

Lloyd's Register of Shipping.
SURVEYS FOR FREEBOARD.
(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name <i>Empire Confederation</i>	Official Number <i>180614</i>	Nationality and Port of Registry <i>British London</i>	Gross Tonnage <i>1575</i>	Date of Build <i>1921</i>	Port of Survey
Moulded Dimensions: Length <i>250.37</i> Breadth <i>37.5</i> Depth <i>15.08</i>					Date of Survey <i>21.8.45</i>
Moulded displacement at moulded draught = 85 per cent. of moulded depth					Surveyor's Signature
Coefficient of fineness for use with Tables <i>703 (assumed)</i>					Particulars of Classification

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 = $\frac{B \times 12}{50}$ =
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$	If restricted by superstructures <i>Nil</i>	Ship's Round of Beam =
Depth for Freeboard (D) =		Difference
		Restricted to
		Correction = $\frac{\text{Diff}^*}{4} \times \left(1 - \frac{S_1}{L} \right) =$ <i>Nil</i>

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 *31.04*
Percentage covered $\frac{S}{L} =$
" " $\frac{S_1}{L} =$
" " $\frac{E}{L} =$ *80.28*
Percentage from Table, Line A. *Timber 87.68*
(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 = *31.04 x 87.68 = -27.21*

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...		1					1		
$\frac{1}{8}L$ from A.P. ...		4					4		
$\frac{2}{8}L$ " ...		2					2		
Amidships ...		4					4		
$\frac{3}{8}L$ from F.P. ...		2					2		
$\frac{4}{8}L$ " ...		4					4		
F.P. ...		1					1		
Total ...									

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 " =
Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) =$ *-0.02*
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. Addition for Winter and Winter North Atlantic Freeboard.	Deduction for Fresh Water. Displacement in salt water at summer load water line $\Delta =$ Tons per inch immersion at summer load water line $T =$ Deduction = $\frac{\Delta}{40T}$ inches <i>$\frac{27}{40} = 3.66 = 3\frac{3}{4}$</i>	TABULAR FREEBOARD corrected for Fresh Deck (if required) Correction for coefficient $\frac{.703 + .68}{1.36} = \frac{1.383}{1.36}$ Depth Correction ... Deduction for superstructures ... Sheer correction ... Round of Beam correction ... Correction for Thickness of Deck amidships ... Other corrections, scantlings, etc. ... Summer Freeboard = <i>5.70</i>
Depth to Freeboard Deck = <i>15.12</i> Summer freeboard = <i>.48</i> Moulded draught (d) = <i>14.64</i> Deduction for Tropical freeboard and Addition for Winter freeboard = $\frac{d}{43} = \frac{4.88}{5} = .976$ Addition for Winter North Atlantic Freeboard (if required) =		<i>32.38</i> <i>32.93</i> <i>87.8</i> <i>21.8.45</i> <i>-27.23</i> <i>-27.23</i>

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

Timber Tropical Fresh Water Line above Centre of Disc ...	7 1/2" Timber	Tropical Fresh Water Freeboard ...	0' - 5 3/4"
Timber Fresh Water Line	"	" Fresh Water	0' - 2"
Timber Tropical Line	"	" Tropical	0' - 10 3/4"
Timber Winter Line	"	" Winter	"
Timber Winter North Atlantic Line	"	" Winter North Atlantic	"
Timber Summer above centre of disc	3 3/4"		

10m 3.37. T. 010451-010460-0062