

Fort Columbia
No. 37352 Etc.

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

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

Index No. 37428
(For London Office only).

| | | | | | |
|--|----------------------------------|---|---------------------------------|------------------------------|---|
| Ship's Name S.S. "STRATHGONA PARK" CABANO | Official Number 174802 | Nationality and Port of Registry British Montreal, Que. | Gross Tonnage 7156.70 | Date of Build 1943 | Port of Survey North Vancouver, B. C. |
| Moulded Dimensions: Length ^{417.35} 416.50 Breadth 56.90' Depth (37.33' to Upper Deck <i>To centre of rudder stock</i> (28.58' to 2nd Deck | | | | | Date of Survey August & Sept., 1943 |
| Moulded displacement at moulded draught = 85 per cent. of moulded depth 16,600 tons | | | | | Surveyor's Signature <i>T. H. Gill</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 plate06' Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ Depth for Freeboard (D) = 37.39 | Depth correction. (a) Where D is greater than Table depth (D - Table depth) R = $(37.39 - 27.82) \cdot 3 = +28.71$ 9.57 (b) Where D is less than Table depth (if allowed) (Table depth - D) R = <input checked="" type="checkbox"/> If restricted by superstructures <input checked="" type="checkbox"/> | Round of Beam correction. Moulded Breadth (B) 56.9' Standard Round of Beam = $\frac{B \times 12}{50} = 13.66$ Ship's Round of Beam = 14.00" Difference = .34 Restricted to <input checked="" type="checkbox"/> Correction = $\frac{Diff}{4} \times \left(1 - \frac{S_1}{L}\right) = \frac{.34}{4} = -.09"$ |
|--|--|---|

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 (written across the table with arrows pointing to the 'Equivalent Enclosed Length' column)

Standard Height of Superstructure _____

" " R.Q.D. _____

Deduction for complete superstructure _____

Percentage covered $\frac{S}{L} =$ _____

" " $\frac{S_1}{L} =$ *Flush Deck*

" " $\frac{E}{L} =$ _____

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 | 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 |
| 1/4L " ... | 5.69 | 2 | | 11.38 | 6.50 | 6.50 | 2 | | 13.00 |
| Amidships ... | - | 4 | | - | - | - | 4 | | - |
| 1/4L 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 |

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.*

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 " = _____

| | | |
|--|---|--|
| Deduction for Tropical Freeboard. | Deduction for Fresh Water. | TABULAR FREEBOARD corrected for Flush Deck (if required) 83.21 |
| Addition for Winter and Winter North Atlantic Freeboard. | Displacement in salt water at summer load water line $\Delta = 13760$ | Correction for coefficient $\frac{.771 + .68}{1.36} = 1.451 / 1.36 = 88.78$ |
| Depth to Freeboard Deck = 37.39 | Tons per inch immersion at summer load water line $T = 48.20$ | Depth Correction ... 28.71 |
| Summer freeboard = 10.56 | Deduction = $\frac{\Delta}{40T}$ inches = 7 1/4" | Deduction for superstructures ... |
| Moulded draught (d) = 26.83 | | Sheer correction45 |
| Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 6.71 = 6 3/4" | | Round of Beam correction09 |
| Addition for Winter North Atlantic Freeboard (if required) = <input checked="" type="checkbox"/> | | Correction for Thickness of Deck amidships ... |
| | | Other corrections, scantlings, etc. to correspond to a Summer Moulded Draught of 26'-10" 9.80 |
| | | 38.51 .54 + 37.97 |
| | | Summer Freeboard = 126.75 |

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, ~~Wood~~ Steel, Deck: **10'-6 3/4"**

| | | | |
|--|---------------|------------------------------------|-------------------|
| Tropical Fresh Water Line above Centre of Disc ... | 1.4" | Tropical Fresh Water Freeboard ... | 9'-4 3/4" |
| Fresh Water Line " " ... | 1 1/4" | Fresh Water " " ... | 9'-11 1/2" |
| Tropical Line " " ... | 6 3/4" | Tropical " " ... | 10'-0" |
| Winter Line below " " ... | 6 3/4" | Winter " " ... | 11'-1 1/2" |
| Winter North Atlantic Line " " ... | .. | Winter North Atlantic " " ... | .. |

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