

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

 Index. No. ~~34991~~
 (For London Office only.)

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having _____

(Type of Superstructures.) _____

Port of Survey _____

Date of Survey 27/6/36

Name of Surveyor _____

Particulars of Classification + 100 A1 with free
(contemplated)

Ship's Name Cannell Laird

Nationality and Port of Registry _____

Official Number _____

Gross Tonnage _____

Date of Build _____

Moulded Dimensions: Length 486 Breadth 62.00 Depth 35.00

Moulded displacement at moulded draught = 85 per cent. of moulded depth _____ tons

Coefficient of fineness for use with Tables .706 given

Depth for Freeboard (D)		Depth correction		Round of Beam correction	
Moulded depth	35.00	(a) Where D is greater than Table depth (D-Table depth) R = $(35.04 - 32.40) 3.00$ = + 7.92"		Moulded Breadth (B)	62.00
Stringer plate	.04	(b) Where D is less than Table depth (if allowed) (Table depth-D) R = _____		Standard Round of Beam = $\frac{B \times 12}{50}$	14.88"
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$	✓	If restricted by superstructures ✓		Ship's Round of Beam	15.50"
Depth for Freeboard (D) =	35.04			Difference	Excess .62"
				Restricted to	
				Correction = $\frac{\text{Diff}^*}{4} \times \left(1 - \frac{S_1}{L} \right)$	$= \frac{.62}{4} \times .1234 = -.02$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...	75.50	75.50	8'-6"	✓	75.50
" overhang ...					
R.Q.D. enclosed ...					
" overhang ...					
Bridge enclosed ...	35.50	35.50	8'-6"	✓	35.50
" overhang aft ...					
" overhang forward ...					
F'cle enclosed ...					
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" " forward ...					
Total ...	426.00	426.00			426.00

Standard Height of Superstructure 7'-6"

" " R.Q.D. ✓

Deduction for complete superstructure 42.00"

Percentage covered $\frac{S}{L} = 87.66\%$

" " $\frac{S_1}{L} = 87.66\%$

" " $\frac{E}{L} = 87.66\%$

Percentage from Table, Line A. 84.80%
(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 = $42.00 \times .848 = - 35.61"$

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	58.60	1		58.60			1		
$\frac{1}{8}$ L from A.P. ...	26.075	4		104.30			4		
$\frac{2}{8}$ L " ...	6.445	2		12.89			2		
Amidships ...	✓	4		✓			4		
$\frac{3}{8}$ L from F.P. ...	12.89	2		25.78			2		
$\frac{4}{8}$ L " ...	52.15	4		208.60			4		
F.P. ...	117.20	1		117.20			1		
Total ...				527.37					

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 " = _____

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

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		Correction for coefficient	$\frac{706 + .68}{1.36} = \frac{1386}{1360}$
Depth to Freeboard Deck = <u>35.04</u>	Ft.	$\Delta =$		Depth Correction ...	7.92
Summer freeboard = <u>6.71</u>		Tons per inch immersion at summer load water line		Deduction for superstructures ...	- 35.61
Moulded draught (d) = <u>28.33</u>		T =		Sheer correction ...	-
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = <u>7.08</u> = <u>7"</u>		Deduction = $\frac{\Delta}{40T}$ inches		Round of Beam correction ...	- .02
Addition for Winter North Atlantic Freeboard (if required) = <u>✓</u>		$\frac{d}{4} = 7"$		Correction for Thickness of Deck amidships ...	-
				Other corrections, scantlings, etc. ...	8.23
				to a summer moulded draught of 28'-4"	16.15
				Summer Freeboard =	80.50

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

Tropical Fresh Water Line above Centre of Disc ...	1/4"	Tropical Fresh Water Freeboard ...	5'-8 1/2"
Fresh Water Line " " ...	7"	Fresh Water " " ...	6'-1 1/2"
Tropical Line " " ...	7"	Tropical " " ...	6'-1 1/2"
Winter Line below " " ...	7"	Winter " " ...	7'-3 1/2"
Winter North Atlantic Line " " ...	✓	Winter North Atlantic " " ...	✓