

Rpt. C.11.

Index. No. 21303
(For London Office only.)

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

how named "LADYCONNAUGHT"

No 100648

Computation of Freeboard for Steamer, Sailing Ship, Tug having <u>Loop, Bridge, & Sails</u>					Port of Survey <u>Liverpool</u>
(Type of Superstructures.)					Date of Survey <u>4th April & Subsequently</u>
Ship's Name <u>"LADY LEINSTER"</u>	Nationality and Port of Registry <u>British</u> <i>now Lady Killybegs Dublin Liverpool</i>	Official Number <u>132019</u>	Gross Tonnage <u>228.4</u>	Date of Build <u>1913</u> <i>Sho.</i>	Name of Surveyor <u>T.R. McIlvenna</u>
Moulded Dimensions: Length <u>32.4.7</u> Breadth <u>4.1.5</u> Depth <u>17.92</u>					Particulars of Classification <u>+100 A.I.</u>
Moulded displacement at moulded draught = 85 per cent. of moulded depth <u>3514</u> tons					<u>with rubboard</u>
Coefficient of fineness for use with Tables <u>599</u> <u>68 lowest</u>					<u>at No. 3. 4. 5. 6.</u>
Depth for Freeboard (D)			Depth correction		Round of Beam correction
Moulded depth <u>17.92</u>			(a) Where D is greater than Table depth (D - Table depth) R =		Moulded Breadth (B) <u>41.5</u>
Stringer plate <u>1.04</u>			(b) Where D is less than Table depth (if allowed) (Table depth - D) R =		Standard Round of Beam = $\frac{B \times 12}{50} =$ <u>9.96</u>
Sheathing on exposed deck <u>3"</u>			If restricted by superstructures <u>NIL</u>		Ship's Round of Beam = <u>4"</u>
$T \left(\frac{L-S}{L} \right) = .25 \times .0968$ <u>.02</u>			<u>YES</u>		Difference <u>5.96</u>
Depth for Freeboard (D) = <u>17.98</u>					Restricted to
					Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{5.96}{4} \times \frac{2132}{2132} = +.32$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	
Poop enclosed	52.50	52.50	7.3		52.50	Standard Height of Superstructure <u>6.75</u>
" overhang						" " R.Q.D.
R.Q.D. enclosed						Deduction for complete superstructure <u>36.98</u>
" overhang						Percentage covered $\frac{S}{L} =$ <u>90.32</u>
Bridge enclosed	123.75	123.75	7.3-7.6		123.75	" " $\frac{S_1}{L} =$ <u>78.68</u>
" overhang aft	38.00	28.50			28.50	" " $\frac{E}{L} =$ <u>78.68</u>
" overhang forward	2.50	1.25			1.25	Percentage from Table, Line A.
P'cle enclosed open	76.50	49.48	10.9		49.48	(corrected for absence of forecastle (if required))
" overhang						Percentage from Table, Line B.
Trunk aft						(corrected for absence of forecastle (if required)) <u>73.68</u>
" forward						Interpolation for bridge less than .2L (if required)
Tonnage opening aft						Deduction = <u>36.98 x .7368 = -27.25</u>
" forward						
Total	293.25	255.48			255.48	

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product	
A.P.	42.47	1		42.47	38"	38.00	1		38.00	Mean actual sheer aft = <u>Deficient</u>
L from A.P.	18.90	4		75.60	8 1/2"	13.43	4		53.72	Mean actual sheer forward = <u>Deficient .846 Standard</u>
L "	4.67	2		9.34	1 1/2"	3.36	2		6.72	Mean standard sheer forward
amidships		4			0		4			Length of enclosed superstructure forward of amidships = <u>.209</u>
L from F.P.	9.34	2		18.68	8 1/2"	8.09	2		16.18	" " aft of " = <u>.172</u>
L "	37.80	4		151.20	30 1/2"	32.38	4		129.52	
A.P.	84.94	1		84.94	70"	70.00	1		70.00	
Total				382.23					314.14	
Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{68.09}{18} \left(.75 - \frac{4516}{2132} \right) = +1.13$										
If limited on account of midship superstructure.										
										Mean actual sheer aft = <u>Deficient</u>
										Mean standard sheer aft
										Mean actual sheer forward = <u>Deficient .846 Standard</u>
										Mean standard sheer forward
										Length of enclosed superstructure forward of amidships = <u>.209</u>
										" " aft of " = <u>.172</u>
										Sheer forward
										Standard
										Actual
										9.34 3 28.02 8.09 3 24.27
										37.80 3 113.40 32.38 3 97.14
										84.94 1 84.94 70.00 1 70.00
										226.36 191.41
										226.36 = .84

Deduction for Tropical Freeboard.	Deduction for Fresh Water.	TABULAR FREEBOARD corrected for Flush Deck (if required)	49.62
Addition for Winter and Winter North Atlantic Freeboard.	Displacement in salt water at summer load water line	Correction for coefficient	49.62
Depth to Freeboard Deck = <u>18.03</u>	$\Delta =$	Depth Correction	
Summer freeboard = <u>2.04</u>	Tons per inch immersion at summer load water line	Deduction for superstructures	27.25
Moulded draught (d) = <u>15.99</u>	T =	Sheer correction	1.13
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = <u>3.99" 4"</u>	Deduction = $\frac{\Delta}{40T}$ inches	Round of Beam correction32
Addition for Winter North Atlantic Freeboard (if required) = <u>2"</u>		Correction for Thickness of Deck amidships <u>80"</u>	.56
		Other corrections, scantlings, etc.	
		2.01 27.25 - 25.24	
		Summer Freeboard = <u>24.38</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									
Freeboard Deck					Deck Deck				
Description of Hatchway	No 1	No 2	No 3		No 1				
Dimensions of Hatchway	10' x 10'	16' x 12'	16' x 10'		10' x 10'				
COAMINGS									
Height above Deck	14"	14"	14"		9" BA (6" above wood deck)				
Thickness	1/2"	1/2"	1/2"						
Sides	✓	✓	✓						
Stiffeners	✓	✓	✓						
Brackets, Stays	✓	✓	✓						
HATCH BEAMS									
Number	1	2	3		1				
Spacing	midway	5'-4"	5'-0" max		midway				
Scantling and Sketch									
Bearing Surface	2 1/2"	2 1/2"	2 1/2"		2 1/2"				
FORE AND AFTERS									
Number									
Spacing									
Unsupported Lengths									
Scantling and Sketch									
Bearing Surface									
HATCH COVERS									
Material	Pine				Pine				
Thickness	3"				3"				
How fitted	5 x 8	40 x 100	40 x 100		5 x 8				
Bearing Surface	1 1/4"				3"				
Spacing of Cleats	18"				18"				
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? ☒

Particulars of fiddle, funnel and ventilator coamings:—
 Ventilators in efficient condition
 Strong steel covers over fiddle, gratings (bolted down)
 S.R. Skelton of steel strongly constructed.

Particulars of Flush Bunker Scuttles:—
 none

Particulars of Companionways:—
 Fore Deck:— Steel Companionway opening 5'7" x 2'3" wide 2" sill above wood deck
 Steel door in halves, operated from both sides
 Aft Deck:— Steel Companionway to crew forward opening 5'9" x 2'10" sill 18" above wood deck
 Steel double doors operated from both sides
 Mid Deck:— Steel Companionway to crew at aft end Engine casing opening
 5'8" x 2'1" sill 6" above wood deck wood door operated from both sides

Particulars of Ventilators in exposed positions on freeboard and superstructure decks:—
 Fore Deck:— 2 @ 12" dia 2'8" x 7/16" cong 1/4" cong on the deck
 1 @ 18" - 2'8" x 3/16" - 1/4" cong 1/4" cong on the deck
 1 @ 14" - 6'0" x 1/4" - 1/4" cong 1/4" cong on the deck
 1 @ 10" - 2'9" x 3/16" - 1/4" cong 1/4" cong on the deck
 Poop Deck:— 1 @ 18" dia 2'6" x 3/16" cong 1/4" cong on the deck
 1 @ 12" - 1'9" x 3/16" - 1/4" cong 1/4" cong on the deck
 2 @ 21" - 1'9" x 3/16" - 1/4" cong 1/4" cong on the deck
 1 @ 12" - 1'9" x 3/16" - 1/4" cong 1/4" cong on the deck
 2 @ 18" - 1'9" x 3/16" - 1/4" cong 1/4" cong on the deck
 Ventilators have wood Plugs & Canvas covers.

Particulars of Air Pipes in exposed positions on freeboard, raised quarter, or superstructure decks:—
 1 on Poop Deck 2'6" dia 2'4" to top (above wood deck) 1/4" A. Peak.
 Air Pipes to O.T.B. Tanks are led up to Roomade Deck & cut off flush with railing & wood plugged.

Particulars of Gangway Cargo and Coaling Ports:—
 Gangway doors abreast 5'-6" wide x 8'-9" high Sill 15"
 No 1 Hatchway (P.A.)
 do - abreast No 2 Hatch 11'-0" wide height to Bridge Deck level Sill 15"
 do - " No 3 " 12'-0" " " " " " Sill 15"
 Oiling doors at Ship's side 2'0" x 2'6" Sill 17"
 Strong steel doors efficiently secured.
 Ash doors at Ship's side 17' x 17" 18" Sill Strong steel doors efficiently secured.

Particulars of Scuppers and Sanitary Discharge Pipes:—
 All sanitary discharges & Scuppers (except from exposed weather decks) have storm valves at ship's side.

Particulars of Side Scuttles:—
 All side scuttles are of substantial construction & those situated below freeboard deck are fitted with steel hinged deadlights.

Particulars of Guard Rails:—
 Fore Deck 3'-6" high 4 Rails Stanchions 2'-4" apart
 Poop Deck 3'-6" high 4 Rails Stanchions 2'-3" apart.

Particulars of Gangways, Lifelines, etc.:—
 Hinged wood Gangways over wells (see sketch)
 with portable stanchions 2'-6" inboard spaced 4'-3" apart height 3'-6" with 2 rows chain.

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	16'-0"	Free Deck Twelve Decks	27" x 9"	1	1.68 sq feet	✓ 8.1
Forward Well	15'-6"	- do -	27" x 9"	1	1.68 sq feet	✓ 8.0

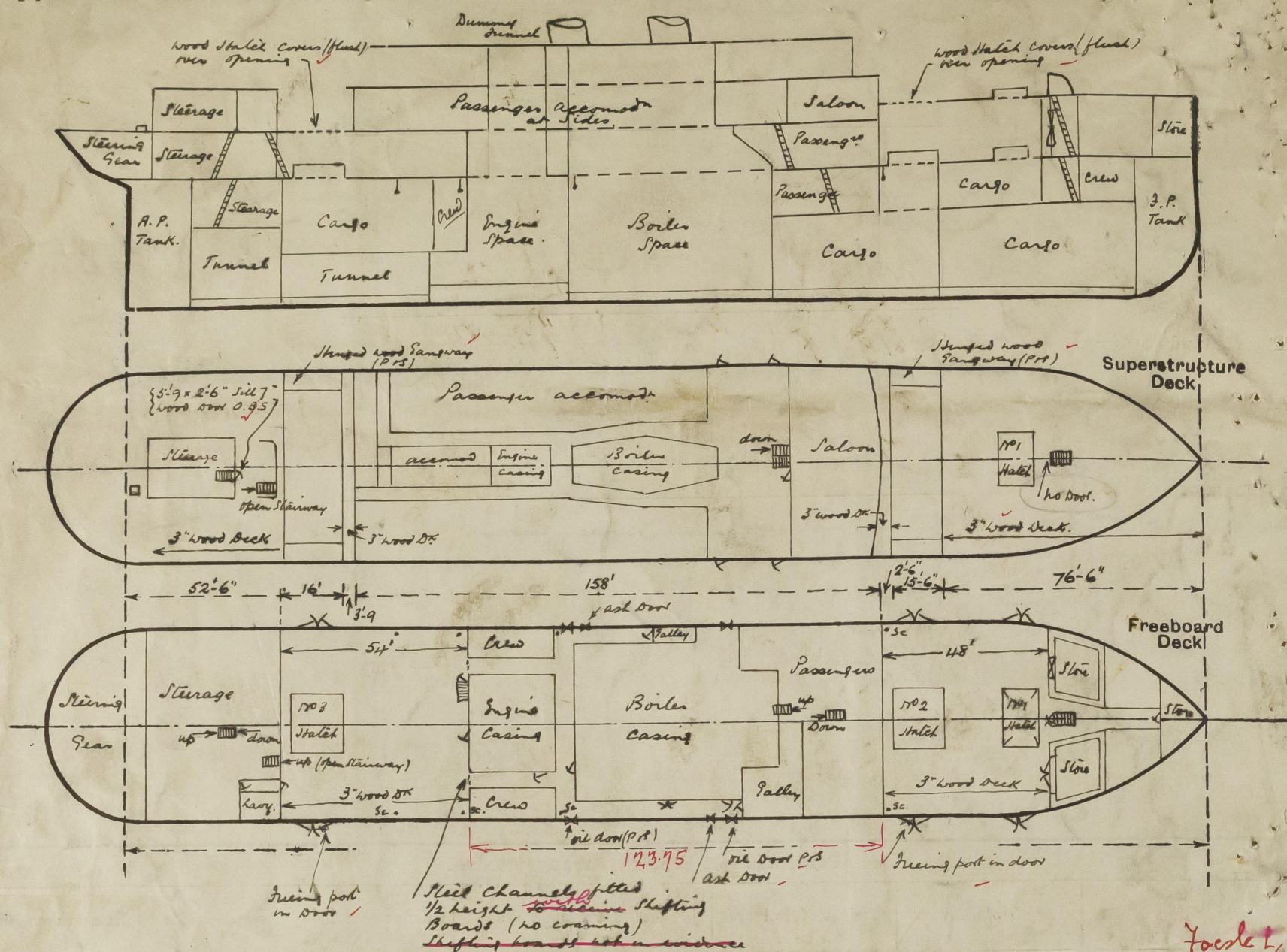
State position of each freeing port:—
 (F. and A. position and height above deck edge)
 State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:—
 Hinged steel shutters.

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	✓	3/16	3" flanges	3'-0"	✓	5'-9" x 2'-3"	6"	7'-3"
Raised Quarter Deck Bulkhead	✓							
Bridge, After Bulkhead	5/16	3/16	2 1/2 x 2 1/2 x 15"	4'-0"	✓	5'-4" x 2'-5"	11"	7'-3"
Bridge, Forward Bulkhead	5/16	3/16	4' x 3 x 34"	3'-0"		none	✓	10'-9"
Forecastle Bulkhead	✓	3/16	not available installed			5'-0" x 4'-3" side	20"	10'-9"
Trunk, Aft	✓							
Trunk, Forward	✓							
Exposed Machinery Casings on Freeboard or Raised Quarter Decks	✓							
Exposed Machinery Casings on Superstructure Decks	not available	wood lining on outside of casing and lagging on inside				none	✓	7'-6"
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	5/16	3/16	2 1/2 x 2 1/2 x 15"	4'-0"	none	5'-0" x 2'-6" 5'-6" x 2'-6" 5'-6" x 2'-9" 5'-6" x 2'-6"	15" 16" 16" 12"	7'-3 1/2" 7'-6"
Deckhouses on Flush Deck Ships	✓							

Particulars of Closing Appliances (state if capable of being manipulated from both sides).	
Poop Bulkhead	wood door operated from both sides.
Raised Quarter Deck Bulkhead	✓
Bridge, After Bulkhead	wood door operated from both sides. - & shifting boards half height in
Bridge, Forward Bulkhead	✓
Forecastle Bulkhead	Port side to closing appliance - starboard side double wood doors padlocked.
Exposed Machinery Casings on Freeboard or Raised Quarter Decks	✓
Exposed Machinery Casings on Superstructure Decks	none
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	Strong steel doors in boiler casing wood door Engine Room entrance (Plants) all doors operated from both sides.
Deckhouses on Flush Deck Ships	✓

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 shown on the following sketches:—



Vessel Surveyed afloat for freeboard assignment only.

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

Hatch on Poop Deck to Steering Gear

2'-0" Square 15" x 1/4 coaming
Steel Hinged cover efficiently secured.

Access to fore cabin Peaks
by flush manholes (on 2nd Deck)
fitted with bolted steel covers

70000
1/10
x 0.6

76.50
32.47
44.03 x 50

Builder's name and yard number Harland & Wolff Ltd No. 424

Names of sister ships

Owners Coast Lines Ltd.

Fee £ 10 : 4 : 0

Received by me



© 2020

Lloyd's Register Foundation