

# LLOYD'S REGISTER OF SHIPPING

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## SURVEYS FOR FREEBOARD

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER)

Received .....  
 Index No. ....  
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 Owners C11 .....

Ship's Name <b>BERNY</b>	Official Number	Nationality and Port of Registry <b>FINNISH MARIEHAMN</b>	Gross Tonnage <b>603.36</b>	Date of Build <b>1950</b>	Port of Survey
Moulded Dimensions: Length <b>53.935</b> ✓ Breadth <b>8.850</b> ✓ Depth <b>4.142</b> ✓	Freeboard Length <b>4 of R. Stock</b>	Moulded displacement at moulded draught = 85 per cent. of moulded depth (excluding bossing)	Coefficient of fineness for use with Tables <b>.719</b> ✓	Surveyor's Signature	Particulars of Classification <b>+ 100 A1</b>
Moulded displacement at moulded draught = 85 per cent. of moulded depth (excluding bossing)					Date of Survey <b>7.56</b>

DEPTH FOR FREEBOARD (D).	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth ...	(a) Where D is greater than Table depth (D-Table depth) R =	Moulded Breadth (B)
Stringer plate ...	(b) Where D is less than Table depth (if allowed) (Table depth-D) R =	Standard Round of Beam = $\frac{B \times 12}{50} =$
Wood Sheathing on exposed deck	If restricted by superstructures	Ship's Round of Beam =
$T \left( \frac{L-S}{L} \right) =$		Difference
Depth for Freeboard (D) = <b>4.151</b> ✓		Restricted to
		Correction = $\frac{\text{Diff}^c}{4} \times \left( 1 - \frac{S_1}{L} \right) = -4 \text{ mm.} ✓$

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 ...				
Bridge enclosed ...				
" overhang aft ...				
" overhang forward ...				
Fore enclosed ...				
" overhang ...				
Trunk aft ...				
" forward ...				
Tonnage opening aft ...				
" " forward ...				
Total ...	<b>19.545</b>	<b>19.415</b>		<b>19.415</b>

Standard Height of Superstructure	<b>1830</b> ✓
" " R.Q.D.	<b>1069</b> ✓
Deduction for complete superstructure	<b>602</b> ✓
Percentage covered $\frac{S}{L} =$	<b>36.24</b>
" " $\frac{S_1}{L} =$	<b>36.00</b> ✓
" " $\frac{E}{L} =$	<b>36.00</b> ✓
Percentage from Table, Line A. <b>TIMBER</b>	<b>58.70</b> ✓
(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 = <b>602 × .5870 = 353</b> ✓	

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P. ...		1				1	
$\frac{1}{4}L$ from A.P. ...		4				4	
$\frac{2}{6}L$ " ...		2				2	
Amidships ...	○	4	○	○	○	4	○
$\frac{2}{6}L$ from F.P. ...		2				2	
$\frac{1}{4}L$ " ...		4				4	
F.P. ...		1				1	
Total ...							

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

If limited on account of midship superstructure.

Mean actual sheer aft =  
 Mean standard sheer aft =

Mean actual sheer forward =  
 Mean standard sheer forward =

Length of enclosed superstructure forward of amidships =  
 " " aft of " =

**+ 19 mm.**

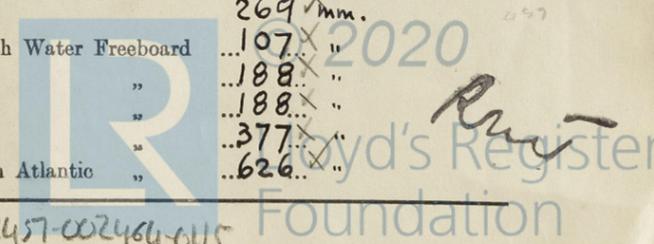
If limited to maximum allowance of 1 1/2 ins. per 100ft.

<b>Deduction for Tropical Freeboard.</b> Addition for Winter and Winter North Atlantic Freeboard. Depth to Freeboard Deck = <b>4.151</b> ✓ Timber Summer freeboard = <b>.269</b> ✓ Moulded draught (d) = <b>3.882</b> ✓ Keel allowance = Extreme draught = Deduction for Tropical freeboard and addition for $\frac{d}{48} = 81$ mm. Winter freeboard = $\frac{d}{36} = 108$ mm. Addition for Winter North Atlantic Freeboard (if required) =	<b>Deduction for Fresh Water.</b> 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 = <b>81</b> mm.	<b>TABULAR FREEBOARD corrected for Flush Deck (if required)</b> Correction for coefficient $\frac{1.399}{1.36}$ Depth Correction ... <b>63</b> ✓ Deduction for superstructures ... <b>353</b> ✓ Sheer correction ... <b>19</b> ✓ Round of Beam correction ... <b>4</b> ✓ Correction for Thickness of Deck amidships ... Other corrections, <sup>to CORRESPOND To</sup> scantlings, etc. ... <b>41</b> ✓ THE MAX. PERMISSIBLE TIMBER MOULDED DRAUGHT OF 3.002 m. Summer Freeboard = <b>269</b> ✓
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<b>TIMBER SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, <del>Wood</del> Steel, Deck :-</b> Timber Tropical Fresh Water Line above Centre of Disc ... <b>392</b> ✓ " Fresh Water Line " " ... <b>311</b> ✓ " Tropical Line " " ... <b>311</b> ✓ " Winter Line <sup>below ABOVE</sup> " " ... <b>122</b> ✓ " Winter North Atlantic Line <sup>below</sup> " " ... <b>127</b> ✓ " SUMMER LINE ABOVE " " ... <b>230</b> ✓	Timber Tropical Fresh Water Freeboard ... <b>269</b> ✓ " Fresh Water " " ... <b>107</b> ✓ " Tropical " " ... <b>188</b> ✓ " Winter " " ... <b>188</b> ✓ " Winter North Atlantic " " ... <b>377</b> ✓ " " " " ... <b>626</b> ✓
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28.8.56

Wh 15-8-56



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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.

$$\begin{aligned} \text{Timber draught} &= 3.652 \times \frac{3.923 \times}{3691 \times} \\ &= 3.882 \times \end{aligned}$$

$$\frac{3652}{3691} \times$$

Trade of ship .....

Names of sister ships .....

Builder's name and yard number .....

Owners .....

Fee £ : : .....

List of plans forwarded for reference. (See "Instructions to Surveyors, Part 4, 1950," paragraph 11.)



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