

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

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

Ship's Name "OTTAWA PAGET"	Official Number	Nationality and Port of Registry British	Gross Tonnage 850 (Approx.)	Date of Build 1945	Port of Survey Prince Rupert, B.C.
Moulded Dimensions: Length 210.33 Breadth 36.5' Depth 14'-1" to 2nd deck 210.0' to centre rudder stock 21'-8" to Upper deck					Date of Survey During construction
Moulded displacement at moulded draught = 85 per cent. of moulded depth 1778 tons (11'-11 1/2") (T.P.I = 14.45)					Surveyor's Signature <i>W. Hill</i> Rms.
Coefficient of fineness for use with Tables (.678 actual) = .68					Particulars of Classification (Contemplated) *100 A1 with Freeboard, part welded.
Depth for Freeboard (D). Moulded depth ... 14.08 Stringer plate .32"027 2 1/2" Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ Depth for Freeboard (D) = 14.11			Depth correction. (a) Where D is greater than Table depth (D-Table depth) R= (14.11-14.02) 1.618 = +0.15 (b) Where D is less than Table depth (if allowed) (Table depth-D) R= If restricted by superstructures <input checked="" type="checkbox"/>		Round of Beam correction. Moulded Breadth (B) 36.5' Standard Round of Beam = $\frac{B \times 12}{50} =$ 8.76 Ship's Round of Beam 3" @ Centre & (2nd Deck) Equiv 2.25" Difference 6.51 Restricted to Correction = $\frac{\text{Diff}^\circ}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{6.51}{4} \times .0564 = .09$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	
Poop enclosed Bhd. 30	60.5'	61.46	7'-7" Side	<input checked="" type="checkbox"/>	61.46	Standard Height of Superstructure 6.0
" overhang ...	4.5'	1.93	8'-4 1/2" Cr.	<input checked="" type="checkbox"/>	1.93	" " R.Q.D.
R.Q.D. enclosed	3.87					Deduction for complete superstructure 27.03
Bridge enclosed						Percentage covered $\frac{S}{L} =$ 100
" overhang aft						" " $\frac{S_1}{L} =$ 94.36
" overhang forward						" " $\frac{E}{L} =$
Fore enclosed	71.5'	71.50	7'-7" Side	<input checked="" type="checkbox"/>	71.50	Percentage from Table, Line A. 93.06
" overhang	69.0'	51.75	8'-4 1/2" Cr.	<input checked="" type="checkbox"/>	51.75	(corrected for absence of forecastle (if required))
Trunk aft						Percentage from Table, Line B.
Trunk forward						(corrected for absence of forecastle (if required))
Tonnage opening aft	4.5'	11.84 = 1/2 diff		<input checked="" type="checkbox"/>	11.84	Interpolation for bridge less than 2L (if required)
Trunk forward						Deduction = 27.03 x .9306 = 25.15
Total	210.0'	198.48			198.48	

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.	31.03	1		31.03	+21.5	48.50	1		48.50
1/2 L from A.P.	13.81	4		55.24	8.5	21.58	4		86.32
1/2 L "	3.415	2		6.83	-	5.33	2		10.66
Amidships	-	4		-	-	-	4		-
1/2 L from F.P.	6.83	2		13.66	-	7.04	2		14.08
1/2 L "	27.62	4		110.48	17.5	28.48	4		113.92
F.P.	62.07	1		62.07	45.0	64.00	1		64.00
Total				279.31	+19.0				337.48

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{58.17}{18} (.75 - .5) = -.81$

If limited on account of midship superstructure. ☒

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

Actual height superstructure **7'-7"**
Standard **6'-0"**
Excess **1'-7"**
Excess above deck **2 1/2"**
Aft Excess **1'-9 1/2"**

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 " =
C.S.S

Deduction for Tropical Freeboard.
Addition for Winter and Winter North Atlantic Freeboard.
Depth to Freeboard Deck = **14.36** Ft.
Summer freeboard = **.42**
Moulded draught (d) = **13.94**
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = **3.48 = 3 1/2**
Addition for Winter North Atlantic Freeboard (if required) = **5 1/2**

Deduction for Fresh Water.
Displacement in salt water at summer load water line $\Delta =$ **2127**
Tons per inch immersion at summer load water line **T = 14.90**
Deduction = $\frac{\Delta}{40T}$ inches = **3.57**
= 3 1/2"

TABULAR FREEBOARD corrected for Flush Deck (if required) **24.86**
Correction for coefficient. **Nil** **24.86**
Depth Correction ... **0.15**
Deduction for superstructures ... **25.15**
Sheer correction ... **.81**
Round of Beam correction ... **.09**
Correction for Thickness of Deck amidships **3.00**
Other corrections, scantlings, etc. **3.24**
Summer Freeboard = **2.14**

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

Tropical Fresh Water Line above Centre of Disc	...	3 1/2"	Tropical Fresh Water Freeboard	...	0'-1 1/2"
Fresh Water Line	...	3 1/2"	Fresh Water	...	0'-1 1/2"
Tropical Line	...	Nil	Tropical	...	0'-5" (Limited)
Winter Line below	...	3 1/2"	Winter	...	0'-8 1/2"
Winter North Atlantic Line	...	5 1/2"	Winter North Atlantic	...	0'-10 1/2"

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.

Equivalent Camber Mean height $\frac{3 \times 36.5 \times 12}{2 \times 36.5 \times 12} = 1.5''$

Equiv camber = $1.5 \times 1.5 = 2.25''$

Roof equiv.

$60.50' + .33' = 60.83'$
 $\frac{1 \times 11.5}{36.5} = .63$

61.46 Equiv. incline

Equiv. overhang $65.33 - 61.46 = 3.87'$

Displacement and Tons per Inch at intermediate waterlines.

	Displacement	T.P.I.
13' W.L.	1961	14.70
14' W.L.	2138	14.92
15' W.L.	2317	15.17

Copy of Lines Plan enclosed for reference.

Trade of ship International

Names of sister ships ---

Builder's name and yard number Prince Rupert Dry Dock and Shipyard - Yard No. 58.

Owners Minister of Munitions and Supply of Canada.

Fee \$40.00



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Foundation