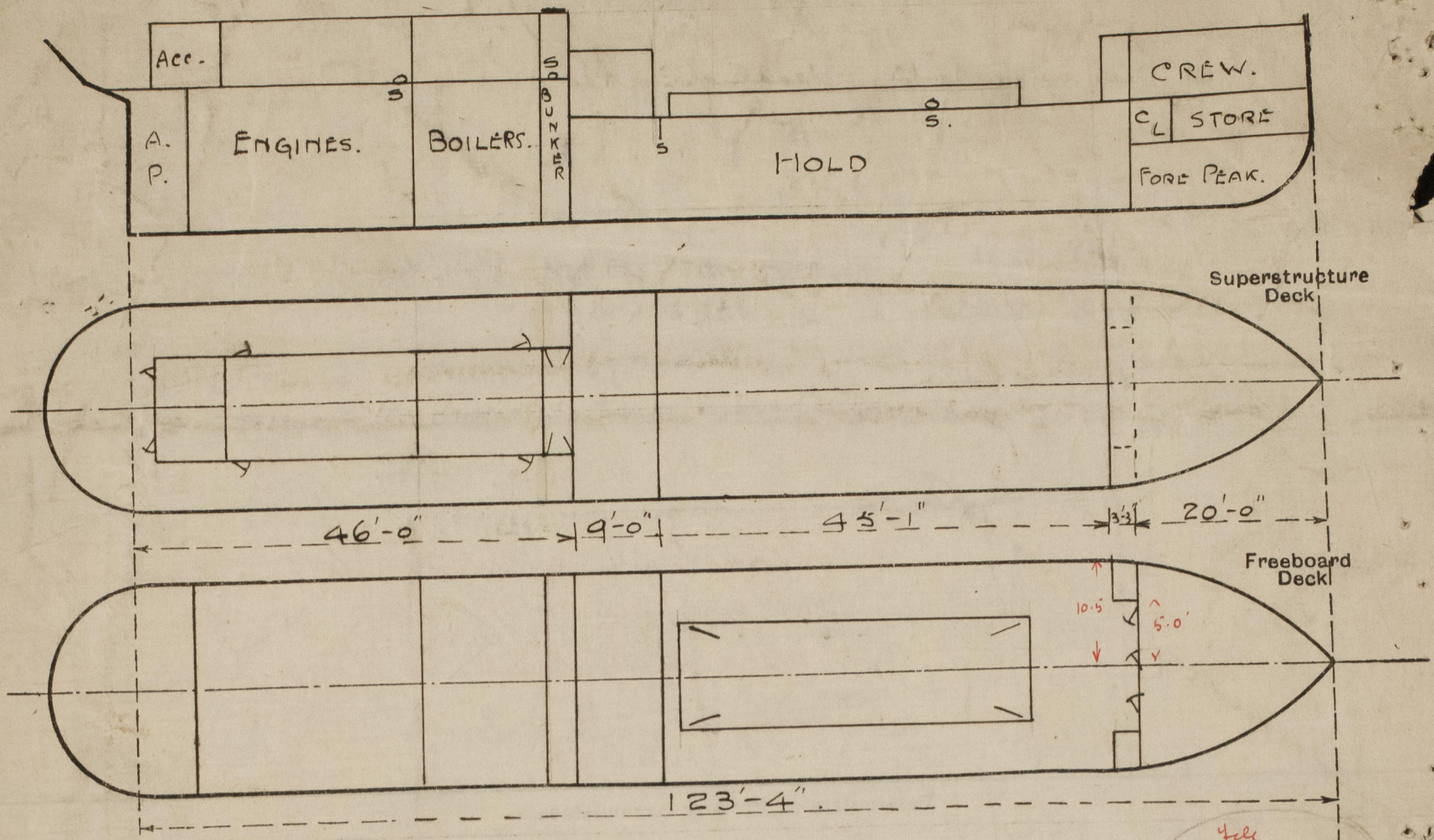
0015 2



© 2021

Lloyd's Register Foundation

Superstructure bulkheads, trunks, deckhouses, casings, cargo and coaling ways, 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 shown on the following sketches:—



4.46
 $23.25 - 5 \times 3.25$
 19.5
 $23.25 - 1.5$
 21.70

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

Bunker Hatch. 5'-6" x 13'-3". Coaming 10" high. 3" thick one lapaulin.
 2 1/2" W.P. covers fitted F&A. 3" bearing surface 24" spaced slats

Builder's name and yard number. ARDROSSAN D.D. S.B. Co. Ltd. N° 274.

Names of sister ships

OWNERS THOMAS COASTERS. Ltd.

Fee £ 3 : 8 : — Received by me



© 2021

Lloyd's Register Foundation