

*Fort Columbia*  
*NO. 37352 Etc.*

# Lloyd's Register of Shipping.

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 (For London Office only).

## SURVEYS FOR FREEBOARD.

*6 DEC 1943*

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name <b>"FORT LA BAYE"</b> <i>DIGBY COUNTY</i>	Official Number <i>169881</i>	Nationality and Port of Registry <i>British</i> <i>London</i>	Gross Tonnage <b>7161.66</b>	Date of Build <b>1943</b>	Port of Survey <b>Vancouver, B. C.</b>
Moulded Dimensions: Length <i>47.35</i> <i>416.51</i> Breadth <b>56.9'</b> Depth <b>37.33' to Upper Deck</b> <b>28.58' to 2nd Deck</b>					Date of Survey <b>September, 1943</b>
Moulded displacement at moulded draught = 85 per cent. of moulded depth <b>16,600</b> tons					Surveyor's Signature <i>K. Perry</i>
Coefficient of fineness for use with Tables <i>.771</i>					Particulars of Classification <b>*100 A1</b> <b>with Freeboard (Contemplated)</b>

Depth for Freeboard (D).		Depth correction.	Round of Beam correction.
Moulded depth ...	<b>37.33'</b>	(a) Where D is greater than Table depth (D - Table depth) R = <i>37.39 - 27.82 = +9.57</i>	Moulded Breadth (B) <b>56.9'</b>
Stringer plate ...	<b>.06'</b>	(b) Where D is less than Table depth (if allowed) (Table depth - D) R = <i>✓</i>	Standard Round of Beam = $\frac{B \times 12}{50} = 13.66$
Sheathing on exposed deck $T \left( \frac{L-S}{L} \right) =$		If restricted by superstructures <i>✓</i>	Ship's Round of Beam = <b>14.00"</b>
Depth for Freeboard (D) =	<b>37.39</b>		Difference <b>.34</b>
			Restricted to <i>✓</i>
			Correction = $\frac{\text{Diff}^e}{4} \times \left( 1 - \frac{S_1}{L} \right) = \frac{.34}{4} = .09"$

### DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)	
Poop enclosed ...						Standard Height of Superstructure
" overhang ...						
R.Q.D. enclosed ...						" " R.Q.D.
" overhang ...						Deduction for complete superstructure
Bridge enclosed ...						Percentage covered $\frac{S}{L} =$
" overhang aft ...						" " $\frac{S_1}{L} =$
" overhang forward						" " $\frac{E}{L} =$
F'cle enclosed ...						Percentage from Table, Line A.
" overhang ...						(corrected for absence of forecastle (if required))
Trunk aft ...						Percentage from Table, Line B.
" forward ...						(corrected for absence of forecastle (if required))
Tonnage opening aft ...						Interpolation for bridge less than .2L (if required)
" " forward						Deduction = <i>Nil</i>
Total ...						

### SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product	
A.P. ...	<i>51.73</i>	1	<i>51.73</i>	<b>55.00</b>	<i>55.00</i>	<b>55.00</b>	1	<i>55.00</i>	<b>55.00</b>	Mean actual sheer aft = Mean standard sheer aft =
%L from A.P. ...	<i>23.02</i>	4	<i>92.08</i>	<b>23.25</b>	<i>23.25</i>	<b>23.25</b>	4	<i>93.00</i>	<b>93.00</b>	
%L " ...	<i>5.69</i>	2	<i>11.38</i>	<b>6.50</b>	<i>6.50</i>	<b>6.50</b>	2	<i>13.00</i>	<b>13.00</b>	Mean actual sheer forward = Mean standard sheer forward =
Amidships ...	-	4	-	-	-	-	4	-	-	Length of enclosed superstructure forward of amidships = L
%L from F.P. ...	<i>11.38</i>	2	<i>22.76</i>	<b>11.63</b>	<i>11.63</i>	<b>11.63</b>	2	<i>23.26</i>	<b>23.26</b>	
%L " ...	<i>46.04</i>	4	<i>184.16</i>	<b>46.75</b>	<i>46.75</i>	<b>46.75</b>	4	<i>187.00</i>	<b>187.00</b>	" " aft of " =
F.P. ...	<i>103.47</i>	1	<i>103.47</i>	<b>105.00</b>	<i>105.00</i>	<b>105.00</b>	1	<i>105.00</i>	<b>105.00</b>	
Total ...			<i>465.58</i>						<i>476.26</i>	

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.	Deduction for Fresh Water.	TABULAR FREEBOARD corrected for Flush Deck (if required)	
Addition for Winter and North Atlantic Freeboard.	Displacement in salt water at summer load water line	Correction for coefficient.	<i>83.21</i>
Depth to Freeboard Deck = <i>37.39</i>	$\Delta = 13.760$	$\frac{.771 + .68}{1.36} = 1.451$	<i>88.78</i>
Summer freeboard = <i>10.56</i>	Tons per inch immersion at summer load water line	Depth Correction ...	
Moulded draught (d) = <i>26.83</i>	T = <i>48.20</i>	Deduction for superstructures ...	
Deduction for Tropical freeboard and addition for	Deduction = $\frac{\Delta}{40T}$ inches	Sheer correction ...	
Winter freeboard = $\frac{d}{4}$ inches = <i>6.71 = 6 3/4</i>	= <i>7 1/4</i>	Round of Beam correction ...	
Addition for Winter North Atlantic Freeboard (if required) = <i>✓</i>		Correction for Thickness of Deck amidships	
		Other corrections, scantlings, etc. to correspond to a Summer Moulded Draught	
		<i>926'-10"</i>	
		Summer Freeboard = <i>126.75</i>	

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

Tropical Fresh Water Line above Centre of Disc ...	<i>14</i>	Tropical Fresh Water Freeboard ...	<i>9'-4 3/4"</i>
Fresh Water Line " " ...	<i>7 1/4"</i>	Fresh Water " " ...	<i>9'-11 1/2"</i>
Tropical Line " " ...	<i>6 3/4"</i>	Tropical " " ...	<i>10'-0"</i>
Winter Line below " " ...	<i>6 3/4"</i>	Winter " " ...	<i>11'-1 1/4"</i>
Winter North Atlantic Line " " ...	<i>✓</i>	Winter North Atlantic " " ...	<i>✓</i>



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