

AMENDED

FBD. 2259

Index No. 38787
(For London Office only.)

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name EMPIRE CEDRIC	Official Number 181506	Nationality and Port of Registry BRITISH LONDON	Gross Tonnage 4291	Date of Build 1945	Port of Survey _____
Moulded Dimensions: Length 323.25 Breadth 54.0 Depth 27.0					Date of Survey 29-11-46
Moulded displacement at moulded draught = 85 per cent. of moulded depth _____ tons					Surveyor's Signature E.J.
Coefficient of fineness for use with Tables .91 assumed					Particulars of Classification +A- with fbd for service U.K. & Eire (excluding West Coast of Ireland) also to and in Baltic & Med

DEPTH FOR FREEBOARD (D). Moulded depth 27.00 Stringer plate03 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 $(D - \text{Table depth}) R =$ $(27.03 - 21.55) 2.486 = +13.62"$ (b) Where D is less than Table depth (if allowed) $(\text{Table depth} - D) R =$ ✓ If restricted by superstructures ✓	ROUND OF BEAM CORRECTION. Moulded Breadth (B) 54.0 Standard Round of Beam = $\frac{B \times 12}{50} =$ 12.96 Ship's Round of Beam = NIL Difference -12.96 Restricted to Correction = $\frac{\text{Diff}^*}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{12.96}{4} = +3.24"$
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DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	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 $\frac{S}{L} =$ _____
 " " $\frac{S_1}{L} =$ _____
 " " $\frac{E}{L} =$ _____
 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.	43.325	1	42.32	27.32	27.32	1	27.32
$\frac{1}{2}L$ from A.P.	18.835	4	75.34	12.25	12.25	4	53.00
$\frac{3}{4}L$ "	4.655	2	9.31	-	-	2	-
Amidships	-	4	-	-	-	4	-
$\frac{3}{4}L$ 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	35.40	35.40	1	35.40
Total			380.92				115.72

Mean actual sheer aft
 Mean standard sheer aft =

Mean actual sheer forward
 Mean standard sheer forward =

Length of enclosed superstructure forward of amidships = } deficient
 " " aft of " = } sheer

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{265.20}{18} \times .75 = +14.05"$
 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. Depth to Freeboard Deck = 27.03 Summer freeboard = 16.52 Moulded draught (d) = 10.51 Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 2.63 = 2$\frac{3}{4}$ Addition for Winter North Atlantic Freeboard (if required) = not assigned	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 $\frac{d}{4} = 2\frac{3}{4}"$	TABULAR FREEBOARD corrected for Flush Deck (if required) Correction for coefficient $\frac{.91 + .68}{1.36} = \frac{1.59}{1.36}$ Depth Correction 13.62 Deduction for superstructures - Sheer correction 11.05 Round of Beam correction 3.24 Correction for Thickness of Deck amidships - Other corrections, scantlings, etc. corresponding to a summer moulded draught of 10'-6" (10'-6 $\frac{1}{2}$ " actual). 107.09 135.00 Summer Freeboard = 198.25
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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 16'-6$\frac{1}{4}"$
Fresh Water Line " 2$\frac{3}{4}"$	Fresh Water " 16'-3$\frac{1}{2}"$
Tropical Line " not assigned	Tropical " not assigned
Winter Line below " 2$\frac{3}{4}"$	Winter " 16'-9"
Winter North Atlantic Line " not assigned	Winter North Atlantic " not assigned

the Surveyor should endorse the form on this side with his signature and the date.

Trade of ship			
Names of sister ships			
Builder's name and yard number			
Owners			
Fee £ 15	(a/c 20 JAN 1947)		