

LLOYD'S REGISTER OF SHIPPING

UNITED WITH THE BRITISH CORPORATION REGISTER

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

No 36793

Ship's Name "LISBETH M"	Official Number 185955	Nationality and Port of Registry British London	Gross Tonnage 939	Date of Build 1953	Port of Survey Rotterdam
Moulded Dimensions: Length 199.97' Breadth 33.01' Depth 15.07'					Date of Survey while building
Moulded displacement at moulded draught = 85 per cent. of moulded depth (excluding bossing) 1646 m³					Surveyor's Signature <i>W. J. J. J.</i>
Coefficient of fineness for use with Tables .688					Particulars of Classification 100 A1

DEPTH FOR FREEBOARD (D).	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth ... 15.07'	(a) Where D is greater than Table depth (D-Table depth) R = (15.11 - 13.33) 1.538 = +2.74	Moulded Breadth (B) 33.01
Stringer plate04	(b) Where D is less than Table depth (if allowed) (Table depth-D) R = 1.78	Standard Round of Beam = $\frac{B \times 12}{50} = 7.92$
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ —	If restricted by superstructures ✓	Ship's Round of Beam = 7.87
Depth for Freeboard (D) = 15.11		Difference .05
		Restricted to —
		Correction = $\frac{\text{Diff}^\circ}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.05}{4} \times .295 = \text{NIL}$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...	51.38	51.38	6.99		51.38
" overhang ...	2.72		2.69	above RQD	
R.Q.D. enclosed ...	66.60	66.60	3.55	3.66	66.48
" overhang ...	2.69		2.69	3.66	
Bridge enclosed ...					
" overhang aft ...					
" overhang forward ...					
F'cle enclosed ...	21.10	21.10	7.99		21.10
" overhang ...	See sketch	1.91	7.15		
Trunk aft ...	3.81				1.91
" forward ...					
Tonnage opening aft ...					
" " forward ...					
Total ...	142.89	140.99			140.87

Standard Height of Superstructure **6'**

" " R.Q.D. **3.667'**

Deduction for complete superstructure **26"**

Percentage covered $\frac{S}{L} = 71.45$

" " $\frac{S_1}{L} = 70.50$

" " $\frac{E}{L} = 70.44$

Percentage from Table, Line A. **63.54**

(corrected for absence of forecastle (if required))

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

Interpolation for bridge less than 2L (if required)

Deduction = **26" x .6854 = 16.52"**

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	30.00	✓	1	30.00	30.12	30.00	✓	1	30.00
$\frac{1}{2}$ L from A.P. ...	13.35	✓	4	53.40	13.39	13.35	✓	4	53.40
$\frac{2}{5}$ L " ...	3.30	✓	2	6.60	3.35	3.30	✓	2	6.60
Amidships ...	✓	✓	4	✓	0	✓	✓	4	✓
$\frac{2}{5}$ L from F.P. ...	6.60	✓	2	13.20	6.50	6.50	✓	2	13.00
$\frac{1}{2}$ L " ...	26.70	✓	4	106.80	26.18	26.18	✓	4	104.72
F.P. ...	59.99	✓	1	59.99	59.84	59.84	✓	1	59.84
Total ...				269.99					267.56

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{2.43}{18} \left(.75 - \frac{3573}{267.56} \right) = +.05$

If limited on account of midship superstructure.

Mean actual sheer aft = **Excess**

Mean standard sheer aft = **Excess**

Mean actual sheer forward = **Deficient**

Mean standard sheer forward = **Deficient**

Length of enclosed superstructure forward of amidships = **Deficient**

" " aft of " = **Sheers**

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = **18.77**

Summer freeboard = **4.46**

Moulded draught (d) = **14.31**

Keel allowance = **—**

Extreme draught = **—**

Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = **3.58 = 3 1/2**

Addition for Winter North Atlantic Freeboard (if required) = **3 1/2 + 2 = 5 1/2**

Deduction for Fresh Water.

Displacement in salt water at summer load water line **1908 m³**

Tons per inch immersion at summer load water line **13.6**

Deduction = $\frac{\Delta}{40 T}$ inches = **3.51"**

= **3 1/2"**

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient	688 + .68 = 1.368	1.36	23.09
Depth Correction	2.74	—	23.23
Deduction for superstructures	—	16.52	
Sheer correction	.05	—	
Round of Beam correction	—	—	
Correction for Thickness of Deck amidships	43.92	—	
Other corrections, scantlings, etc.	—	—	
Summer Freeboard	46.71	16.52	+ 30.19
			53.42

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

Tropical Fresh Water Line above Centre of Disc	7"	Tropical Fresh Water Freeboard	3' 10 1/2"
Fresh Water Line	3 1/2"	Fresh Water	4' 2"
Tropical Line	3 1/2"	Tropical	4' 2"
Winter Line below	3 1/2"	Winter	4' 9"
Winter North Atlantic Line	5 1/2"	Winter North Atlantic	4' 11"

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.

Trade of ship

unrestricted

Names of sister ships

Builder's name and yard number

de Haan & Derlemans

274

Owners

Thomas J. Metcalf

Fee *fl 198.00*



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Foundation