

Amended

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
Freeboard Length					Surveyor's Signature
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
 $\frac{(D - \text{Table depth}) R}{5.48} = \frac{(27.03 - 27.55) 2.496}{5.48} = +13.62''$

(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 = $\frac{\text{Diff}^2}{4} \times \left(1 - \frac{S}{L} \right) = \frac{12.96^2}{4} = 13.24''$

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					

Flush Deck

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	Product	Actual Ordinate	Effective Ordinate	S	Product
A.P.	42.325	1	42.32	27.34	27.34	1	27.34
1/2 L from A.P.	18.835	4	75.34	13.24	13.29	4	53.16
1/4 L "	4.655	2	9.31	-	-	2	-
Amidships	0	4	0	0	0	4	0
1/4 L from F.P.	9.31	2	18.62	-	-	2	-
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 = _____
 " " aft of " = **Flush Deck**

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 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 = **14.55**
 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 $\frac{.91 + .68}{1.36} = 1.59/1.36$

Depth Correction	13.62	-
Deduction for superstructures	-	-
Sheer correction	11.04	-
Round of Beam correction	3.24	-
Correction for Thickness of Deck amidships	-	-
Other corrections, scantlings, etc. to ...	87.10	-
<i>crossed out with summer moulded draught of 12'-2 1/8"</i>	115.67	-

Summer Freeboard = **178.25**

54.10
13.25
11.500
28.8.56

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	Tropical Fresh Water Freeboard	Not assigned
Fresh Water Line	3"	Fresh Water	14' - 7 1/4"
Tropical Line	Not assigned	Tropical	Not assigned
Winter Line below	3"	Winter	15' - 1 1/4"
Winter North Atlantic Line	Not assigned	Winter North Atlantic	Not assigned