

23 JUN 1944

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Index. No. 37658
(For London Office only).CHIGNECTO PARK
37651

Ship's Name S. S. "BERESFORD PARK"	Official Number 175377	Nationality and Port of Registry CANADIAN MONTREAL	Gross Tonnage 2878	Date of Build 1944	Port of Survey PICTOU, N. S.
Moulded Dimensions: Length 310.44 ft. Breadth 46.33 ft. Depth 25.16 ft.					Date of Survey DURING CONSTRUCTION.
Moulded displacement at moulded draught = 85 per cent. of moulded depth (21.39 ft.) 6690 tons					Surveyor's Signature <i>Gas. H. Nain</i>
Coefficient of fineness for use with Tables .761					Particulars of Classification 100A1 CONTEMPLATED.

Depth for Freeboard (D).		Depth correction.	Round of Beam correction.
Moulded depth	25.16	(a) Where D is greater than Table depth (D - Table depth) R = (25.19 - 20.70) 2.388 = +10.72	Moulded Breadth (B) 46.33
Stringer plate	.40	(b) Where D is less than Table depth (if allowed) (Table depth - D) R = -	Standard Round of Beam = $\frac{B \times 12}{50} =$ 11.12 INS
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$			Ship's Round of Beam = 11.0 INS
Depth for Freeboard (D) = 25.19		If restricted by superstructures -	Difference +1.12 INS
			Restricted to
			Correction = $\frac{\text{Diff}^e}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.12}{4} \times .5379 = .02$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	
Poop enclosed	31.21	31.21	7.75	✓	31.21	Standard Height of Superstructure 6.604
" overhang	2.00	1.00			1.00	" " R.Q.D.
R.Q.D. enclosed	--	--				Deduction for complete superstructure 36.03
" overhang	--	--				Percentage covered $\frac{S}{L} =$ 47.17
Bridge enclosed	76.0	76.0	9.0	✓	76.0	" " $\frac{S_1}{L} =$ 46.21
" overhang aft	4.0	3.0			3.0	" " $\frac{E}{L} =$ 46.21
" overhang forward	2.0	1.0			1.0	Percentage from Table, Line A. (corrected for absence of forecastle (if required))
Fore enclosed	31.23	31.23	7.0	✓	31.23	Percentage from Table, Line B. 32.78 (corrected for absence of forecastle (if required))
" overhang	None					Interpolation for bridge less than .2L (if required)
Trunk aft	--	--				Deduction = 36.03 x .3278 = - 11.81 ins.
" forward	--	--				
Tonnage opening aft	--	--				
" " forward	--	--				
Total	146.44	143.44			143.44	

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.	41.04	1		41.04	18.5"	18.50	1		18.50
1/4 L from A.P.	18.26	4		73.04	1.6"	1.60	4		6.40
1/4 L "	4.51	2		9.02	-	-	2		-
Amidships		4					4		
1/4 L from F.P.	9.03	2		18.06	-	-	2		-
1/4 L "	36.53	4		146.12	14.8"	14.80	4		59.20
F.P.	82.08	1		82.08	66.0"	66.00	1		66.00
Total				369.36					150.10

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{219.26}{18} \times .5142 = +6.26 \text{ ins.}$

If limited on account of midship superstructure.

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

Deduction for Tropical Freeboard.	Deduction for Fresh Extreme Water.	TABULAR FREEBOARD corrected for Flush Deck (if required)	46.01
Addition for Winter and Winter North Atlantic Freeboard.	Displacement in salt water at 20ft. = 6253 tons	Correction for coefficient. $\frac{.68 + .761}{1.36} = \frac{1.441}{1.36}$	48.75
Depth to Freeboard Deck = 25.19	Displacement in fresh water line S	Depth Correction ... 10.72	
Summer freeboard = 4.50	Tons per inch immersion at 20ft. = 28.45	Deduction for superstructures ... 11.81	
Moulded draught (d) = 20.69	Deduction = $\frac{\Delta}{40T} \text{ inches} = \frac{6553}{40 \times 28.45} = 5.67$	Sheer correction ... 6.26	
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4} \text{ inches} = 5 \frac{1}{4}$		Round of Beam correction02	
Addition for Winter North Atlantic Freeboard (if required) = $5 \frac{1}{4} + 2 = 7 \frac{1}{4}$		Correction for Thickness of Deck amidships	
		Other corrections, scantlings, etc. ...	
		Summer Freeboard = 53.94	

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, WOOD Steel, Deck: **4' 6"**

Tropical Fresh Water Line above Centre of Disc	10' 3/4"
Fresh Water Line	5' 1/2"
Tropical Line	5' 1/4"
Winter Line below	5' 1/4"
Winter North Atlantic Line	7' 1/4"

Tropical Fresh Water Freeboard	3' 7-1/4"
Fresh Water	4' 0-1/2"
Tropical	4' 0-3/4"
Winter	4' 11-1/4"
Winter North Atlantic	5' 1-1/4"

127 JUN 1944

Names of sister ships.....

Builder's name and yard number.....

Fee £