

1863.

THE BRITISH CORPORATION REGISTER OF SHIPPING AND AIRCRAFT SURVEY FOR FREEBOARD

STEAMER, TANKER, SAILER: "EMPIRE CAMERON" WITH
WITHOUT TIMBER DECK CARGO

Nationality _____ Builders' Name and No. of Ship Wm Denny & Bros. Ltd.
 Port of Registry _____ No 1358.

Official Number _____ Owners _____

Gross Tonnage _____

Date of Build _____ Port and Date of survey _____

Particulars of Classification _____ Name of Surveyor _____

Type of Superstructures Shelter Decker. (middle line opening aft). Names of Sister Ships _____

Trade of Ship _____

Service Endorsement if any _____

SUMMER FREEBOARD recommended amidships from centre of disc to top of deck line, (.....wood.....steel)

TROPICAL FRESH WATER LINE above centre of disc	<u>12 1/2"</u>	Corresponding Freeboard	<u>3' - 2 1/2"</u>
FRESH WATER LINE " " "	<u>6 1/2"</u>	" "	<u>2' - 2"</u>
TROPICAL LINE " " "	<u>6"</u>	" "	<u>2' - 8"</u>
WINTER LINE below " "	<u>6"</u>	" "	<u>2' - 8 1/2"</u>
WINTER NORTH ATLANTIC LINE " " "	<u>-</u>	" "	<u>3' - 8 1/2"</u>

SUMMER TIMBER FREEBOARD recommended amidships from top of deck line

TROPICAL FRESH WATER Timber line above L.S.	Corresponding Freeboard
FRESH WATER " " " "	" "
TROPICAL " " " "	" "
WINTER " " below "	" "
WINTER NORTH ATLANTIC " " " "	" "

Number of years recommended for load line certificate

The scantlings and protective arrangements being in accordance with the Load Line Rules it is submitted that the freeboards be assigned

Chief Surveyor

Passed at a meeting of the Committee of Management of the British Corporation Register of Shipping and Aircraft
on the



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Lloyd's Register
Foundation
[Secretary]

003240-003244-0011

STANDARD TYPE. COMPUTATION OF FREEBOARD

Length on summer load line **425'-0"** Moulded Breadth **56'-0"** Moulded Depth **27'-9 1/2"** Depth of Keel **.78**
Moulded displacement (ex bossing) at moulded draught of 85 per cent. of moulded depth **11986** Tons
Co-efficient of fineness for use with tables $\frac{\Delta \times 35}{L \times B \times D \times .85} = .7461$
Displacement and tons per inch immersion in salt water at summer load line **12422 @ 17.09**
Moulded depth **27.792** **27.792** Deduction for Fresh Water $\frac{\Delta}{40T} = 6.6 = 6 1/2$ inches
Stringer Plate **.40 (.68 Local x)** **.067** **.033** Round of Beam Correction
Sheathing on exposed deck T $(\frac{L-S}{L})$ **-** **-** Ships Round of Beam **14.00** inches
Rise of floor (in sailers) **-** **-** Standard Round of Beam $\frac{B \times 12}{50}$ **13.44**
Depth for Freeboard (D) **27.849** **27.825** Difference **.56**
Table Depth **4/5 = 28.333** Restricted to
Depth Correction **3 x .508 = 1.524** Correction $\frac{\text{Difference}}{4} \times (1 - \frac{E}{L}) = .12 \times .0061 = \text{N.I.L.}$
If restricted by superstructures

	Enclosed Length	Length of Overhang	Height	Mean Covered Length (S)	Height Correction	Effective Length (E)
Poop	42'-1 1/2"	-	9'-1"	42.12		42.12
Raised Quarter Deck						
Bridge	377'-8 1/2"	F - A	9'-1"	377.72		377.71
Forecastle						
Trunk Aft						
" Forward						
Tonnage Opening Aft	5'-2"		5'-11"	5.17	.5	2.59
" " Forward						
Totals				425.00		422.42

Standard Height of Superstructure **7'-6"**
" " R.Q.D. **-**
Percentage covered S/L = **100%**
" " E/L = **99.39%**
" from Table line A, B, (corrected for absence of forecastle if required) **99.25%**
Percentage from Table by interpolation for Bridge less than .2L if required = **-**
Deduction = **42 x .9925 = 41.68**
Percentage from Table for Tankers (or Timber ships) = **-**
Deduction = **-**

Station	Actual Sheer	Standard Sheer	Effective Sheer	S.M.	Product
19 A.P.	54	52.5	73	1	73
8.44 1/2 L from A.P.	24	23.36	32.44	4	129.36
2.11 1/2 L from A.P.	6	5.78	8.11	2	16.22
- Amidships	-	-	-	4	-
2.11 1/2 L from F.P.	12	11.55	14.11	2	28.22
8.44 1/2 L " "	48	46.72	56.44	4	225.76
19 F.P.	108	106.00	127.0	1	127.0
				18	598.96

Mean Actual sheer aft = **-**
" Standard " " = **-**
Mean Actual sheer forward = **-**
" Standard " " = **-**
Length of enclosed superstructure forward of amidships = **-**
Length of Ship
Length of enclosed superstructure aft of amidships = **-**
Length of Ship
Sheer Correction = Difference X $(.75 - \frac{S}{2L}) = 7.081 \times .25 = 1.77$
If limited on account of midship superstructure = **-**
" to maximum allowance of 1 1/2 ins. per 100 ft. = **-**

Effective Mean Sheer = **33.331**
Standard " " .05L + 5 = **26.250**
Difference **7.081**

TABULAR FREEBOARD corrected for flush deck if required = **79.35**
Correction for co-efficient = $\frac{1.4261}{1.36} = 83.21$

	+	-
Depth correction	-	1.52
Deduction for superstructures	-	41.68
Sheer correction	-	1.77
Round of Beam correction	-	-
Correction for thickness of deck amidships	.28	-
Other corrections, scantlings, etc.	-	-
	.28	44.97

83.21 DRAUGHTS AND SEASONAL CORRECTIONS
Sailor, Tanker, Steamer
Timber
Depth to Freeboard Deck in feet **27.849**
Summer Freeboard in feet **3.208**
Moulded Draught (d) **24.641** (d1)
Addition for Keel **.065**
Extreme draught **24.706**

Summer Freeboard in Inches **S = 3'-2 1/2" = 38.52**
Additional allowance for superstructures on
Timber carrying ships = **-**
Summer Timber Freeboard in Inches = **-**

Deduction for Tropical and addition for Winter freeboard $d/4 = 6.16$ ins.
Addition for Winter North Atlantic (if required) = **-** ins.
Deduction for Tropical Timber Freeboard $\frac{d1}{d1} =$ ins.
Addition for Winter " " $\frac{d1}{3} =$ ins.
" " N.A. Timber Freeboard (if required) = **-** ins.

11260 Ton Empire Commodore