

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Index. No. 36546
(For London Office only).

Ship's Name "DALTONHALL"	Official Number 168926	Nationality and Port of Registry British West India Port	Gross Tonnage 7253 4840 approx	Date of Build 1941	Port of Survey Sunderland
Moulded Dimensions: Length 421.54 Breadth 56.21 Depth 38.04					Date of Survey During construction
Moulded displacement at moulded draught = 85 per cent. of moulded depth 16420 tons					Surveyor's Signature A. Alhain
Coefficient of fineness for use with Tables 421.54 x 56.21 x 38.04 x .85 = .463					Particulars of Classification +100 A.1. with freeboard (contingent).

Depth for Freeboard (D).	Depth correction.	Round of Beam correction.
Moulded depth ... 38.04	(a) Where D is greater than Table depth (D - Table depth) R = (38.13 - 28.10) x 3 = +30.09	Moulded Breadth (B) 56.21
Stringer plate06	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =	Standard Round of Beam = $\frac{B \times 12}{50} =$ 13.49
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ ✓	If restricted by superstructures ✓	Ship's Round of Beam = 13.12
Depth for Freeboard (D) = 38.13		Difference -37
		Restricted to ✓
		Correction = $\frac{\text{Diff}^e}{4} \times \left(1 - \frac{S_1}{L} \right) =$ $\frac{-37}{4} = -9.25$

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 ...					
Fore enclosed ...					
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" " forward ...					
Total ...					

Standard Height of Superstructure **✓**

" " R.Q.D. **✓**

Deduction for complete superstructure

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

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

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

Percentage from Table, Line A.
(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 = **✓**

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	52.15	1		52.15	59.84	59.87	1		59.87
$\frac{1}{8}L$ from A.P. ...	23.21	4		92.84	26.37	26.37	4		105.48
$\frac{2}{8}L$ " ...	5.74	2		11.48	6.56	6.56	2		13.12
Amidships ...	-	4		-	-	-	4		-
$\frac{3}{8}L$ from F.P. ...	11.44	2		22.94	13.55	13.55	2		27.10
$\frac{4}{8}L$ " ...	46.42	4		185.64	54.00	54.00	4		216.00
F.P. ...	104.31	1		104.31	120.50	120.50	1		120.50
Total ...				469.36					542.15

Mean actual sheer aft = **mess**

Mean standard sheer aft

Mean actual sheer forward = **mess.**

Mean standard sheer forward

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

" " aft of " =

Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{75-S}{2L} \right) =$ **$\frac{72.78}{18} \times .75 = -3.03$**

If limited on account of midship superstructure.

If limited to maximum allowance of $1\frac{1}{2}$ ins. per 100 ft.

Deduction for Tropical Freeboard.	Deduction for Fresh Water.	TABULAR FREEBOARD corrected for Flush Deck (if required)
Addition for Winter and Winter North Atlantic Freeboard.	Displacement in salt water at summer load water line = 27' 22"	Correction for coefficient $\frac{68 \times 763}{1.36} = \frac{1.443}{1.36}$
Depth to Freeboard Deck = 38.13	$\Delta =$ 13740	Depth Correction ... 30.09
Summer freeboard = 10.91	Tons per inch immersion at summer load water line	Deduction for superstructures ... -
Moulded draught (d) = 27.22	T = 48.79	Sheer correction ... 3.03
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 6$\frac{3}{4}$	Deduction = $\frac{\Delta}{40T}$ inches	Round of Beam correction09
Addition for Winter North Atlantic Freeboard (if required) =	$\frac{13740}{40 \times 48.79} = 7"$	Correction for Thickness of Deck amidships ... -
		Other corrections, scantlings, etc. to correct round with a summer moulded draught 14.09
		44.27 3.03 +14.24
		Summer Freeboard = 131.00

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

Tropical Fresh Water Line above Centre of Disc ...	13$\frac{3}{4}$	Tropical Fresh Water Freeboard ...	9' 9$\frac{1}{2}$
Fresh Water Line " " ...	7"	Fresh Water " " ...	10' 4$\frac{1}{2}$
Tropical Line " " ...	6$\frac{3}{4}$	Tropical " " ...	10' 4$\frac{1}{2}$
Winter Line below " " ...	6$\frac{3}{4}$	Winter " " ...	11' 5$\frac{1}{2}$
Winter North Atlantic Line " " ...	✓	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.

Trade of ship

Names of sister ships

Builder's name and yard number

Owners

Fee £

18-0-0
Will be charged on completion.



© 2020

Lloyd's Register
Foundation