

AMENDED.

Rpt. C.11 (Comp.).

Index No. _____
(For London Office only.)

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name CLAN CAMPBELL.	Official Number 168761.	Nationality and Port of Registry BRITISH GLASGOW.	Gross Tonnage 51443.	Date of Build 5/1943.	Port of Survey _____
Moulded Dimensions: Length 457.00' Breadth 62.75' Depth 32.54'					Date of Survey 26-4-50.
Moulded displacement at moulded draught = 85 per cent. of moulded depth 5507. tons					Surveyor's Signature _____
Coefficient of fineness for use with Tables .684.					Particulars of Classification B S *

DEPTH FOR FREEBOARD (D).	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth ... 32.54.	(a) Where D is greater than Table depth (D - Table depth) R = (32.58 - 30.47) 3 = +6.33"	Moulded Breadth (B) 62.75.
Stringer plate04.	(b) Where D is less than Table depth (if allowed) (Table depth - D) R = 2.11	Standard Round of Beam = $\frac{B \times 12}{50} =$ 15.06.
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$	If restricted by superstructures ✓	Ship's Round of Beam = 15.75.
Depth for Freeboard (D) = 32.58.		Difference .69
		Restricted to
		Correction = $\frac{\text{Diff}^e}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.69}{4} \times .0054 = \text{N.I.L.}$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...	33.50	33.50	8.21	✓	33.50
„ overhang ...	1.00	.50			.50
R.Q.D. enclosed ...					
„ overhang ...					
Bridge enclosed ...	418.00	418.00	8.21	✓	418.00
„ overhang aft ...					
„ overhang forward ...					
F'cle enclosed ...					
„ overhang ...					
Trunk aft ...					
„ forward ...		1/2 DIFF.			
Tonnage opening aft ...	4.50	2.50		✓	2.50
„ „ forward ...					
Total ...	457.00	454.50			454.50

Standard Height of Superstructure **7.50'**

„ „ R.Q.D. **✓**

Deduction for complete superstructure **42.00"**

Percentage covered $\frac{S}{L} = 100.$

„ „ $\frac{S_1}{L} =$ **99.46.**

„ „ $\frac{E}{L} =$

Percentage from Table, Line A. = B. **99.33.**

(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 × .9933 = 41.71"**

SHEER CORRECTION.

Actual Twn De HT. = **8.21**

STAND. „ „ = **7.50**

.71 = 8.52"

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P. ...	55.70	1	55.70	+ 8.52	60.50	1	60.50
1/2 L from A.P. ...	24.785	4	99.14	27.13	30.72	4	122.88
1/4 L „ ...	6.125	2	12.25	8.25	7.59	2	15.18
Amidships ...	✓	4	✓	✓	✓	4	✓
1/4 L from F.P. ...	12.25	2	24.50	14.25	14.17	2	28.34
1/2 L „ ...	44.57	4	198.28	54.00	57.30	4	229.20
F.P. ...	111.40	1	111.40	120.25	128.77	1	128.77
Total ...			501.27	+ 8.52			593.39

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{92.12}{18} \left(.75 - \frac{.50}{25} \right) = -1.28"$

If limited on account of midship superstructure. **✓**

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

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = **32.58.**

Summer freeboard = **4.40.**

Moulded draught (d) = **28.18**

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = **7.05 = 7"**

Addition for Winter North Atlantic Freeboard (if required) = **✓**

Deduction for Fresh Water.

Displacement in salt water at summer load water line

$\Delta =$ **16036**

Tons per inch immersion at summer load water line

$T =$ **55.35.**

Deduction = $\frac{\Delta}{40 T}$ inches

= 7.24 = 7 1/4"

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient $\frac{.684 + .69}{1.26} = \frac{1.364}{1.26}$

	+	-
Depth Correction ...	6.33	✓
Deduction for superstructures ...	✓	41.742
Sheer correction ...	✓	1.28.
Round of Beam correction ...	✓	✓
Correction for Thickness of Deck amidships ...	✓	✓
Other corrections, scantlings, etc. ...	✓	✓
	6.33	43.02

89.27.

89.54.

Summer Freeboard = **52.857**

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

Tropical Fresh Water Line above Centre of Disc ...	14 1/4"	Tropical Fresh Water Freeboard	3 1/4"
Fresh Water Line „ „ ...	7 1/4"	Fresh Water „ „ ...	3 - 9 1/2"
Tropical Line „ „ ...	7."	Tropical „ „ ...	3 - 9 3/4"
Winter Line below „ „ ...	7."	Winter „ „ ...	4 - 11 3/4"
Winter North Atlantic Line „ „ ...	✓	Winter North Atlantic „ „ ...	✓