

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name "EMPIRE TIGOUVER" Ex "GRETE"	Official Number 180735	Nationality and Port of Registry BRITISH LONDON (EX GERMAN)	Gross Tonnage 638.11	Date of Build 1943	Port of Survey NEWCASTLE-ON-TYNE
Moulded Dimensions: Length 184'-7 1/4" Breadth 29'-6 1/4" Depth 13'-1 1/2"					Date of Survey 25th July + Subs.
Moulded displacement at moulded draught = 85 per cent. of moulded depth					Surveyor's Signature Thomas E. Sowden
Coefficient of fineness for use with Tables .70 (assumed)					Particulars of Classification G.L. + 100A (E) North Sea with fld.

Depth for Freeboard (D).	Depth correction.	Round of Beam correction.
Moulded depth ... 13.12	(a) Where D is greater than Table depth (D - Table depth) R = (13.15 - 12.51) × 1.443 = +.92	Moulded Breadth (B) 29.52
Stringer plate40	(b) Where D is less than Table depth (if allowed) (Table depth - D) R = ✓	Standard Round of Beam = $\frac{B \times 12}{50} =$ 7.88
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$		Ship's Round of Beam = 8
		Difference .94
Depth for Freeboard (D) = 13.15	If restricted by superstructures	Restricted to
		Correction = $\frac{\text{Diff}^*}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.94}{4} \times .5061 = -.12$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed <i>equivalent</i>	53.73	53.73	4'-0"	-	53.73
" overhang98	.49	4'-0"	-	.49
R.Q.D. enclosed					
" overhang					
Bridge enclosed...					
" overhang aft					
" overhang forward					
Fore enclosed <i>equivalent</i>	36.87	36.87	6'-6"	-	36.87
" overhang ...	3.13	1.56	-	-	1.56
Trunk aft					
" forward					
Tonnage opening aft					
" forward					
Total	94.71	92.65			92.65

Standard Height of Superstructure **6.0**
R.Q.D. **✓**
Deduction for complete superstructure **24.76**
Percentage covered $\frac{S}{L} =$ **50.48**
 $\frac{S_1}{L} =$ **49.39**
Percentage from Table, Line A. **31.48**
(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 = **24.76 × .3148 = -7.79**

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	28.76	1		28.76	1'-4 3/4"	16.75	1		16.75
1/8 L from A.P. ...	12.80	4		51.20	4'-5"	4.50	4		18.00
3/8 L " ...	3.165	2		6.33	1'-2 1/2"	1.25	2		2.50
Amidships ...	-	4		-	-	-	4		-
5/8 L from F.P. ...	6.33	2		12.66	4'-7 1/2"	4.75	2		9.50
7/8 L " ...	25.60	4		102.40	1'-5 1/2"	17.50	4		70.00
F.P. ...	57.52	1		57.52	3'-6 3/4"	42.75	1		42.75
Total				258.87					159.50

Mean actual sheer aft =
Mean standard sheer aft = **Deficient**
Mean actual sheer forward =
Mean standard sheer forward =
Length of enclosed superstructure forward of amidships = **Nil**
aft of " =
Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{99.37}{18} \left(.75 - \frac{.2524}{49.76} \right) = +2.75$
If limited on account of midship superstructure. If limited to maximum allowance of 1 1/2 ins. per 100 ft. **✓**

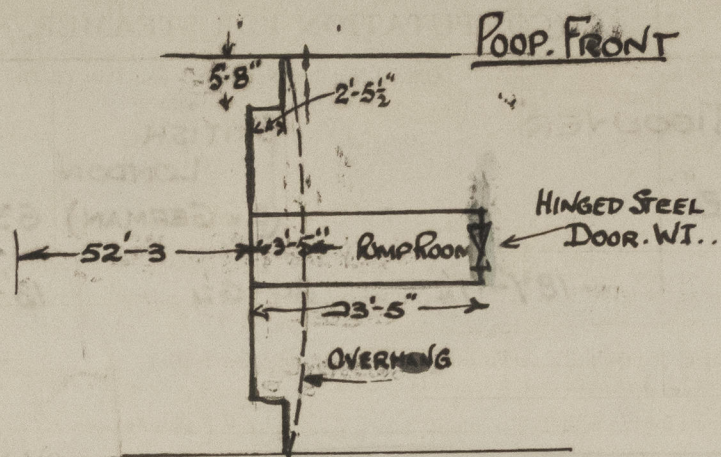
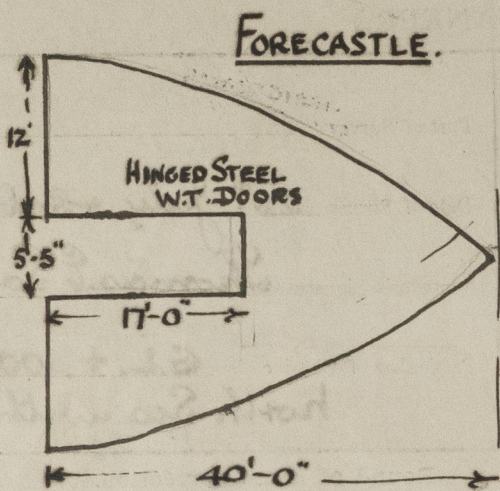
Deduction for Tropical Freeboard.	Deduction for Fresh Water.	TABULAR FREEBOARD corrected for Flush Deck (if required)	21.02
Addition for Winter and Winter North Atlantic Freeboard.	Displacement in salt water at summer load water line	Correction for coefficient $\frac{.70 + .68}{1.36} = \frac{1.38}{1.36}$	21.33
Depth to Freeboard Deck = 13.15	Δ =	Depth Correction92	
Summer freeboard = 3.79	Tons per inch immersion at summer load water line	Deduction for superstructures ... 7.79	
Moulded draught (d) = 9.36	T =	Sheer correction ... 2.75	
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches =	Deduction = $\frac{\Delta}{40 T}$ inches =	Round of Beam correction12	
Addition for Winter North Atlantic Freeboard (if required) =		Correction for Thickness of Deck amidships	
		Other corrections, scantlings, etc. to correspond to all seasons water line draught of 9'-4 1/4"	
		Summer Freeboard = 45.50	

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

Tropical Fresh Water Line above Centre of Disc ... 2 1/4"	Tropical Fresh Water Freeboard ... 3'-9 1/2" (all seasons)
Fresh Water Line " " ... 2 1/4"	Fresh Water " " ... 3'-7 1/4"
Tropical Line " " ... Nil	Tropical " " ... 3'-7 1/4"
Winter Line below " " ... Nil	Winter " " ... 3'-9 1/2"
Winter North Atlantic Line Not required	Winter North Atlantic " " ... 3'-9 1/2"

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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.



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Trade of ship tanker with cylindrical tanks in holds. To be used as water carrier in port in far east.

Names of sister ships "Dora" "Anna" "Hilde"

Builder's name and yard number D.W. Kiemer Sohn. Schiffswerft. Elmshorn.

Owners Ministry of War Transport. (Anglo Saxon Pet. Co Ltd Managers)

Fee £



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