

20-5-A1

Form LL. 4.C. Revised

THE BRITISH CORPORATION REGISTER OF
SHIPPING AND AIRCRAFT
SURVEY FOR FREEBOARD

1816

TANKER, SAILER

Pinebranch. ex Thunderbay

WITH TIMBER DECK CARGO

Canadian.

Builders' Name and No. of Ship *Reconstruction No. 88.*
Reconstruction by Messrs Marine Industries Ltd Sorel, 1940
Built by: Chicago S.B. Co Ltd Chicago, U.S.A. 1895.
Reconstructed. Messrs J. & E. L. L. Co Ltd Sorel, 1921.

Owners

Messrs Branch Lines Ltd. Montreal

Sorel.
131,060.
183.50
1895.

Port and Date of survey

Montreal 1940.

Name of Surveyor

Malcolm Matheson.

Particulars

BS (Bulk oil carrier -

Names of Sister Ships

Great Lakes River St. Lawrence and Limited boating Service).

Type of Superstructures

Trade of Ship

And only so long as the ship is employed in boating service.
Home Trade Class II. Note: - Cert. at present inland waters Class I
Great Lakes + connecting waters + St Lawrence River to Father Point
" and only so long as the ship is employed on the Great
Lakes, River St. Lawrence and boating service between Belle Isle
in the north and the port of New York in the south."

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

TROPICAL FRESH WATER LINE above centre of disc

10'

Corresponding Freeboard

FRESH WATER LINE

5'

TROPICAL LINE

5"

WINTER LINE

below

5"

WINTER NORTH ATLANTIC LINE

7 1/2

4' - 11 1/2"
4' - 1 1/2"
4' - 6 1/2"
4' - 6 1/2"
5' - 4 1/2"
5' - 6 1/2"

SUMMER TIMBER FREEBOARD recommended amidships from top of deck line

TROPICAL FRESH WATER Timber line above L.S.

Corresponding Freeboard

FRESH WATER

TROPICAL

WINTER

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

11th June 1941

Secretary

005418-0054260060

INTERNATIONAL

Flush deckship - therefore based on ordinary ship table freeboard

1816

MLd.

COMPUTATION OF FREEBOARD

Length on summer load line $246'-3"$ Moulded Breadth $40'-0"$ Moulded Depth $24'-9"$ Depth of Keel $5/8"$
 Moulded displacement (ex bossing) at moulded draught of 85 per cent. of moulded depth
 Co-efficient of fineness for use with tables $\frac{\Delta \times 236}{L \times B \times D \times .85} = .8113$ 4670 Tons F.W.

Displacement and tons per inch immersion in salt water at summer load line

Moulded depth 24.240 Stringer Plate $-60"$ $.050$ Sheathing on exposed deck T $\left(\frac{L-S}{L}\right)$ -

Rise of floor (in sailers) -

Depth for Freeboard (D) 24.800 Table Depth $7/15 = 16.417$ Depth Correction $7/30 \times 8.383$

If restricted by superstructures

 15.880 Deduction for Fresh Water $\frac{\Delta}{40 T} = \frac{1}{4} = 1.96 = 5$ inches

Round of Beam Correction

Ships Round of Beam 7.5 inchesStandard Round of Beam $\frac{B \times 12}{50} = 9.6$ Difference 2.1

Restricted to

Correction $\frac{\text{Difference}}{4} \times \left(1 - \frac{E}{L}\right) = .525 \times 1 = .530$

	Enclosed Length	Length of Overhang	Height	Mean Covered Length (S)	Height Correction	Effective Length (E)
Poop						
Raised Quarter Deck						
Bridge		F				
		A				
Forecastle						
Trunk Aft						
" Forward						
Tonnage Opening Aft						
" " Forward						
Totals						

Standard Height of Superstructure

" " R.Q.D.

Percentage covered S/L =

" " E/L =

" from Table line A, B, (corrected for absence of forecastle if required)

Percentage from Table by interpolation for Bridge

less than .2L if required =

Deduction =

Percentage from Table for Tankers (or Timber ships) =

Deduction =

Station	Actual Sheer	Standard Sheer	Effective Sheer	S.M.	Product
A.P.	26.75	34.625	26.75	1	26.75
$\frac{1}{8}$ L from A.P.	5.876		5.875	4	23.50
$\frac{1}{8}$ L from A.P.	- .5		- .5	2	- 1.00
Amidships	-		-	4	-
$\frac{1}{8}$ L from F.P.	6.0		6.0	2	12.00
$\frac{1}{8}$ L " "	20.75		20.75	4	83.00
F.P.	54.0	69.25	54.00	1	54.00
				18	198.25

Effective Mean Sheer =

Standard " " $.05L + 5$ =

Difference

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 $\times \left(.75 - \frac{S}{2L}\right) = 6.299 \times .75 = 4.720$

If limited on account of midship superstructure =

" to maximum allowance of $1\frac{1}{2}$ ins. per 100 ft. =TABULAR FREEBOARD corrected for flush deck if required = $31.55 + 3.69 = 35.244$

Correction for co-efficient =

 1.4913 1.36 = 38.65 DRAUGHTS AND SEASONAL CORRECTIONS

	+	-
Depth correction	15.88	-
Deduction for superstructures	-	-
Sheer correction	4.72	-
Round of Beam correction	.53	-
Correction for thickness of deck amidships	-	-
Other corrections, scantlings, etc.	-	-
	21.13	-
		21.13

Summer Freeboard in Inches $S = 4' - 11\frac{1}{2}" = 59.78$

Additional allowance for superstructures on

Timber carrying ships =

Summer Timber Freeboard in inches =

Sailer, Tanker, Steamer

Timber

Depth to Freeboard Deck in feet 24.800 Summer Freeboard in feet 4.958 Moulded Draught (d) 19.842 Addition for Keel $.104$ Extreme draught 19.946 Deduction for Tropical and addition for Winter freeboard $d/4 = 4.96$ Addition for Winter North Atlantic (if required) $7"$ inDeduction for Tropical Timber Freeboard $\frac{d}{3}$ inAddition for Winter " " $\frac{d}{3}$ in

" " N.A. Timber Freeboard (if required) =

Lloyd's Register Foundation