

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

 Index No. 38621
 (For London Office only).

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name LUCIA 2 (ex Chant 52)	Official Number 337	Nationality and Port of Registry PANAMANIAN PANAMA CITY	Gross Tonnage 8	Date of Build 8	Port of Survey Cardiff
Moulded Dimensions: Length 142.54' Breadth 27.00' Depth 11.00' <i>To centre of rudder stock</i>				Date of Survey 2/8/46	
Moulded displacement at moulded draught = 85 per cent. of moulded depth				Surveyor's Signature <i>John G. Evans</i>	
Coefficient of fineness for use with Tables Assumed .72				Particulars of Classification 100 AX - carrying Petroleum in bulk, coasting service	

Depth for Freeboard (D). Moulded depth ... 11.00 Stringer plate03 Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$... Depth for Freeboard (D) = 11.03	Depth correction. (a) Where D is greater than Table depth $(D - \text{Table depth}) R =$ $(11.03 - 9.50) 1.096 = +1.68$ (b) Where D is less than Table depth (if allowed) $(\text{Table depth} - D) R =$ If restricted by superstructures	Round of Beam correction. Moulded Breadth (B) 27.00' Standard Round of Beam = $\frac{B \times 12}{50} =$ 6.48" Ship's Round of Beam = nil. Difference 6.48 Restricted to Correction = $\frac{\text{Diff}}{4} \times (1 - \frac{S_1}{L}) =$ 6.48 \times 1297 = +37"
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DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	
Poop enclosed <i>Equiv.</i>	42.55	42.55	7.0	-	42.55	Standard Height of Superstructure 6.00'
" overhang ...						" " R.Q.D. 20.25"
R.Q.D. enclosed						Deduction for complete superstructure
" overhang						Percentage covered $\frac{S}{L} =$ 40.89
Bridge enclosed...						" " $\frac{S_1}{L} =$ 77.03
" overhang aft						" " $\frac{E}{L} =$ 65.30
" overhang forward						Percentage from Table, Line A. Tanker 57.83
Fore enclosed <i>Equiv.</i>	14.44	14.44	8.0	-	14.44	(corrected for absence of forecastle (if required))
" overhang <i>Equiv.</i>	1.31	.66	8.0	-	.66	Percentage from Table, Line B.
Trunk aft <i>See</i>		14.55	7.0	-	14.55	(corrected for absence of forecastle (if required))
" forward <i>See</i>		37.62	3.33	33/6	20.88	Interpolation for bridge less than .2L (if required)
Tonnage opening aft						Deduction = 20.25 x .5783 = -11.71"
" forward						
Total	58.30	109.82			93.08	

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product	
A.P. ...	24.25	1		24.25	0	-	1			Mean actual sheer aft = 0
1/4 L from A.P. ...	10.795	4		43.18	0	-	4			Mean actual sheer forward = 0
1/2 L " ...	2.67	2		5.34	0	-	2			Mean standard sheer aft = 0
Amidships ...	-	4		-	0	-	4			Mean standard sheer forward = 0
3/4 L from F.P. ...	5.34	2		10.68	0	-	2			Length of enclosed superstructure forward of amidships =
1/4 L " ...	21.585	4		86.34	0	-	4			" " aft of " = Tanker with no sheer.
F.P. ...	48.51	1		48.51	0	-	1			
Total				218.30						

Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{.75 - S}{2L} \right) = \frac{218.30}{18} \left(\frac{.75 - .2044}{2} \right) = 6.62$
 If limited on account of midship superstructure. **54.56** 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 = 11.03 Summer freeboard = 11.00 Moulded draught (d) = 10.03 Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 2.51 = 2 1/2" Addition for Winter North Atlantic Freeboard (if required) = 2.51 + 2 = 4 1/2"	Deduction for Fresh Water. Displacement in salt water at summer load water line $\Delta =$ Tons per inch immersion at summer load water line $T =$ Deduction = $\frac{\Delta}{40 T}$ inches $\frac{1}{4} = 2 1/2"$	TABULAR FREEBOARD corrected for Flush Deck (if required) Correction for coefficient .72 + .68 = 1.40 / 1.36 <table border="1"> <tr> <th></th> <th>+</th> <th>-</th> </tr> <tr> <td>Depth Correction</td> <td>1.68</td> <td>-</td> </tr> <tr> <td>Deduction for superstructures</td> <td>11.71</td> <td>-</td> </tr> <tr> <td>Sheer correction</td> <td>6.62</td> <td>-</td> </tr> <tr> <td>Round of Beam correction</td> <td>.37</td> <td>-</td> </tr> <tr> <td>Correction for Thickness of Deck amidships</td> <td>-</td> <td>-</td> </tr> <tr> <td>Other corrections, scantlings, etc.</td> <td>-</td> <td>-</td> </tr> <tr> <td></td> <td>8.67</td> <td>11.71</td> </tr> </table> Summer Freeboard = 11.92		+	-	Depth Correction	1.68	-	Deduction for superstructures	11.71	-	Sheer correction	6.62	-	Round of Beam correction	.37	-	Correction for Thickness of Deck amidships	-	-	Other corrections, scantlings, etc.	-	-		8.67	11.71
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SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood Steel, Deck:

Tropical Fresh Water Line above Centre of Disc	5 1/2" = 126 mm	Tropical Fresh Water Freeboard	0' - 7 1/2" = 179 mm
Fresh Water Line	2 1/2" = 63 mm	Fresh Water	0' - 9 1/2" = 242 mm
Tropical Line	2 1/2" = 63 mm	Tropical	0' - 9 1/2" = 242 mm
Winter Line below	2 1/2" = 63 mm	Winter	1' - 2 1/2" = 368 mm
Winter North Atlantic Line	Not assumed	Winter North Atlantic	Not assumed

Lucia 2.

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.

Pool equivalent length

$$\text{End extension } (18 \times 4.42) + (4.5 \times 4.42) = 7.68$$

Length at side
Equis

$$\begin{array}{r} 38.87 \\ \hline 42.55 \end{array}$$

$$\text{Trunk aft } \frac{21.83 \times 18}{27} = 14.55'$$

Trunk fwd 59'-11"

$$18'-6" \left\{ \begin{array}{l} 5.0 \times 12.5 \\ \hline 27 \end{array} \right. = 3.24$$

$$\left\{ \begin{array}{l} 13.5 \times 13.54 \\ \hline 27 \end{array} \right. = 6.77$$

$$41'-5" \times \frac{18}{27} = 27.61$$

$$\begin{array}{r} 27.61 \\ \hline 37.62 \end{array}$$

Forecastle 15.75

Heel 1.75 x 14.75

$$\frac{19.67}{27}$$

Equis enclosed

15.75

1.31 = anchorage

$$\begin{array}{r} 14.44 \\ \hline \end{array}$$

Trade of ship

"Carrying Petroleum in Bulk" "For Service in the Mediterranean and North African Coasting Service to Dakar."

Names of sister ships

Builder's name and yard number

Owners

COMPANIA DE NAVEGACION LUCIA S.A

Fee £



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