

THE BRITISH CORPORATION REGISTER OF SHIPPING AND AIRCRAFT SURVEY FOR FREEBOARD

STEAMER, TANKER, SAILER: SS. NORMAN QUEEN WITH TIMBER DECK CARGO
WITHOUT

Nationality BRITISH. Builders' Name and No. of Ship ARDROSSAN DOCKYARD LTD.
Port of Registry LONDON. YARD NO 397.

Official Number 169965. Owners BRITISH CHANNEL TRADERS LTD.
Gross Tonnage 1047.43. QUEENSHIP NAVIGATION LTD.

Date of Build 10/1944. Port and Date of survey ARDROSSAN DURING CONSTRUCTION.

Particulars of Classification BS* Name of Surveyor T.B. TILLERY.

Type of Superstructures POOP. R.Q.D.* BRIDGE & FOLE. Names of Sister Ships HIGHLAND QUEEN BALMORAL QUEEN

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>7 1/2"</u>	Corresponding Freeboard	<u>4'-4"</u>
FRESH WATER LINE " " "	<u>4"</u>	" "	<u>3'-8 1/2"</u>
TROPICAL LINE " " "	<u>3 1/2"</u>	" "	<u>4'-0"</u>
WINTER LINE below " " "	<u>3 1/2"</u>	" "	<u>4'-0 1/2"</u>
WINTER NORTH ATLANTIC LINE " " "	<u>5 1/2"</u>	" "	<u>4'-7 1/2"</u>
		" "	<u>4'-9 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

August 7 1944.

Secretary

003788-003799-041

COMPUTATION OF FREEBOARD

Length on summer load line 202'-0" Moulded Breadth 32'-7" Moulded Depth 15'-9" Depth of Keel 1'
Moulded displacement (ex bossing) at moulded draught of 85 per cent. of moulded depth 1445.1820 Tons
Co-efficient of fineness for use with tables $\frac{\Delta \times 35}{L \times B \times D \times .85} = \frac{1445.1820 \times 35}{202 \times 32.7 \times 15.75 \times .85} = .7228$
Displacement and tons per inch immersion in salt water at summer load line 2100 @ 13-30 T.P.I.
Moulded depth 15.75 19.417 Deduction for Fresh Water $\frac{\Delta}{40T} = \frac{1445.1820}{40 \times 2100} = .4'$ inches
Stringer Plate 42 (R.Q.D. .38) .035 .031 Round of Beam Correction
Sheathing on exposed deck T $\left(\frac{L-S}{L}\right)$ - - Ships Round of Beam 7.875 inches
Rise of floor (in sailers) - - Standard Round of Beam $\frac{B \times 12}{50} = \frac{32.7 \times 12}{50} = 7.820$
Depth for Freeboard (D) 15.745 19.448 Difference .055
Table Depth 1/15 13.467 Restricted to
Depth Correction 1/130 2.318 Correction $\frac{\text{Difference}}{4} \times \left(1 - \frac{E}{L}\right) = \frac{.055}{4} \times \left(1 - \frac{15.745}{13.467}\right) = .014 \times 1836 = .026$
If restricted by superstructures = 3.60 ON. N.L.

	Enclosed Length	Length of Overhang	Height	Mean Covered Length (S)	Height Correction	Effective Length (E)
Poop	38'-9"		7'-0"	38.75		38.75
Raised Quarter Deck	94'-0"		3'-6"	94.00		94.00
Bridge	12'-0"	F 2'-0" R.Q.D. A	7'-0"	12.00		13.33
Forecastle	23'-3 1/2"		7'-0"	23.29		18.86
Trunk Aft						
„ Forward						
Tonnage Opening Aft						
„ „ Forward						
Totals				168.04		164.94

Standard Height of Superstructure 6.0'
„ „ R.Q.D. 3.6'
Percentage covered S/L = 83.18%
„ „ E/L = 81.64%
„ from Table line A, B, (corrected for absence of forecastle if required) 77.33%
Percentage from Table by interpolation for Bridge less than .2L if required =
Deduction = 26.20 x .7733 = 20.26 OFF.
Percentage from Table for Tankers (or Timber ships) =
Deduction =

Station	Actual Sheer	Standard Sheer	Effective Sheer	S.M.	Product
A.P.	27.5	30.2	27.5	1	27.5
1/3 L from A.P.	12.0	13.44	12.0	4	48.0
1/3 L from A.P.	3.0	3.32	3.0	2	6.0
Amidships	-	-	-	4	-
1/3 L from F.P.	0.5	6.64	.5	2	1.0
1/3 L „ „	24.0	26.88	24.0	4	96.0
F.P.	64.5	60.40	64.5	1	64.5
				18	243.0
Effective Mean Sheer	= <u>13.50</u>				
Standard „ „ .05L + 5	= <u>15.10</u>				
Difference	<u>1.60</u>				

Mean Actual sheer aft = LESS THAN 1.
„ Standard „ „
Mean Actual sheer forward = 135/160.96 = 85.74%
„ 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 $\left(75 - \frac{S}{2L}\right) = 1.60 \times .3341 = .54 ON.$
If limited on account of midship superstructure =
„ to maximum allowance of 1 1/2 ins. per 100 ft. =

TABULAR FREEBOARD corrected for flush deck if required = 23.45

Correction for co-efficient = 1400/1.36 = 24.19

	+	-
Depth correction	3.60	-
Deduction for superstructures	-	20.26
Sheer correction	.54	-
Round of Beam correction		
Correction for thickness of deck amidships		
Other corrections, scantlings, etc.		
	4.14	20.26 - 16.12

Summer Freeboard in inches = 8.07
Additional allowance for superstructures on Timber carrying ships 22.00 = 43.96
Summer Timber Freeboard in inches 4'-4" = 52.03

DRAUGHTS AND SEASONAL CORRECTIONS

	Sailer, Tanker, Steamer	Timber
Depth to Freeboard Deck in feet	<u>19.448</u>	
Summer Freeboard in feet	<u>4.323</u>	
Moulded Draught (d)	<u>15.115</u>	(d1)
Addition for Keel	<u>.082</u>	
Extreme draught	<u>15'-2 1/2"</u> <u>15.198</u>	
Deduction for Tropical and addition for Winter freeboard d/4 = <u>3.78</u> ins.		
Addition for Winter North Atlantic (if required) = <u>5.78</u> ins.		
Deduction for Tropical Timber Freeboard d/4 = <u>ins.</u>		
Addition for Winter „ „ d 1/3 = <u>ins.</u>		
„ „ N.A. Timber Freeboard (if required) = <u>ins.</u>		