

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

BUENOS AIRES.

Nº 12703.

Computation of Freeboard for Steamer, *open forecastle, combined bridge & poop.*

having *FITZROY* (Type of Superstructures.)

Ship's Name *"LAFONIA"* Nationality and Port of Registry *London British* Official Number *161,827* Gross Tonnage *770* Date of Build *1931*

Moulded Dimensions: Length *165'* Breadth *32.5'* Depth *13.5'*

Moulded displacement at moulded draught = 85 per cent. of moulded depth *at 11'-6" in salt water 1147 tons*

Coefficient of fineness for use with Tables *0.66* *652* *68 lowest allowed.*

Port of Survey *Montevideo*

Date of Survey *29<sup>th</sup> & 30<sup>th</sup> November, 1932*

Name of Surveyor *A. J. Warkentin*

Particulars of Classification *100 A1.*

Depth for Freeboard (D)	Depth correction	Round of Beam correction
Moulded depth ... .. <i>13.50</i>	(a) Where D is greater than Table depth (D - Table depth) R = <i>(13.53 - 11.00) 1.269 = 3.21</i>	Moulded Breadth (B) <i>32.5'</i>
Stringer plate ... .. <i>0.5" 03</i>	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =	Standard Round of Beam = $\frac{B \times 12}{50} =$ <i>7.80</i>
Sheathing on exposed deck <i>ON POOP 20'3" x 23' ALPH. PLATE</i>	If restricted by superstructures	Ship's Round of Beam = <i>8.4'</i>
$T \left( \frac{L-S}{L} \right) =$		Difference <i>.45</i>
Depth for Freeboard (D) = <i>13.53'</i>		Restricted to
		Correction = $\frac{\text{Diff}^*}{4} \times \left( 1 - \frac{S_1}{L} \right) =$ <i><math>\frac{.45}{4} \times \frac{2329}{165} = -.03</math></i>

## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed ... ..					
overhang ... ..					
R.Q.D. enclosed ... ..					
overhang ... ..					
POOP Bridge enclosed <i>COMBINED</i>	<i>108.67</i>	<i>108.67</i>	<i>7'-0"</i>	-	<i>108.67</i>
overhang aft ... ..	<i>NONE</i>				
overhang forward ... ..	<i>1.91</i>	<i>.91</i>			<i>.91</i>
Forecastle <i>OPEN</i>	<i>17.50</i>	<i>17.00</i>	<i>7'-0"</i>	-	<i>17.00</i>
overhang ... ..					
Trunk aft ... ..					
forward ... ..					
Tonnage opening aft ... ..					
forward ... ..					
Total ... ..	<i>128.00</i>	<i>126.58</i>			<i>126.58</i>

Standard Height of Superstructure *6.00*

R.Q.D. *22.5'*

Deduction for complete superstructure *22.5'*

Percentage covered  $\frac{S}{L} =$  *77.57*

$\frac{S_1}{L} =$  *76.71*

$\frac{E}{L} =$  *76.71*

Percentage from Table, Line A. (corrected for absence of forecastle (if required)) *71.25*

Percentage from Table, Line B. (corrected for absence of forecastle (if required))

Interpolation for bridge less than 2L (if required)

Deduction = *-16.03*

## SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ... ..	<i>26.50</i>	1		<i>26.50</i>	<i>24.5</i>	<i>33.00</i>	1		<i>45.00</i>
$\frac{1}{2}$ L from A.P. ... ..	<i>11.79</i>	4		<i>47.16</i>	<i>14.0</i>	<i>14.22</i>	4		<i>80.12</i>
$\frac{3}{4}$ L " ... ..	<i>2.91</i>	2		<i>5.82</i>	<i>3.8</i>	<i>3.55</i>	2		<i>9.90</i>
Amidships ... ..		4			<i>0</i>		4		
$\frac{3}{4}$ L from F.P. ... ..	<i>5.83</i>	2		<i>11.66</i>	<i>8</i>	<i>7.70</i>	2		<i>15.40</i>
$\frac{1}{2}$ L " ... ..	<i>23.59</i>	4		<i>94.36</i>	<i>30.2</i>	<i>30.81</i>	4		<i>123.24</i>
F.P. ... ..	<i>53.00</i>	1		<i>53.00</i>	<i>35.5</i>	<i>69.00</i>	1		<i>69.00</i>
Total ... ..				<i>238.50</i>	<i>116</i>				<i>342.66</i>

Correction =  $\frac{\text{Difference between sums of products}}{18} = \frac{104.16}{18} = 5.79$

If limited on account of midship superstructure.

Mean actual sheer aft = *Excess*

Mean standard sheer aft = *Excess*

Mean actual sheer forward = *Excess*

Mean standard sheer forward = *Excess*

Length of enclosed superstructure forward of amidships = *26'6" BRIDGE .166*

aft of " = *84.0" deck POOP .50*

Actual height of Poop *7.0*

Standard " *6.0*

$1.0 = 12"$

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = *13.53'*

Summer freeboard = *0.23'*

Moulded draught (d) = *13.30'*

Deduction for Tropical freeboard and addition for Winter freeboard =  $\frac{d}{4}$  inches = *3.32 3/4*

Addition for Winter North Atlantic Freeboard (if required) = *2*

Deduction for Fresh Water.

Displacement in salt water at summer load water line

$\Delta =$  *1375*

Tons per inch immersion at summer load water line

T = *10.0*

Deduction =  $\frac{\Delta}{40T}$  inches = *3.44*

*3 1/2"*

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

	+	-
Depth Correction ... ..	<i>3.21</i>	
Deduction for superstructures ... ..		<i>16.03</i>
Sheer correction ... ..		<i>2.10</i>
Round of Beam correction ... ..		<i>.03</i>
Correction for Thickness of Deck amidships ... ..		
Other corrections, scantlings, etc. ... ..		
	<i>3.21</i>	<i>18.16</i>
Summer Freeboard =	<i>2.65</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>4 1/4</i>	Tropical Fresh Water Freeboard ... ..	<i>MINUS 10 1/2</i>
Fresh Water Line " " ... ..	<i>3 1/2</i>	Fresh Water " " ... ..	<i>MINUS 0 3/4</i>
Tropical Line " " ... ..	<i>3/4</i>	Tropical " (limited) ... ..	<i>0 - 2 1/2</i>
Winter Line below " " ... ..	<i>3 1/4</i>	Winter " " ... ..	<i>0 - 6</i>
Winter North Atlantic Line " " ... ..	<i>5 1/4</i>	Winter North Atlantic " " ... ..	



# PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS						
Description of Hatchway	Nº1 HOLD	Nº2 HOLD	Nº3 HOLD	FORE PEAK	Nº1 HOLD	BUNKER, P.S.
Dimensions of Hatchway	IN WELL DECK	IN WELL DECK	ON BRIDGE DECK	UNDER POSE	UNDER POSE	BOAT DECK
COAMINGS	Height above Deck	3'-0"	12'-10" x 14'-0"	47" x 36"	29" x 20"	44" x 57"
	Thickness Sides	.41	.41	.375	.375	.31
	Thickness Ends	.41	.41	.375	.375	.31
	Stiffeners HOR. BULB ANGLE	7" x 3/8" x 44"	7" x 3/8" x 44"	none	none	none
HATCH BEAMS	Brackets, Stays	NONE	NONE	none	none	none
	Number	1	ONE	none	none	none
	Spacing	1 x 2	6'-5"	none	none	none
	Scantling and Sketch	Patent steel	7" x 3/8" x 44"	none	none	none
FORE AND AFTERS	Bearing Surface	MACANKING	3"	none	none	none
	Number	as per approved plan	none	none	none	none
	Spacing	as per approved plan	none	none	none	none
	Unsupported Lengths	as per approved plan	none	none	none	none
HATCH COVERS	Scantling* and Sketch	as per approved plan	none	none	none	none
	Bearing Surface	MACANKING	white pine	white pine	white pine	white pine
	Material	NONE	3"	2 1/2"	2 1/2"	2 1/2"
	Thickness	NONE	3"	2 1/2"	2 1/2"	2 1/2"
Spacing of Cleats	How fitted	NONE	Fore, aft	Fore, aft	Fore, aft	Fore, aft
	Bearing Surface	NONE	3"	2"	2 1/4"	2 1/4"
Number of Tarpaulins	MACANKING	24"	29 1/2" parts	16 1/2"	21"	21"
	PATENT	3"	2"	2"	2"	2"

\*Are wood fore and afters steel shod at all bearing surfaces? none  
 Are battens and wedges efficient and in good condition? Yes  
 Are tarpaulins in good condition and in accordance with rule requirements? Yes at Nº3, fore peak, Nº1 small hatch, and bunker hatches. New joints fitted to Nº2 hatch.  
 Are lashings provided in accordance with rule requirements? Yes. Rungbolts, locking bars at Nº3 hatch, & locking bars at fore peak hatch.

Particulars of fiddle, funnel and ventilator coamings:—

Fidley has 2 1/2" angle coaming and steel lugged cover. The funnel has no coaming being riveted to the top of steel casing with angle connection. Stokehold ventilators in aft of navigation house, 21" in diameter x 8'-6" coaming x 7/8" stayed to each other by a grating.

Particulars of Flush Bunker Scuttles:—

None

Particulars of Companionways:— The crew live in the amidship deck house 61'-8" in length x 7' in height and under the poop the entrances being from the after part of a deck house 13' x 7' both houses being on bridge deck. Peak doors to accommodation 67" x 23" x 1 1/2"; sill 16 1/2". Navigation house on boat deck for Master & Marconi operator 19'-6" in length x 7' height, with peak doors as above. Entrance to Nº3 bridge deck by doorway on starboard side of companionway, aft of deck house, by peak door 67" x 23" x 1 1/2", sill 19 1/2" above the deck, entrance to stokehold starboard side of deck house by peak door 67" x 23" x 1 1/2", sill 16 1/2"; engine room skylight coaming 30" at centre & 15" outboard, 8'-7" x 8'-7" with 6 steel lugged covers; peak skylight on boat deck over saloon entrance 32" x 42" of 2 peak coaming at centre 17" outboard 5 1/2" with 2 stayed flaps.

Particulars of Ventilators in exposed positions on freeboard and superstructure decks:— 2 on forecastle head for Nº1 hold 36" x 12" dia. x 34". 2 Kingposts in well deck to Nº1 hold; 1 in well deck Nº1 hold 36" x 9" x 32"; 1 in well deck Nº2 hold 12" x 10" x 38" stayed to bridge deck. 2 each port and starboard sides of saloon on bridge deck to passenger accommodation 5 3/4" x 2 1/2" above sheathing x 32". 1 each port & starboard Nº3 hold 15" x 8'-9" x 38" stayed to boat deck & on bridge deck. 2 on bridge deck Nº3 hold 30" x 9" x 32". 2 on bridge deck crew's quarters 30" x 4" x 32"; another 28" x 5 3/4" x 32". 1 on after house top 28" x 15" x 38", another 28" x 6" x 32" to 2nd class; on boat deck to E.R. 2 of 56" x 13 1/4" x 8"; 1 of 28" x 4" x 32"; 4 of 28" x 6" x 36" all ventilators, plugs & covers in good order & all fastenings to rule where clear of sheathing excepting light engine room & stokehold ventilators on boat deck.

Particulars of Air Pipes in exposed positions on freeboard, or superstructure decks:— 8 goose-neck pipes on bridge deck on each port & starboard sides of deck house from 10'2" to 19'0"; 3 goose-neck ventilators on poop to crews quarters 12"; A.P.T. 10" wood plugs with chain provided

Particulars of Gangway Cargo and Coaling Ports:—

None



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*Fuzroy*

*Lafonia*

Particulars of Scuppers and Sanitary Discharge Pipes — *heavy iron pipes 1 inch, port & starboard sides after end of well deck through main plate, space, brass storm valves on shell plating. 1 each port & starboard with W.C. pipes, bath & wash basin discharges, & scupper pipes of passenger accommodation in bridge deck led into them by iron pipes; cocks fitted under wash basins, & valve under the bath in accessible positions; Engineers & crew's W.C.'s also fitted with controllable valves; scuppers in poop space for crew's W.C.'s are small holes through shell plating; scuppers abreast of bridge house iron pipes through bridge side plating; abreast open rails aft stinger angles are cut flush with stinger plate and compensated.*

*Each scupper and discharge from the poop space is fitted with a storm valve and an efficient trap at the lower end.*

*None*

Particulars of Side Scuttles:

Particulars of Guard Rails: *Forecastle 39" x 2 high rail; bulwarks abreast of amidships accommodation 64'-2" in length x 45" in height; 4 high rail 45" in height from bulwark to poop making about 57' each port & starboard sides;*

Particulars of Gangways, Lifelines, etc.: — *None*

*Suitable provision made for rigging lifelines by the fitting of eye-bolts.*

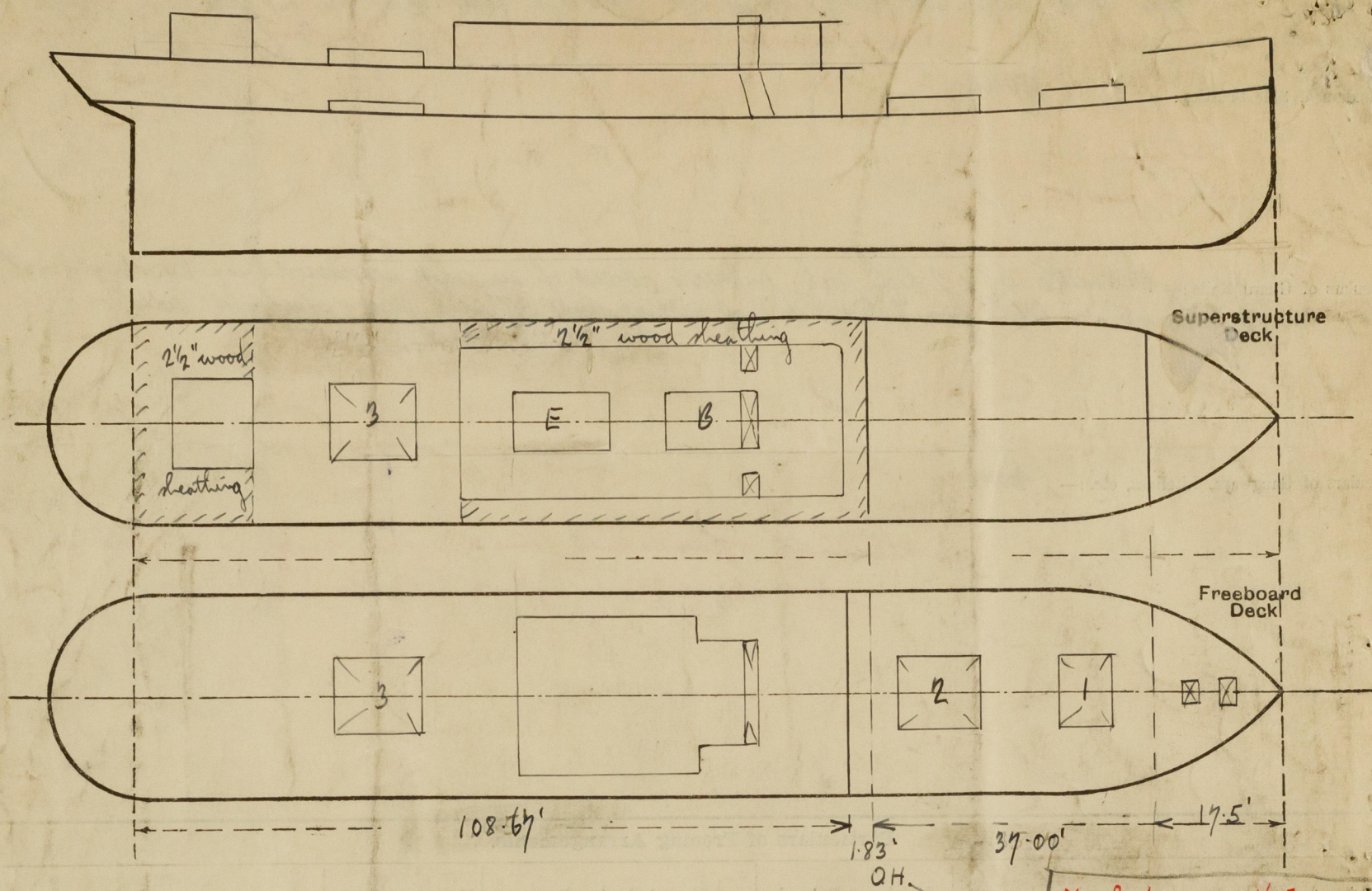
Particulars of Freeing Arrangements.						
	Length of Bulwark	Height of Bulwark	Size of Freeing Ports	Number each side	Area each side	Rule area each side
Port Well ... <i>None</i> ...						
Forward Well ... ..	<i>39'</i> <del>42'</del> 2"	45"	<i>after 36" x 15 1/2", each centre 36" x 15" side forward 36" x 15" side</i>	3	11.37 sq. ft.	<i>10.2</i> <del>11</del> sq. ft.
State position of each freeing port ... .. { After Well: — <i>from aft: after 6'-6"; centre 17'-4" forward 26'-2"; 10'2" above deck</i>						
(F. and A. position and height above deck edge) { Forward Well: — <i>from aft: after 6'-6"; centre 17'-4" forward 26'-2"; 10'2" above deck</i>						
State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such: — <i>shutters, in good order, on outside out of centre.</i>						
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 ... .. <i>None</i>								
Raised Quarter Deck Bulkhead ... .. <i>None</i>								
Bridge, After Bulkhead ... .. <i>None</i>								
Bridge, Forward Bulkhead ... ..	.375	.31	6 1/2" x 3" x 3/4" bolts	21" outboard 30" others	angle lugs with 4 bolts	6 port lights 13" dia. no large openings		7'-0"
Forecastle Bulkhead ... .. <i>open aft</i>								
Trunk, Aft ... ..								
Trunk, Forward ... ..								
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...								
Exposed Machinery Casings on Super-structure Decks WITHIN BRIDGE HOUSE	.31	.25	Plating flanged	34"	none	24" x 66"	12" STEEL DOORS WITH LOCKS	7'-0"
Machinery Casings within Superstructures not fitted with Class I Closing Appliances ... ..								
BRIDGE & POOP Deckhouses on Flush Deck Ships ...	.31	.25	2 1/2" x 3" x 1/2"	36"	none	TEAK DOORS 67" x 23" x 1 1/2"	16 1/2"	7'-0"

Particulars of Closing Appliances (state if capable of being manipulated from both sides).	
Poop Bulkhead ... .. <i>None</i>	<i>No openings</i>
Raised Quarter Deck Bulkhead ... .. <i>None</i>	
Bridge, After Bulkhead ... .. <i>None</i>	
Bridge, Forward Bulkhead ... ..	<i>The usual heavy brass port lights, no deadlights, no large openings.</i>
Forecastle Bulkhead ... .. <i>None</i>	<i>Open.</i>
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...	<i>None</i>
Exposed Machinery Casings on Super-structure Decks ... ..	<i>Teak door as above only over stokehold entrance; external teak &amp; internal steel doors for engine room.</i>
Machinery Casings within Superstructures not fitted with Class I Closing Appliances ... ..	
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 shewn on the following sketches:—



State any special features in the construction of the ship:— Companionway door to No 3 bridge deck space, on the bridge door forward of hatchway of peak 14" in thickness, weatherproof like cabin doors. Peak door 14" in thickness on bridge deck house, protected by 45" steel bulwarks, but no internal steel door fitted, for stowhold entrance.

The above survey held in the Mana Dry Dock, Montevideo, and all parts examined found to be or placed in good order as per B. O. Rpt. No 12,702.

Builder's name and yard number

Names of sister ships

Owners

Fee £ 6 : 0 : 0  
"2 Survey 3 : 5 : 0  
"2 Telegraph 3 : 2 : 0

Received by me

account rendered to the Owners' agents in Montevideo but owing to difficulties in exchange, arrangements have been made for payment in London.

A. J. Mackeson  
Surveyor to Lloyd's Register



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