

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name SALACIA.	Official Number 165910	Nationality and Port of Registry British, Glasgow	Gross Tonnage 5495	Date of Build 1937, 8mo.	Port of Survey
Moulded Dimensions: Length 425.0 Breadth 57.0 Depth 38.75'					Date of Survey 3.6.41.
Moulded displacement at moulded draught = 85 per cent. of moulded depth 731 (estimated) tons					Surveyor's Signature ✓
Coefficient of fineness for use with Tables					Particulars of Classification + 100 A1 with freeboard.

Depth for Freeboard (D). Moulded depth ... 38.75' Stringer plate ... 5304 Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ ✓ Depth for Freeboard (D) = 38.79'	Depth correction. (a) Where D is greater than Table depth $\left(\frac{D - \text{Table depth}}{\text{Table depth}} \right) \times 3 = +31.38''$ $\frac{10.46}{10.46} \times 3 = +31.38''$ (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) 57.0' Standard Round of Beam = $\frac{B \times 12}{50} = 13.68''$ Ship's Round of Beam = 13.75'' Difference .07'' Restricted to ✓ Correction = $\frac{\text{Diff}''}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.07}{4} \times .944 = -.02''$
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DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S _i)	Height	Height Correction	Effective Length (E)
Poop enclosed ...					
„ overhang ...					
R.Q.D. enclosed ...					
„ overhang ...					
Bridge enclosed ...					
„ overhang aft ...					
„ overhang forward ...					
Forecastle enclosed ...	30.0'	30.0'	8.0'	✓	30.0'
„ overhang ...					
Trunk aft ...					
„ forward ...					
Tonnage opening aft ...					
„ „ forward ...					
Total ...	30.00'	30.0'			30.0'

Standard Height of Superstructure **7.5'**
 „ „ R.Q.D. **✓**
 Deduction for complete superstructure **42.00''**
 Percentage covered $\frac{S}{L} =$ **7.06**
 „ „ $\frac{S_i}{L} =$ **7.06**
 „ „ $\frac{E}{L} =$ **3.53**
 Percentage from Table, Line A. **3.53**
 (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 = $42 \times .0353 = -1.48''$

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
... ..	52.50	1	52.50	51.5	51.5	1	51.5
from A.P. ...	23.36	4	93.44	23.0	23.0	4	92.0
„ ...	5.77	2	11.54	6.0	6.0	2	12.0
amidships ...	-	4	-	-	-	4	-
from F.P. ...	11.55	2	23.10	12.0	12.0	2	24.0
„ ...	46.72	4	186.88	45.5	45.5	4	182.0
„ ...	105.00	1	105.00	106.0	106.0	1	106.0
Total ...			472.46				467.5

Mean actual sheer aft = **Deficient.**
 Mean standard sheer aft
 Mean actual sheer forward = **Deficient**
 Mean standard sheer forward
 Length of enclosed superstructure forward of amidships = **Deficient**
 „ „ aft of „ = **sheers.**

Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{75-S}{2L} \right) = \frac{4.96}{18} (75 - .0353) = +.20$
 If limited on account of midship superstructure, **71.47** If limited to maximum allowance of 1½ ins. per 100 ft. **✓**

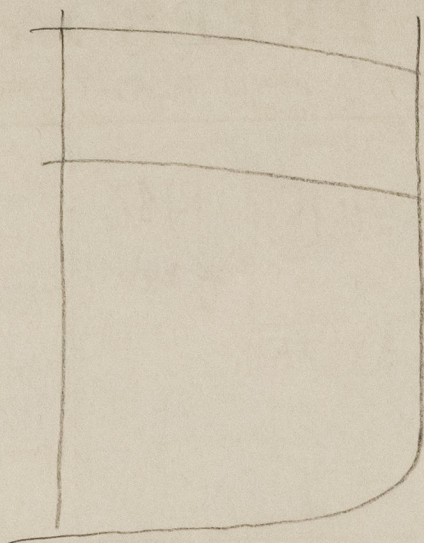
Deduction for Tropical Freeboard. Addition for Winter and Winter North Atlantic Freeboard. Depth to Freeboard Deck = 38.79' Summer freeboard = 11.08 Moulded draught (d) = 27.71 Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 6.93 = 7'' Addition for Winter North Atlantic Freeboard (if required) =	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 = $\frac{\Delta}{40T}$ inches = 7¼''	TABULAR FREEBOARD corrected for Flush Deck (if required) Correction for coefficient $\frac{79.35 + 1.87}{1.36} = 59.31$ Depth Correction ... 31.38 Deduction for superstructures ... 1.48 Sheer correction20 Round of Beam correction02 Correction for Thickness of Deck amidships ... Other corrections, scantlings, etc. to correct 18.65 with a summer moulded draught 50.23 48 27'-8½'' Summer Freeboard = 133.00
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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	14¼''
Fresh Water Line	2¼''
Tropical Line	7''
Winter Line	below
Winter North Atlantic Line	below

Tropical Fresh Water Freeboard	9'-10½''
Fresh Water	10'-5¾''
Tropical	10'-6''
Winter	10'-5''
Winter North Atlantic	10'-5''

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.



No T.H.

NB T.H.

Plan particulars

425 x 57 x 30'9"
38'9"

Partial flush deck penalty

4.21
2.125
6.375

1.000
706
294

= +1.87"

Trade of ship

Names of sister ships

Builder's name and yard number

Owners

Fee £



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Foundation