

# COMPUTATION OF FREEBOARD

Length on summer load line 247'-6" Moulded Breadth 43'-6" Moulded Depth 19'-6" Depth of Keel  
 Moulded displacement (ex bossing) at moulded draught of 85 per cent. of moulded depth Tons

Co-efficient of fineness for use with tables  $\frac{\Delta \times 35}{L \times B \times D \times .85} =$

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

Moulded depth

Deduction for Fresh Water  $\frac{\Delta}{40 T} =$  inches

Stringer Plate

Round of Beam Correction

Sheathing on exposed deck  $T \left( \frac{L-S}{L} \right)$

Ships Round of Beam 12 inches

Rise of floor (in sailers)

Standard Round of Beam  $\frac{B \times 12}{50}$

Depth for Freeboard (D)

Difference

Table Depth

Restricted to

Depth Correction

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

If restricted by superstructures

	Enclosed Length	Length of Overhang	Height	Mean Covered Length (S)	Height Correction	Effective Length (E)	
Poop	<u>37'-0"</u>						Standard Height of Superstructure
Raised Quarter Deck							" " R.Q.D.
Bridge		F					Percentage covered S/L =
		A					" " E/L =
Forecastle							" from Table line A, B, (corrected for absence of forecastle if required)
Trunk Aft							Percentage from Table by interpolation for Bridge less than .2L if required =
" Forward							Deduction =
Tonnage Opening Aft							Percentage from Table for Tankers (or Timber ships) =
" " Forward							Deduction =
Totals							

Station	Actual Sheer	Standard Sheer	Effective Sheer	S.M.	Product
A.P.				1	
$\frac{1}{8}$ L from A.P.	<u>1'</u>			4	
$\frac{1}{8}$ L from A.P.	<u>0'</u>			2	
Amidships	<u>0'</u>			4	
$\frac{1}{8}$ L from F.P.	<u>0'</u>			2	
$\frac{1}{8}$ L " "	<u>0'</u>			4	
F.P.				1	
				18	

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

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 =

Correction for co-efficient =

Depth correction

Deduction for superstructures

Sheer correction

Round of Beam correction

Correction for thickness of deck amidships

Other corrections, scantlings, etc.

+	-

Summer Freeboard in inches =

Additional allowance for superstructures on

Timber carrying ships =

Summer Timber Freeboard in inches =

## DRAUGHTS AND SEASONAL CORRECTIONS

	Sailer, Tanker, Steamer	Timber
Depth to Freeboard Deck in feet		
Summer Freeboard in feet		
Moulded Draught (d)		(d1)
Addition for Keel		
Extreme draught		
Deduction for Tropical and addition for Winter freeboard $d/4$		ins.
Addition for Winter North Atlantic (if required)		ins.
Deduction for Tropical Timber Freeboard $d/4$		ins.
Addition for Winter " " $\frac{d}{3}$		ins.
" " N.A. Timber Freeboard (if required)		ins.

# THE BRITISH CORPORATION REGISTER OF SHIPPING AND AIRCRAFT SURVEY FOR FREEBOARD

C2.

STEAMER, TANKER, SAILER: *S.M. "RED FERN"*WITH  
WITHOUT TIMBER DECK CARGONationality *CANADIAN.*Builders' Name and No. of Ship *CANADIAN VICKERS LTD.*Port of Registry *MONTREAL**MONTREAL PQ.*Official Number *154 910*Owners *NORTH AMERICAN TRANSPORTS. LTD.*Gross Tonnage *1856*Date of Build *1930.*Port and Date of survey *PORTSMOUTH. ONT.*Name of Surveyor *Alex. P. Lewis*Particulars of Classification *B.S. (GULF OF ST. LAWRENCE AND HALIFAX SERVICE)*

Names of Sister Ships

Type of Superstructures *Peop.*Trade of Ship *GT. LAKES & GULF OF ST. LAWRENCE.*Service Endorsement if any *GT LAKES, GULF OF ST. LAWRENCE & HALIFAX SERVICE.*

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

TROPICAL FRESH WATER LINE above centre of disc

Corresponding Freeboard

FRESH WATER LINE

" " "

*3 1/2 "*

" "

*5' 4 1/2 "*

TROPICAL LINE

" " "

*3 1/2 "*

" "

*5' 4 1/2 "*

WINTER LINE

below " "

*3 1/2 "*

" "

*5' 11 1/2 "*

WINTER NORTH ATLANTIC LINE " " "

" "

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

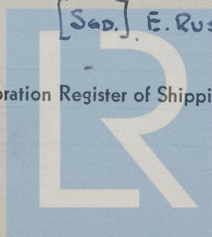
[INTD] E.R.N. for Chief Surveyor

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

on the *23<sup>rd</sup> MARCH 1949.*[Sgd.] E. RUSSELL MacMILLAN Secretary  
Canadian Committee

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

on the

Lloyd's Register  
Foundation  
Secretary