

Lloyd's Register of Shipping.

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(For London Office only).

SURVEYS FOR FREEBOARD.

10 JUN 1942

(COMPUTATION FOR STEAMER, /SAILING SHIP/ TANKER/)

Ship's Name S.S. "FORT FRASER"	Official Number 168725	Nationality and Port of Registry British Glasgow	Gross Tonnage 7126	Date of Build 1942	Port of Survey Vancouver, B. C.
Moulded Dimensions: Length 416.50' ✓ <i>To centre of stack 417.35'</i> Breadth 56.90' ✓ Depth 37.33' to Upper Dk. 28.58' to 2nd Deck. ✓					Date of Survey April, 1942.
Moulded displacement at moulded draught = 85 per cent. of moulded depth 16.600 ✓ tons					Surveyor's Signature <i>M. J. J. J.</i>
Coefficient of fineness for use with Tables -- .771 ✓					Particulars of Classification * 100 A1 with freeboard (contemplated)

Depth for Freeboard (D). Moulded depth ✓ 37.33 Stringer plate ✓ .05 Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ ✓ Depth for Freeboard (D) = 37.38	Depth correction. (a) Where D is greater than Table depth $(D - \text{Table depth}) R =$ $(37.38 - 27.82) \times 3 = +28.68" ✓$ (b) Where D is less than Table depth (if allowed) (Table depth - D) R = If restricted by superstructures ✓	Round of Beam correction. Moulded Breadth (B) 56.90' ✓ Standard Round of Beam = $\frac{B \times 12}{50} =$ 13.66" Ship's Round of Beam = 14" ✓ Difference .34" ✓ Restricted to Correction = $\frac{\text{Diff}^*}{4} \times (1 - \frac{S_1}{L}) =$ -.09" ✓
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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 **7.50'** ✓
 " " R.Q.D. ✓
 Deduction for complete superstructure **42.80"**
 Percentage covered $\frac{S}{L} =$
 $\frac{S_1}{L} =$
 $\frac{E}{L} =$ } **Nil.**
 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	S M	Product
A.P. ...	51.73	1	51.73	55.00	55.00	1	55.00
1/4 L from A.P. ...	23.02	4	92.08	23.25	23.25	4	93.00
1/2 L " ...	5.69	2	11.38	6.50	6.50	2	13.00
Amidships ...	-	4	-	-	-	4	-
3/4 L from F.P. ...	11.38	2	22.76	11.63	11.63	2	23.26
1/4 L " ...	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 = } **Excess.**
 Mean actual sheer forward =
 Mean standard sheer forward =
 Length of enclosed superstructure forward of amidships =
 " " aft of " = } **Flush deck.**

Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{.75 - \frac{S}{2L}}{.75} \right) = \frac{10.68}{18} \times .75 = -.45"$
 If limited on account of midship superstructure. ✓
 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 = **37.38** Ft.
 Summer freeboard = **10.54**
 Moulded draught (d) = **26.84**

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

 $\Delta =$ **13770 tons**

Tons per inch immersion at summer load water line

 $T =$ **48.21**Deduction = $\frac{\Delta}{40T}$ inches**= 7 1/4"**

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

 $\frac{.68 + .771}{1.36} = 1.45 \frac{1}{2} \times 1.36$

+ -

Depth Correction **28.68** -

Deduction for superstructures -

Sheer correction - **.45**Round of Beam correction - **.09**

Correction for Thickness of Deck amidships -

Other corrections, scantlings, etc. to conform to summer moulded draught

9.58 -**38.26** - **.54** + **37.72**Summer Freeboard = **126.50**SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, ~~Wood~~ Steel, Deck :-

Tropical Fresh Water Line above Centre of Disc ... **14"**
 Fresh Water Line " " ... **7 1/4"**
 Tropical Line " " ... **6 3/4"**
 Winter Line below " " ... **6 3/4"**
 Winter North Atlantic Line " " ... ✓

Tropical Fresh Water Freeboard ... **9' - 4 1/2"**
 Fresh Water " " ... **9' - 11 1/4"**
 Tropical " " ... **9' - 11 3/4"**
 Winter " " ... **11' - 1 1/4"**
 Winter North Atlantic " " ... ✓

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.

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Names of sister ships S.S. "FORT ST. JAMES"

Builder's name and yard number Burrard Dry Dock Co.Ltd., North Vancouver, B.C. Hull No. 136

Owners H. M. Government in the United Kingdom.

Fee \$ 90.00