

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

Ship's Name Temeraire	Official Number	Nationality and Port of Registry Norwich Turkey.	Gross Tonnage	Date of Build 1927 -12	Port of Survey
Moulded Dimensions: Length 450.92 Breadth 59.96 Depth 38.62					Date of Survey 12-10-40.
Moulded displacement at moulded draught = 85 per cent. of moulded depth tons					Surveyor's Signature
Coefficient of fineness for use with Tables .737 (estimated)					Particulars of Classification

Depth for Freeboard (D).	Depth correction.	Round of Beam correction.
Moulded depth 38.62	(a) Where D is greater than Table depth (D-Table depth) R = (38.62-30.00) x 3 = +25.89 8.63	Moulded Breadth (B) 59.96
Stringer plate07	(b) Where D is less than Table depth (if allowed) (Table depth-D) R = -	Standard Round of Beam = $\frac{B \times 12}{50} = \frac{14.39}{50}$
Heating on exposed deck $T \left(\frac{L-S}{L} \right) =$	If restricted by superstructures	Ship's Round of Beam = 14.00
Depth for Freeboard (D) = 38.69		Difference .39
		Restricted to
		Correction = $\frac{\text{Diff.}}{4} \times \left(1 - \frac{S_1}{L_1} \right) = \frac{.39}{4}$

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 7.5
.. .. R.Q.D. -
Deduction for complete superstructure 42
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.	55.09	1	55.09	51.00	51.00	1	51.00	51.00	
$\frac{1}{4}$ L from A.P.	24.51	4	98.04	23.50	23.50	4	94.00	94.00	
$\frac{3}{4}$ L	6.06	2	12.12	6.50	6.50	2	13.00	13.00	
Amidships	-	4	-	-	-	4	-	-	
$\frac{3}{4}$ L from F.P.	12.12	2	24.24	13.00	13.00	2	26.00	26.00	
$\frac{1}{4}$ L	49.03	4	196.12	48.25	48.25	4	193.00	193.00	
F.P.	110.18	1	110.18	114.00	114.00	1	114.00	114.00	
Total			498.79				496.00		

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{4.79}{18} (.75 -) =$

If limited on account of midship superstructure.

Mean actual sheer aft = **Deficient out > .75**

Mean standard sheer aft =

Mean actual sheer forward = **Excess**

Mean standard sheer forward =

Length of enclosed superstructure forward of amidships =

.. .. aft of .. =

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

Deduction for Tropical Freeboard.	Deduction for Fresh Water.	TABULAR FREEBOARD corrected for Flush Deck (if required)	87.39
Addition for Winter and Winter North Atlantic Freeboard.	Displacement in salt water at summer load water line	Correction for coefficient $\frac{.737 + .68}{1.36} = \frac{1.417}{1.36}$	91.06
Depth to Freeboard Deck = 38.69	$\Delta = 15227$	Depth Correction 25.89	
Summer freeboard = 11.35	Tons per inch immersion at summer load water line	Deduction for superstructures	
Moulded draught (d) = 27.34	$T = 53.13$	Sheer correction	
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 6.83 = 6 3/4	Deduction = $\frac{\Delta}{40T}$ inches = 7.16 = 7 1/4	Round of Beam correction	
Addition for Winter North Atlantic Freeboard (if required) =		Correction for Thickness of Deck amidships	
		Other corrections, scantlings, etc.	
		Summer Freeboard = 136.25	

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

Tropical Fresh Water Line above Centre of Disc	14" = 355"	Tropical Fresh Water Freeboard	11' 4 1/4" = 346 1/4"
Fresh Water Line	7 1/4" = 184"	Fresh Water	10' 2 1/4" = 310 6"
Tropical Line	6 3/4" = 171"	Tropical	10' 9" = 327 7"
Winter Line below	5 1/4" = 121"	Winter	10' 9 1/2" = 329 0"
Winter North Atlantic Line		Winter North Atlantic	11' 11" = 363 2"