

Amended

For LONDON OFFICE ONLY

LLOYD'S REGISTER OF SHIPPING

UNITED WITH THE BRITISH CORPORATION REGISTER

SURVEYS FOR FREEBOARD

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER)

Received _____
 Index No. _____
 Govt. Copy _____
 Owners C11 _____

Ship's Name EMPIRE CELTIC	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build	Port of Survey
Moulded Dimensions: Length 323.25 Breadth 54.0 Depth 27.0	Date of Survey 28.8.56				Surveyor's Signature
Freeboard Length	Moulded displacement at moulded draught = 85 per cent. of moulded depth (excluding bossing) _____ tons				Particulars of Classification
Coefficient of fineness for use with Tables .91					

DEPTH FOR FREEBOARD (D).

Moulded depth **27.00**
 Stringer plate **.03**
 Wood Sheathing on exposed deck
 $T \left(\frac{L-S}{L} \right) =$
 Depth for Freeboard (D) = **27.03**

DEPTH CORRECTION.

(a) Where D is greater than Table depth
 $(D - \text{Table depth}) R =$
 $(27.03 - 27.55) 2.496 = +13.62$
 (b) Where D is less than Table depth (if allowed)
 (Table depth - D) R =
 If restricted by superstructures

ROUND OF BEAM CORRECTION.

Moulded Breadth (B) **54.00**
 Standard Round of Beam = $\frac{B \times 12}{50} = 12.96$
 Ship's Round of Beam = **Nil**
 Difference **12.96**
 Restricted to
 Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S}{L} \right) = \frac{12.96}{4} \times \left(1 - \frac{54}{323.25} \right) = 3.24$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S _i)	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 $\frac{S}{L} =$
 " " $\frac{S_i}{L} =$
 " " $\frac{E}{L} =$
 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**

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.	42.325	1		42.32	27.34	27.34	1		27.34
$\frac{1}{2}$ L from A.P.	18.835	4		75.34	13.24	13.29	4		53.16
$\frac{3}{4}$ L "	4.655	2		9.31			2		
Amidships	0	4		0	0	0	4		0
$\frac{3}{4}$ L from F.P.	9.31	2		18.62			2		
$\frac{1}{2}$ L "	37.67	4		150.68			4		
F.P.	84.65	1		84.65	35.42	35.42	1		35.42
Total				380.92					115.92

Mean actual sheer aft =
 Mean standard sheer aft =

Mean actual sheer forward =
 Mean standard sheer forward =

Length of enclosed superstructure forward of amidships =
 L

" " aft of " = **Flush DK**

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{265}{18} \times .71 = 11.04$
 If limited on account of midship superstructure.

If limited to maximum allowance of $1\frac{1}{2}$ ins. per 100ft.

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = **27.03**
 Summer freeboard = **14.85**
 Moulded draught (d) = **12.18**
 Keel allowance =
 Extreme draught =
 Deduction for Tropical freeboard and addition for =

Winter freeboard = $\frac{d}{4}$ inches = **3"**

Addition for Winter North Atlantic Freeboard (if required) =

Deduction for Fresh Water.

Displacement in salt water at summer load water line
 $\Delta =$
 Tons per inch immersion at summer load water line
 $T =$
 Deduction = $\frac{\Delta}{40 T}$ inches
3"

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

Depth Correction
 Deduction for superstructures
 Sheer correction
 Round of Beam correction
 Correction for Thickness of Deck amidships
 Other corrections, scantlings, etc. to
12'-2 1/8"

54.10
13.25
11.50
178.25

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

Tropical Fresh Water Line above Centre of Disc **Not assigned**
 Fresh Water Line " " **3"**
 Tropical Line " " **Not assigned**
 Winter Line below " " **3"**
 Winter North Atlantic Line " " **Not assigned**

Tropical Fresh Water Freeboard **Not assigned**
 Fresh Water " **14'-7 1/4"**
 Tropical " **Not assigned**
 Winter " **15'-1 1/4"**
 Winter North Atlantic " **Not assigned**