

URGENT

Lloyd's Register of Shipping.

Index. No.
(For London Office only).

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name *Empire Salvage* Official Number _____ Nationality and Port of Registry _____ Gross Tonnage *not yet measured* Date of Build *1940*

M.T. *Empire Salvage* Port of Survey _____ Date of Survey _____

Moulded Dimensions: Length *149.28 M²* Breadth *22.250 M²* Depth *10.795 M²*
TO CENTRE OF RUDDER STOCK.

Moulded displacement at moulded draught = 85 per cent. of moulded depth *22 830 M³* tons

Coefficient of fineness for use with Tables *749.*

Surveyor's Signature _____

Particulars of Classification *+ 100 A1.*
Carrying Petroleum in Bulk
(Contemplated) ✓

Depth for Freeboard (D).		Depth correction.		Round of Beam correction.	
Moulded depth	10795 mm	(a) Where D is greater than Table depth (D - Table depth) R = <i>8.33 (10.816 - 9.952) 30 = + 216 mm.</i>		Moulded Breadth (B)	22250 mm
Stringer plate	21 mm	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =		Standard Round of Beam = $\frac{B \times R}{50}$	445 mm
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$				Ship's Round of Beam	445 mm
				Difference	Nil
Depth for Freeboard (D) =	10816 mm	If restricted by superstructures	✓	Restricted to	✓
				Correction = $\frac{\text{Diff}^2}{4} \times \left(1 - \frac{S_1}{L} \right)$	Nil

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed <i>2401.5</i>	35602	35602	2440	✓	35602
overhang					
R.Q.D. enclosed					
overhang					
Bridge enclosed					
overhang aft					
overhang forward					
F'cle enclosed	12880	12880	2440	✓	12880
overhang	685	685		✓	685
Trunk aft					
forward					
Tonnage opening aft					
forward					
Total	49167	49167			49167

Standard Height of Superstructure *2290 mm.*

" " R.Q.D. *✓*

Deduction for complete superstructure *1067 mm*

Percentage covered $\frac{S}{L} = 32.94$

" " $\frac{S_1}{L} = 32.94$

" " $\frac{E}{L} = 32.94$

Percentage from Table, Line A *TANKER 23.94.*

(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 = $1067 \times 23.94 = 255 \text{ mm.}$

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P. ...	1498	1	1498	1493	1493	1	1493
1/4 L from A.P. ...	665	4	2660	666	666	4	2664
1/2 L " ...	166	2	332	163	163	2	326
Amidships ...	-	4	-	0	-	4	-
3/4 L from F.P. ...	333	2	666	333	333	2	666
3/4 L " ...	1331	4	5324	1331	1331	4	5324
F.P. ...	2995	1	2995	2989	2989	1	2989
Total			13475				13462

Mean actual sheer aft = *Deficient*

Mean standard sheer aft

Mean actual sheer forward = *Deficient*

Mean standard sheer forward

Length of enclosed superstructure forward of amidships = *Deficient*

" aft of " = *Sheer.*

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{13}{18} \times (.75 - .1647) = \text{negligible.}$

If limited on account of midship superstructure. ✓

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

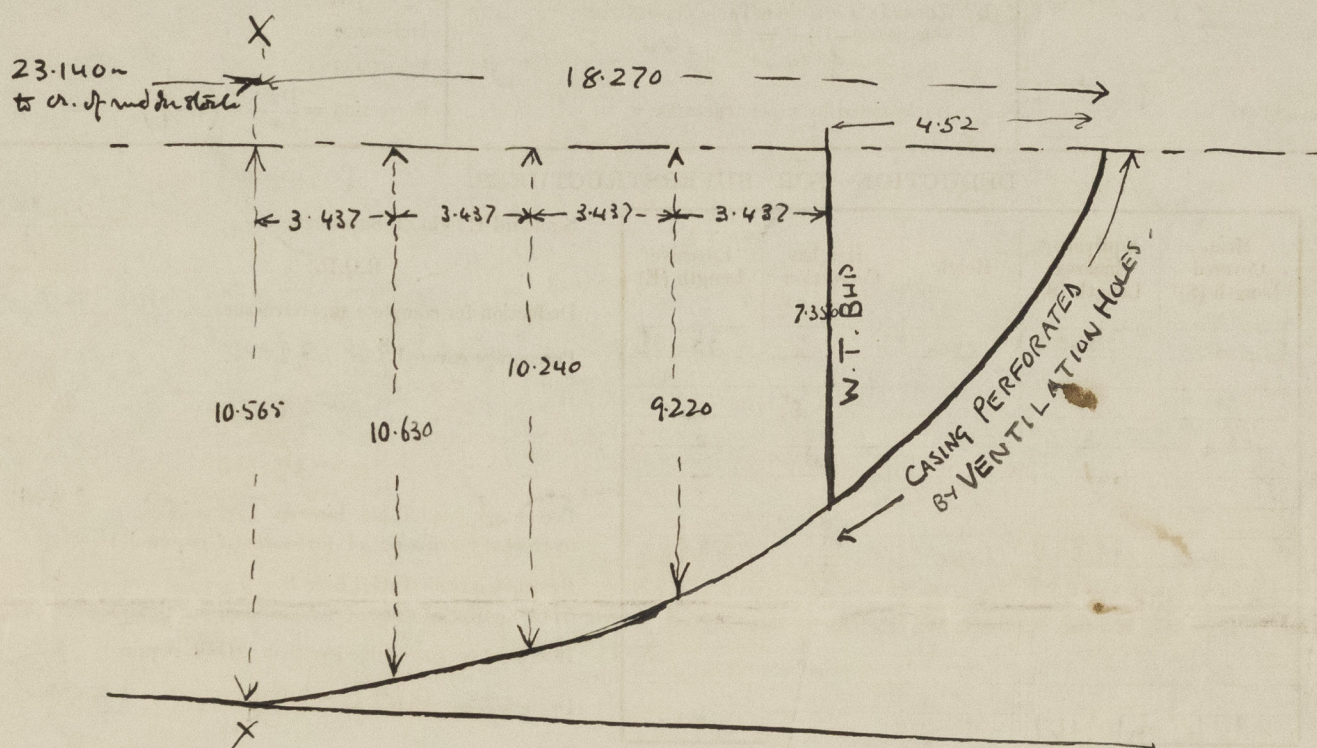
Deduction for Tropical Freeboard.	Deduction for Fresh Water.	TABULAR FREEBOARD corrected for Flush Deck (if required)
Addition for Winter and Winter North Atlantic Freeboard.	Displacement in salt water at summer load water line	Correction for coefficient $\frac{749 + .68}{1.36} = 1.422 / 1.36$
Depth to Freeboard Deck = <i>10.816</i>	$\Delta = 21.480$	
Summer freeboard = <i>1.230</i>	Tons per inch immersion at summer load water line	
Moulded draught (d) = <i>8.586</i>	$T = 72.40$	
Deduction for Tropical freeboard and addition for Winter freeboard = <i>179 - 18 cms</i>	Deduction = $\frac{\Delta}{40 T}$ inches	
Addition for Winter North Atlantic Freeboard (if required) = <i>179 + 122 = 301 = 30 cms.</i>	= <i>7.41"</i>	
	= <i>188</i>	
	= <i>19 cms.</i>	

Summer Freeboard = *2232*

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 1/2 ... 37 cms	Tropical Fresh Water Freeboard	6.1 1/4 ... 186 "
Fresh Water Line	7 1/2 ... 19 "	Fresh Water	6.8 3/4 ... 204 "
Tropical Line	7 ... 18 "	Tropical	6.8 3/4 ... 205 "
Winter Line below	7 ... 18 "	Winter	7.10 1/4 ... 241 "
Winter North Atlantic Line	11 3/4 ... 30 "	Winter North Atlantic	8.3 1/2 ... 253 "

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.



Equivalent length of Poop

10.565 x 1	10.565
10.630 x 4	42.520
10.240 x 2	20.480
9.220 x 4	36.880
7.350 x 1	7.350

$$\frac{117.795 \times 13.750}{3 \times 4} = 134.98 \text{ m}^2$$

$$\text{Equivalent length of } XX = \frac{134.98}{10.565} = 12.775$$

Correction for mean width of deck.

$$\begin{aligned} \frac{1}{2} \text{ width at } 12.775 \text{ ft. of } XX &= 11.000 \\ \frac{1}{2} \text{ width at } XX &= 10.565 \\ \text{mean } \frac{1}{2} \text{ width} &= 10.832 \end{aligned}$$

$$\text{Corrected Equivalent Bulkhead} = \frac{134.98}{10.832} = 12.462$$

\therefore Equivalent length of Poop

$$= 23.140 + 12.462 = 35.602 \text{ m}$$

Trade of ship Ocean trade

Names of sister ships [redacted]

Builder's name and yard number [redacted]

Owners [redacted]

Fee [redacted]



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Foundation