

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Computation of Freeboard for ~~Steamer, Sailing Ship, Tanker~~ *Whaling Factory* having *a flush deck*

Port of Survey *Sandefjord*

Date of Survey *June 24th 1932*

Name of Surveyor *Jos. Webster*

Particulars of Classification *+100 A1 with fld whaling service, carrying petroleum in bulk.*

Ship's Name *EMPIRE VENTURE* Type of Superstructures *LONDON* 14772

Registry *British* Gross Tonnage *12639* Date of Build *1929*

Nationality and Port of Official Number *Newcastle* 161537

Moulded Dimensions: Length 490.0 Breadth 40.75 Depth 51.0

Moulded displacement at moulded draught = 85 per cent. of moulded depth 36121 tons

Coefficient of fineness for use with Tables .842

Depth for Freeboard (D)		Depth correction		Round of Beam correction	
Moulded depth	51.00	(a) Where D is greater than Table depth (D - Table depth) R =		Moulded Breadth (B)	40.75
Stringer plate	.05	(51.05 - 32.67) x 3 =	55.14 ✓	Standard Round of Beam = $\frac{B \times 12}{50}$	16.98
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$	-	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =		Ship's Round of Beam	17.75
Depth for Freeboard (D) =	51.05	If restricted by superstructures		Difference	.77
				Restricted to	
				Correction = $\frac{\text{Diff}^*}{4} \times \left(1 - \frac{S_1}{L} \right)$	$\frac{.77}{4} \times 1 = -.19$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	
Poop enclosed ...						Standard Height of Superstructure
" overhang ...						" " R.Q.D.
R.Q.D. enclosed ...						Deduction for complete superstructure
" overhang ...						Percentage covered $\frac{S}{L} =$
Bridge enclosed ...						" " $\frac{S_1}{L} =$
" overhang aft ...						" " $\frac{E}{L} =$
" overhang forward						Percentage from Table, Line A.
Fore enclosed ...						(corrected for absence of forecastle (if required))
" overhang ...						Percentage from Table, Line B.
Trunk aft ...						(corrected for absence of forecastle (if required))
" forward ...						Interpolation for bridge less than .2L (if required)
Tonnage opening aft ...						Deduction =
" " forward						
Total ...						NIL

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	59.00	1		59.00	48.25	48.25	1		48.25
1/2 L from A.P. ...	26.25	4		101.00	21.52	21.52	4		86.08
3/4 L " ...	6.49	2		12.98	5.38	5.38	2		10.76
Amidships ...		4					4		
3/4 L from F.P. ...	12.98	2		25.96	8.09	8.09	2		16.18
1/2 L " ...	52.50	4		210.00	32.39	32.39	4		129.56
F.P. ...	118.00	1		118.00	72.75	72.75	1		72.75
Total ...				530.94					363.58

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 = } *NIL*
" " aft of " = }

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{167.36 \times .75}{18} = +6.97$

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 = 51.05

Summer freeboard = 15.91

Moulded draught (d) = 35.14

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = 8.78

on for Winter North Atlantic Freeboard (if required) =

Deduction for Fresh Water.

Displacement in salt water at summer load water line

$\Delta = 28780$

Tons per inch immersion at summer load water line

T = 75.8

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

= 9.48

9 1/2"

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

$\frac{99.30 + 7.35}{1.36} = 15.22$

Depth Correction ... 55.14

Deduction for superstructures ...

Sheer correction ... 6.97

Round of Beam correction19

Correction for Thickness of Deck amidships

Other corrections, scantlings, etc. ...

to shipway & for scantlings

106.65

119.37

+

55.14

-

6.97

-

.19

-

9.71

-

71.82

1.19

+ 71.63

Summer Freeboard = 191.00

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

Tropical Fresh Water Line above Centre of Disc ... 18 1/4

Fresh Water Line " " ... 9 1/2

Tropical Line " " ... 8 3/4

Winter Line below " " ... 8 3/4

Winter North Atlantic Line " " ...

Tropical Fresh Water Freeboard ...

Fresh Water " " ...

Tropical " " ...

Winter " " ...

Winter North Atlantic " " ...

15 1/2

12 3/4

15 1/2

15 2 1/4

6 7 3/4

RECEIVED 22 APR 1937
RECEIVED 13 NOV 1934
RECEIVED 12 - AUG 1933

006301-006316-0053