

Rpt. C.11 (Comp.)
 Freshener 36765

Amended computation

Index. No. 36879
 (For London Office only)

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name FRESHENER.	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build 1942.	Port of Survey
Moulded Dimensions: Length 120.0 Breadth 24-6 Depth 12'-6	Moulded displacement at moulded draught = 85 per cent. of moulded depth 639.5 tons				Date of Survey 15.7.42.
Coefficient of fineness for use with Tables .717.	Surveyor's Signature				Particulars of Classification + 100 A1 for Government Service

Depth for Freeboard (D). Moulded depth 12.5 Stringer plate03 Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ ✓ Depth for Freeboard (D) = 12.53	Depth correction. (a) Where D is greater than Table depth $\left(\frac{D - \text{Table depth}}{4.53} \right) \times 923 = +4.18''$ (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) 24'-6'' Standard Round of Beam = $\frac{B \times 12}{50} = 5.88''$ Ship's Round of Beam = 6.00'' Difference .12'' Restricted to ✓ Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.12}{4} \times .8476 = -.03''$
---	--	---

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					
Forecastle enclosed	18'-2''	18.17	6'-6''	✓	18.17
.. overhang	0-3''	.12			.12
Trunk aft					
.. forward					
Tonnage opening aft					
.. forward					
Total	18.42	18.29			18.29

Standard Height of Superstructure **6.0'**
 .. R.Q.D. **✓**
 Deduction for complete superstructure **18''**
 Percentage covered $\frac{S}{L} = 15.35$
 .. $\frac{S_1}{L} = 15.24$
 .. $\frac{E}{L} = 15.24$
 Percentage from Table, Line A. **7.62**
 (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 = **18.00 x .0762 = -1.37''**

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.	22.00	1		22.00	12.0	12.0	1		12.00
$\frac{1}{4}L$ from A.P.	9.79	4		39.16	5	5.0	4		20.00
$\frac{2}{4}L$	2.42	2		4.84	1.5	1.5	2		3.00
Amidships	-	4		-	-	-	4		-
$\frac{3}{4}L$ from F.P.	4.84	2		9.68	7	7.0	2		14.00
$\frac{1}{4}L$	19.58	4		78.32	19	19.0	4		76.00
F.P.	44.00	1		44.00	42	42	1		42.00
Total				198.00					167.00

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

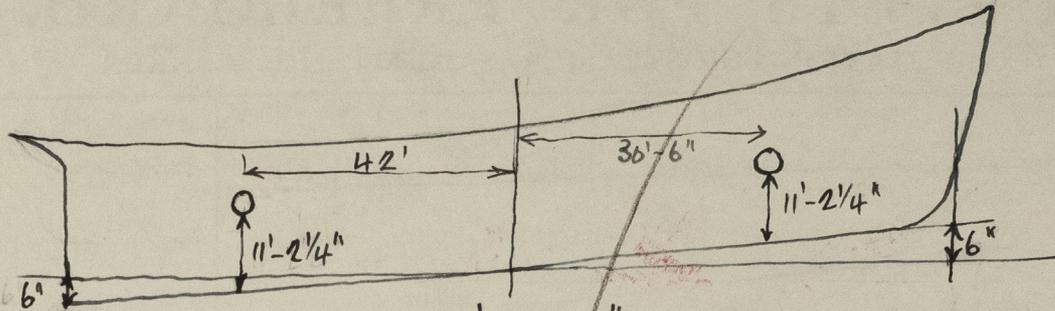
Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{31.00}{18} \left(.75 - .0762 \right) = +1.16''$
 If limited on account of midship superstructure. **.678** If limited to maximum allowance of $1\frac{1}{2}$ ins. per 100 ft.

Deduction for Tropical Freeboard. Addition for Winter and Winter North Atlantic Freeboard. Depth to Freeboard Deck = 12.53 Ft. Summer freeboard = 2.21 Moulded draught (d) = 17.32 Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = Addition for Winter North Atlantic Freeboard (if required) =	Deduction for Fresh Water. Displacement in salt water at summer load water line $\Delta = 620$ Tons per inch immersion at summer load water line $T = 5.84$ Deduction = $\frac{\Delta}{40T}$ inches = 2.65 = 2 3/4''	TABULAR FREEBOARD corrected for Flush Deck (if required) Correction for coefficient $\frac{.717 + .68}{1.36} = 1.397/1.36$ <table border="1"> <tr> <td></td> <td>+</td> <td>-</td> <td></td> </tr> <tr> <td>Depth Correction</td> <td>4.18</td> <td>-</td> <td></td> </tr> <tr> <td>Deduction for superstructures</td> <td>-</td> <td>1.37</td> <td></td> </tr> <tr> <td>Sheer correction</td> <td>1.16</td> <td>-</td> <td></td> </tr> <tr> <td>Round of Beam correction</td> <td>-</td> <td>.03</td> <td></td> </tr> <tr> <td>Correction for Thickness of Deck amidships</td> <td>-</td> <td>-</td> <td></td> </tr> <tr> <td>Other corrections, scantlings, etc. to correspond with position of lowest side scuttle aft.</td> <td>10.24</td> <td>-</td> <td></td> </tr> <tr> <td></td> <td>15.58</td> <td>1.40</td> <td>+ 14.18</td> </tr> </table> Summer Freeboard = 26.50		+	-		Depth Correction	4.18	-		Deduction for superstructures	-	1.37		Sheer correction	1.16	-		Round of Beam correction	-	.03		Correction for Thickness of Deck amidships	-	-		Other corrections, scantlings, etc. to correspond with position of lowest side scuttle aft.	10.24	-			15.58	1.40	+ 14.18
	+	-																																
Depth Correction	4.18	-																																
Deduction for superstructures	-	1.37																																
Sheer correction	1.16	-																																
Round of Beam correction	-	.03																																
Correction for Thickness of Deck amidships	-	-																																
Other corrections, scantlings, etc. to correspond with position of lowest side scuttle aft.	10.24	-																																
	15.58	1.40	+ 14.18																															

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

Tropical Fresh Water Line above Centre of Disc Not assigned	Tropical Fresh Water Freeboard	2'-2 1/2''
Fresh Water Line	Fresh Water	1'-11 3/4''
Tropical Line Not assigned	Tropical	
Winter Line below	Winter	2'-2 1/2''
Winter North Atlantic Line Not assigned	Winter North Atlantic	

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.



Service trim
12" by stern

$$6'' \times \frac{42}{60}$$

Limiting draught

$$\begin{array}{r}
 11' - 2.25'' \\
 4.7'' \\
 \hline
 10' - 10.05'' \\
 - 6'' \\
 \hline
 10' - 4.05'' \\
 12 - 6.38 \\
 \hline
 2' - 2.33'' = 2/2 1/2'' \text{ bbs.}
 \end{array}$$

Long

Trade of ship _____

Names of sister ships _____

Builder's name and yard number _____

Owners _____

Fee £ _____



© 2021

Lloyd's Register
Foundation