

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, ~~SAILING SHIP, TANKER.~~)

Fort Columbia 37352

FORT VENANGO
COLCHESTER COUNTY

Official Number **162733** Nationality and Port of Registry **British London.** Gross Tonnage **7166.24** Date of Build **1943**

Port of Survey **North Vancouver, B.C.**

Date of Survey **October, 1943.**

Surveyor's Signature *H.B. Gill*

Particulars of Classification ***100 A1 with freeboard (contemplated)**

Moulded Dimensions: Length **417.35** Breadth **56.90'** Depth **(37.33' to Upper Deck (28.58' to 2nd Deck))**

Moulded displacement at moulded draught = 85 per cent. of moulded depth **16,600** tons

Coefficient of fineness for use with Tables **.771**

Depth for Freeboard (D).		Depth correction.	Round of Beam correction.
Moulded depth	37.33'	(a) Where D is greater than Table depth (D—Table depth) R= (37.33 - 27.82) 3 = +28.71	Moulded Breadth (B) 56.9'
Stringer plate	.06'	(b) Where D is less than Table depth (if allowed) (Table depth—D) R=	Standard Round of Beam = $\frac{B \times 12}{50} = 13.66$
Sheathing on exposed deck			Ship's Round of Beam = 14.00"
$T \left(\frac{L-S}{L} \right) =$		If restricted by superstructures	Difference .34
Depth for Freeboard (D) =	37.39		Restricted to
			Correction = $\frac{\text{Diff}^{\circ}}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.34}{4} = -.09$

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					

FLUSH DECK

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 Ins.	S M	Product
A.P. ...	51.73	1	51.73	55.00	55.00	1	55.00
1/4L from A.P. ...	23.02	4	92.08	23.25	23.25	4	93.00
1/2L " ...	5.69	2	11.38	6.50	6.50	2	13.00
Amidships ...	-	4	-	-	-	4	-
3/4L from F.P. ...	11.38	2	22.76	11.63	11.63	2	23.26
1/4L " ...	46.04	4	184.16	46.75	46.75	4	187.00
F.P. ...	103.47	1	103.47	105.00	105.00	1	105.00
Total ...			465.58				476.26

Mean actual sheer aft =

Mean standard sheer aft =

Mean actual sheer forward =

Mean standard sheer forward =

Length of enclosed superstructure forward of amidships =

" " aft of " =

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{10.68}{18} \times .75 = -.45$

If limited on account of midship superstructure. *No. Flush Deck*

If limited to maximum allowance of 1 1/2 ins. per 100 ft.

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = **37.39**

Summer freeboard = **10.56**

Moulded draught (d) = **26.83**

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = **6.71 = 6 3/4**

Addition for Winter North Atlantic Freeboard (if required) =

Deduction for Fresh Water.

Displacement in salt water at summer load water line

$\Delta = 13760$

Tons per inch immersion at summer load water line

$T = 48.20$

Deduction = $\frac{\Delta}{40T}$ inches

= **7 1/4**

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient. $\frac{76.95 + 6.26}{1.36} = \frac{83.21}{1.36} = 61.2$

	+	-
Depth Correction	28.71	-
Deduction for superstructures	-	-
Sheer correction	-	.45
Round of Beam correction	-	.09
Correction for Thickness of Deck amidships	-	-
Other corrections, scantlings, etc. <i>to summer moulded draught of 26'-10"</i>	9.80	-
	38.51	.54

Summer Freeboard = **126.75**

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, ~~Wood~~, Steel, Deck:

Tropical Fresh Water Line above Centre of Disc	35.5 m/m	14"
Fresh Water Line	18.4	7 1/4"
Tropical Line	17.1	6 3/4"
Winter Line below	17.1	6 3/4"
Winter North Atlantic Line		

Tropical Fresh Water Freeboard	10'-6 3/4"	3219 m/m
Fresh Water	9'-4 3/4"	2864 "
Tropical	9'-11 1/2"	3035 "
Winter	10'-0"	3048 "
Winter North Atlantic	11'-1 1/2"	3390 "

A new form should be prepared if any alterations that affect the freeboard have been made. If no such alterations have been made, the Surveyor should endorse the form on this side with his signature and the date.

Trade of ship.....

Names of sister ships..... Burrard Dry Dock Co. Ltd., North Vancouver, B.C. (South Yard No. 181)

Builder's name and yard number..... Burrard Dry Dock Co. Ltd., North Vancouver, B.C. (South Yard No. 189)

Owners..... Minister of Munitions & Supply of Canada.

Fee \$100.00 Rh.



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Foundation