

EMPIRE CHAPMAN
NO. 36825Glasgow Rep. No. 67652
Lloyd's Register of Shipping.F.49
Index. No. 37407
(For London Office only).

SURVEYS FOR FREEBOARD.

PECHELBRONN (COMPUTATION FOR ~~STEAMER, SAILING SHIP, TANKER.~~)

Ship's Name <i>Empire Traveller</i>	Official Number 168530	Nationality and Port of Registry <i>British Finnish Belfast</i>	Gross Tonnage 8201.35	Date of Build 1943	Port of Survey <i>Belfast & Glasgow</i>
Moulded Dimensions: Length <i>460</i> Breadth <i>59</i> Depth <i>34</i>					Date of Survey <i>during construction</i>
Moulded displacement at moulded draught = 85 per cent. of moulded depth <i>17733</i> tons					Surveyor's Signature <i>Wm. Baifan</i>
Coefficient of fineness for use with Tables <i>.791</i>					Particulars of Classification <i>400 A1 carrying petroleum in bulk. Cargo contemplated</i>

Depth for Freeboard (D).	Depth correction.	Round of Beam correction.
Moulded depth <i>34</i>	(a) Where D is greater than Table depth (D - Table depth) R = <i>(34.07 - 30.67) 3 = +10.20"</i> <i>3.40</i>	Moulded Breadth (B) <i>59</i>
Stringer plate ... <i>80</i> <i>.07</i>	(b) Where D is less than Table depth (if allowed) (Table depth - D) R = <i>✓</i>	Standard Round of Beam = $\frac{B \times 12}{50} = \frac{14.16}{50}$
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ <i>nil</i>	If restricted by superstructures <i>✓</i>	Ship's Round of Beam = <i>14.74</i>
Depth for Freeboard (D) = <i>34.07</i>		Difference <i>.59</i>
		Restricted to
		Correction = $\frac{\text{Diff}^*}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.59}{4} \times .583 = -.09"$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed <i>Equi</i> ...	<i>95.00</i>	<i>95.00</i>	<i>7'-6"</i>	<i>7'-6"</i>	<i>95.00</i>
" overhang ...					
R.Q.D. enclosed ...					
" overhang ...					
Bridge enclosed <i>Equi</i> ...	<i>46.86</i>	<i>46.86</i>	<i>7'-6"</i>	<i>7'-6"</i>	<i>46.86</i>
" overhang aft ...	<i>2.50</i>	<i>1.88</i>			<i>1.88</i>
" overhang forward ...					
Fore enclosed ...	<i>48.04</i>	<i>48.04</i>	<i>7'-6"</i>	<i>7'-6"</i>	<i>48.04</i>
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" forward ...					
Total ...	<i>192.40</i>	<i>191.78</i>			<i>191.78</i>

Standard Height of Superstructure	<i>7.5</i>
" " R.Q.D.	<i>✓</i>
Deduction for complete superstructure	<i>42.00"</i>
Percentage covered $\frac{S}{L} =$	<i>41.83</i>
" " $\frac{S_1}{L} =$	<i>41.70</i>
" " $\frac{E}{L} =$	<i>41.70</i>
Percentage from Table, Line A. <i>Tanker</i>	<i>32.70</i>
(corrected for absence of forecastle (if required))	<i>✓</i>
Percentage from Table, Line B.	<i>✓</i>
(corrected for absence of forecastle (if required))	<i>✓</i>
Interpolation for bridge less than 2L (if required)	<i>✓</i>
Deduction = $42.00 \times .3270 =$	<i>-13.73"</i>

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	<i>56.00</i>	1		<i>56.00</i>	<i>56.4</i>	<i>56.40</i>	1		<i>56.40</i>
$\frac{1}{4}$ L from A.P. ...	<i>24.92</i>	4		<i>99.68</i>	<i>25.0</i>	<i>25.00</i>	4		<i>100.00</i>
$\frac{2}{8}$ L " ...	<i>6.16</i>	2		<i>12.32</i>	<i>6.2</i>	<i>6.20</i>	2		<i>12.40</i>
Amidships ...	-	4		-	-	-	4		-
$\frac{3}{8}$ L from F.P. ...	<i>12.32</i>	2		<i>24.64</i>	<i>12.4</i>	<i>12.40</i>	2		<i>24.80</i>
$\frac{1}{4}$ L " ...	<i>49.84</i>	4		<i>199.36</i>	<i>50.0</i>	<i>50.00</i>	4		<i>200.00</i>
F.P. ...	<i>112.00</i>	1		<i>112.00</i>	<i>112.1</i>	<i>112.10</i>	1		<i>112.10</i>
Total ...				<i>504.00</i>					<i>505.70</i>

Mean actual sheer aft =
Mean standard sheer aft =Mean actual sheer forward =
Mean standard sheer forward =Length of enclosed superstructure forward of amidships =
Laft of " = *Tanker*Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{1.7}{18} (.75 - .2092) = -.05"$
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.

Ft.
Depth to Freeboard Deck = *34.07*
Summer freeboard = *6.71*
Moulded draught (d) = *27.36*

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = *6.84 = 6 $\frac{3}{4}$* Addition for Winter North Atlantic Freeboard (if required) = *6.84 + 4.60 = 11.44 = 11 $\frac{1}{2}$*

Deduction for Fresh Water.

Displacement in salt water at summer load water line

 $\Delta =$ *16791*

Tons per inch immersion at summer load water line

 $T =$ *56.41*Deduction = $\frac{\Delta}{40T}$ inches *7.44 7 $\frac{1}{2}$* *48 8240 T.P.1**28 1715 56.6**27 16439 56.2*

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

 $\frac{.791 + .68}{1.36} = 1.471 / 1.36$ Depth Correction *10.20*Deduction for superstructures *-13.73*Sheer correction *.05*Round of Beam correction *.09*Correction for Thickness of Deck amidships *-*Other corrections, scantlings, etc. *-**10.20 13.87 -3.67*Summer Freeboard = *80.38*

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

Tropical Fresh Water Line above Centre of Disc ...	<i>14.4"</i>
Fresh Water Line " " ...	<i>7.12"</i>
Tropical Line " " ...	<i>6.34"</i>
Winter Line below " " ...	<i>6.34"</i>
Winter North Atlantic Line " " ...	<i>11.12"</i>

Tropical Fresh Water Freeboard ...	<i>6$\frac{3}{4}$"</i>
Fresh Water " " ...	<i>6$\frac{1}{2}$"</i>
Tropical " " ...	<i>6$\frac{1}{2}$"</i>
Winter " " ...	<i>7$\frac{1}{2}$"</i>
Winter North Atlantic " " ...	<i>7$\frac{1}{2}$"</i>

(W. K. ...)

006601-006613-0300

29/10/43.

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.

Poop: $\frac{2}{3} \times 3' - 7\frac{1}{2}" = 2' - 5"$
 $\frac{26108892}{95' - 0"} = 2' - 5"$

Bridge: $\frac{2}{3} \times 4' - 6\frac{1}{2}" = 3.03$
 $\frac{43.83}{46.86'}$

Mean (m) (m) (m)	Length (m)	Height (m)	Width (m)
	2.0	2.0	2.0
	2.0	2.0	2.0
	2.0	2.0	2.0

Length (m)	Width (m)	Height (m)	Volume (m³)
2.0	2.0	2.0	8.0
2.0	2.0	2.0	8.0
2.0	2.0	2.0	8.0
2.0	2.0	2.0	8.0

Trade of ship Ocean-going Tanker
 Names of sister ships Empire Bonifat. (N7164) Empire Bombardier N1158 etc
 Builder's name and yard number Empire Traveller N1189 (Harland & Wolff Ltd Belfast)
 Owners Ministry of War Transport (Manager Eagle Oil Co Ltd)
 Fee £ 19 0 0



© 2021

Lloyd's Register Foundation