

Lloyd's Register of Shipping.

Index. No.
(For London Office only).

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name "LA PLATA"	Official Number 8559	Nationality and Port of Registry Swedish Stockholm	Gross Tonnage About 7000	Date of Build 1943	Port of Survey Malmö
Moulded Dimensions: Length 418' Breadth 57'0" Depth 37'67"					Date of Survey December 1942
Moulded displacement at moulded draught = 85 per cent. of moulded depth 15610 tons					Surveyor's Signature A. Sundén
Coefficient of fineness for use with Tables 7162					Particulars of Classification +100 A1 with freeboard (contemplated)

Depth for Freeboard (D). Moulded depth 37'67" Stringer plate 157 05 Sheathing on exposed deck 3' aft + midships $T \left(\frac{L-S}{L} \right) = .87 \times .8011 = .70 = .06$ $93.1 \times .25 = 23.275$ $117.1 \times .25 = 29.275$ 418 Depth for Freeboard (D) = 37'78"	Depth correction. (a) Where D is greater than Table depth (D—Table depth) R = $(37.78 - 27.87) 3 = +29.73"$ (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) 57'00" Standard Round of Beam = $\frac{B \times 12}{50} =$ 13'68" Ship's Round of Beam 13'78" Difference Excess 0'10" Restricted to Correction = $\frac{\text{Diff}^e}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{10}{4} \times .8021 = -02"$
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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					
» overhang aft					
» overhang forward					
F'cle enclosed	82.33	82.33	8'0"	-	82.33
» overhang	0.83	.41	-	-	.41
Trunk aft					
» forward					
Tonnage opening aft ...					
» » forward					
Total	83.16	82.74			82.74

Standard Height of Superstructure	7'6"
» » R.Q.D.	-
Deduction for complete superstructure	42"
Percentage covered $\frac{S}{L} =$.1989
» » $\frac{S_1}{L} =$.1979
» » $\frac{E}{L} =$.1979
Percentage from Table, Line A. (corrected for absence of forecastle [if required])	9.89
Percentage from Table, Line B. (corrected for absence of forecastle [if required])	
Interpolation for bridge less than 2L (if required)	
Deduction =	42 × .989 = -4.15"

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P.	51.80	1	51.80	53.98	53.98	1	53.98
1/6 L from A.P. ...	23.05	4	92.20	18.42	18.42	4	73.68
2/6 L " " ...	5.70	2	11.40	1.30	1.30	2	2.60
Amidships	-	4	-	-	-	4	-
2/6 L from F.P. ...	11.40	2	22.80	14.01	14.01	2	28.02
1/6 L " " ...	46.10	4	184.40	48.54	48.54	4	194.16
F.P.	103.60	1	103.60	108.11	108.11	1	108.11
Total ...			466.20				460.55

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{5.65}{18} (.75 - .0994) = +.20"$

If limited on account of midship superstructure.

Mean actual sheer aft = **Deficient = 81.8% Standard**Mean standard sheer aft = **Excess**Length of enclosed superstructure forward of amidships = **Deficient**

Actual Sheer aft	Standard sheer aft
53.98 1 53.98	51.80 1 51.80
18.42 3 55.26	23.05 3 69.15
1.30 3 3.90	5.70 3 17.10
113.14	138.05 = 81.8%

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.

Depth to Freeboard Deck = **37'97"**
 Summer freeboard = **11'84.3"**
 Moulded draught (d) = **26'13.4"**

Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = **6.53 = 166%**

Addition for Winter North Atlantic Freeboard (if required) =

Deduction for Fresh Water.

Displacement in salt water at summer load water line

$\Delta = 12367$

Tons per inch immersion at summer load water line

$T = 46.2$

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

$= \frac{12367}{40 \times 46.2} = 66.9$

$= 170\%$

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient $\frac{7162 + 68}{1.36} = \frac{13962}{1.36}$ Depth Correction **29.73**Deduction for superstructures **4.15**Sheer correction **.20**Round of Beam correction **.02**Correction for Thickness of Deck amidships ... **2.30**Other corrections, scantlings, etc. to a summer moulded draught of 26'13 7/8" **34.86**Summer Freeboard = **142.08**

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

Tropical Fresh Water Line above Centre of Disc **336 7/8**Fresh Water Line " " **170 -**Tropical Line " " **166 -**Winter Line below " " **166 -**Winter North Atlantic Line " " **166 -**Tropical Fresh Water Freeboard **360 7/8**Fresh Water " " **327 3/4**Tropical " " **343 1/2**Winter " " **344 3/4**Winter North Atlantic " " **377 1/2**

LA PLATA.

A new form should be prepared if any alterations that affect the freeboard have been made. If no such alterations have been made, the Surveyor should endorse the form on this side with his signature and the date.

Displacement in salt water and tons per inch immersion.

<u>Moulded Draft</u>	<u>Tons</u>	<u>Tons/Inch</u>
26'	12295	46.15
27'	12850	46.55

Trade of ship ✓

Names of sister ships ✓

Builder's name and yard number

Kockums Mek. Verkstads AB. Malmö. Yard No 251

Owners

Rederiaktiebolaget. Nordstjernan. Stockholm.

Fee £



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Foundation