

Empire Galtair  
36827

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER, (TUG))

Ship's Name <b>"EMPIRE BETSY"</b> N.N. <b>SOERIO</b>	Official Number <b>180248</b>	Nationality and Port of Registry <b>BRITISH</b> <b>HULL.</b>	Gross Tonnage <b>274.35</b>	Date of Build <b>1944</b>	Port of Survey <b>HULL.</b>
Moulded Dimensions: Length <b>105'0"</b> Breadth <b>26'6"</b> Depth <b>13'0"</b>	Moulded displacement at moulded draught = 85 per cent. of moulded depth <b>504</b> tons				Date of Survey <b>DURING CONSTRUCTION.</b>
Coefficient of fineness for use with Tables <b>.68 (.574 actual)</b>				Surveyor's Signature <b>J. Macleod</b>	
				Particulars of Classification <b>*100 A.1.</b> <b>"FOR TOWING SERVICES"</b> <b>(CONTEMPLATED)</b>	

<b>Depth for Freeboard (D).</b>	<b>Depth correction.</b>	<b>Round of Beam correction.</b>
Moulded depth ... <b>13'0"</b>	(a) Where D is greater than Table depth $(D - \text{Table depth}) R =$ $(13.03 - 7.00) \times .808 = +4.87$ <b>6.03</b>	Moulded Breadth (B) <b>26'5"</b>
Stringer plate ... <b>.029</b>	(b) Where D is less than Table depth (if allowed) (Table depth - D) R = <b>✓</b>	Standard Round of Beam = $\frac{B \times 12}{50} =$ <b>6.36</b>
Sheathing on exposed deck <b>✓</b> $T \left( \frac{L-S}{L} \right) =$	If restricted by superstructures <b>✓</b>	Ship's Round of Beam = <b>7 1/2"</b>
Depth for Freeboard (D) = <b>13-029</b>		Difference = <b>1.14</b>
		Restricted to
		Correction = $\frac{\text{Diff}^*}{4} \times \left( 1 - \frac{S_1}{L} \right) =$ <b>1.14/4 = -.29</b>

### DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)	
Poop enclosed ...						
" overhang ...						
R.Q.D. enclosed ...						
" overhang ...						
Bridge enclosed ...						
" overhang aft ...						
" overhang forward ...						
F'cle enclosed ...						
" overhang ...						
Trunk aft ...						
" forward ...						
Tonnage opening aft ...						
" forward ...						
Total ...						

Standard Height of Superstructure \_\_\_\_\_  
" " R.Q.D. \_\_\_\_\_  
Deduction for complete superstructure \_\_\_\_\_  
Percentage covered  $\frac{S}{L} =$  \_\_\_\_\_  
" "  $\frac{S_1}{L} =$  **Nil**  
" "  $\frac{E}{L} =$  \_\_\_\_\_  
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 = **Nil** ✓

### SHEERS MEASURED FROM TOP OF KEEL TO DECK AT SIDE

### SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P. ...	20.50	1	20.50	36.00	36.00	1	36.00
1/2 L from A.P. ...	9.12	4	36.48	17.50	17.50	4	70.00
3/4 L " ...	2.25	2	4.51	6.00	6.00	2	12.00
Amidships ...	-	4	-	18.00	-	4	-
3/4 L from F.P. ...	4.51	2	9.02	4.25	4.25	2	8.50
1/2 L " ...	18.25	4	73.00	24.00	24.00	4	96.00
F.P. ...	41.00	1	41.00	60.00	60.00	1	60.00
Total ...			184.51				282.50

Mean actual sheer aft = \_\_\_\_\_  
Mean standard sheer aft = \_\_\_\_\_  
Mean actual sheer forward = \_\_\_\_\_  
Mean standard sheer forward = \_\_\_\_\_  
Length of enclosed superstructure forward of amidships = \_\_\_\_\_  
" " aft of " = **Nil**

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) = \frac{97.99 \times .75}{18} = -4.08$   
If limited on account of midship superstructure. **No. Flush Deck**

If limited to maximum allowance of 1 1/2 ins. per 100 ft. **4.08 - 1.58**

Deduction for Tropical Freeboard.	Deduction for Fresh Water.	TABULAR FREEBOARD corrected for Flush Deck (if required)	12.07
Addition for Winter and Winter North Atlantic Freeboard.	Displacement in salt water at summer load water line.	Correction for coefficient	12.07
Depth to Freeboard Deck = <b>13.03</b>	$\Delta = 555$	Depth Correction ...	4.87
Summer freeboard = <b>1.25</b>	Tons per inch immersion at summer load water line	Deduction for superstructures ...	-
Moulded draught (d) = <b>11.78</b>	$T = 5.29$	Sheer correction ...	1.58
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = <b>2.94 = 3</b>	Deduction = $\frac{\Delta}{40T}$ inches = $\frac{555}{40 \times 5.29} = 2.62 = 2 1/2$	Round of Beam correction ...	2.29
Addition for Winter North Atlantic Freeboard (if required) = <b>5</b>	MEAN DRAUGHT. EXT. DISP. T.	Correction for Thickness of Deck amidships ...	-
	12'0" 532 5.22	Other corrections, scantlings, etc.	4.87 1.87 +3.00
	11'0" 468 5.03	Summer Freeboard = <b>15.07</b>	
	10'0" 408 4.84		

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

Tropical Fresh Water Line above Centre of Disc ...	5 1/2 = 14	Tropical Fresh Water Freeboard ...	1'3" = 38 cms.
Fresh Water Line " " ...	2 1/2 = 6	Fresh Water " " ...	0'9 1/2 = 24
Tropical Line " " ...	3' = 8	Tropical " " ...	1'0 1/2 = 32
Winter Line below " " ...	3' = 8	Winter " " ...	1'0 = 30
Winter North Atlantic Line " " ...	5' = 13	Winter North Atlantic " " ...	1'8" = 51

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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.

(202) \_\_\_\_\_

HULL	BRITISH	EMPIRE GELBY
DURING CONSTRUCTION	HULL	
1000	1020	1020
PC TOWING SERVICES	200	
(CONTINUED)	7 22	

Trade of ship. FOR TOWING SERVICES.

Names of sister ships. "EMPIRE SILAS" - "EMPIRE HUMPHREY"

Builder's name and yard number. COCHRANE & SONS LD. YARD NO 1280.

Owners. THE MINISTRY OF WAR TRANSPORT.

Fee £ TO BE CHARGED WITH FIRST ENTRY.

*Chart*

100	110	120
130	140	150
160	170	180
190	200	210



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