

FORT. ST. JAMES
NO 36801 etc.

Index. No. 37147
(For London Office only).

Lloyd's Register of Shipping.
SURVEYS FOR FREEBOARD.
 (COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name S.S. "FORT RUPERT"	Official Number 168374 --	Nationality and Port of Registry British LONDON	Gross Tonnage 7141.67	Date of Build 1942	Port of Survey Prince Rupert, B. C.
Moulded Dimensions: Length 416.50' Breadth 56.87' Depth (37.33' to Upper Deck To CENTRE OF RUDDER STOCK 417.35' (28.58' to 2nd Deck					Date of Survey 2nd & 3rd October, 1942
Moulded displacement at moulded draught = 85 per cent. of moulded depth 16,600 tons					Surveyor's Signature R.E. Marlborough
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 plate05' 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 $(D - \text{Table depth}) R =$ $(37.38 - 27.82) 3 = + 28.68$ 9.56 (b) Where D is less than Table depth (if allowed) $(\text{Table depth} - D) R =$ / 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 $= \frac{\text{Diff}^o}{4} \times \left(1 - \frac{S_1}{L} \right) =$ $\frac{34}{4} = - .09$
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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					
Forecastle enclosed ...					
" overhang ...					
Trunk aft ...					
" forward ...					
Deck opening aft ...					
" " forward					
Total ...					

FLUSH DECK

Standard Height of Superstructure 7.5

" " R.Q.D. ✓

Deduction for complete superstructure 42.00

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 <u>Ins.</u>	Effective Ordinate	S M	Product
A.P. ...	51.73	1	51.73	55.00	55.00	1	55.00
1/2 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	-
1/2 L from F.P. ...	11.38	2	22.76	11.63	11.63	2	23.26
1/2 L " ...	46.05	4	184.20	46.75	46.75	4	187.00
F.P. ...	103.47	1	103.47	105.00	105.00	1	105.00
Total ...			465.62				476.26

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{10.64}{18} \times .75 = -.44''$

If limited on account of midship superstructure. ✓

Mean actual sheer aft =
Mean standard sheer aft = } EXCESS

Mean actual sheer forward =
Mean standard sheer forward = }

$\frac{\text{Length of enclosed superstructure}}{L}$ forward of amidships = } FLUSH DECK
" " aft of " = }

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

<p>Deduction for Tropical Freeboard.</p> <p>Addition for Winter and Winter North Atlantic Freeboard.</p> <p style="text-align: center;">Ft.</p> <p>Depth to Freeboard Deck = <u>37.38</u></p> <p>Summer freeboard = <u>10.54</u></p> <p>Moulded draught (d) = <u>26.84</u></p> <p>Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = $6.71 = 6\frac{3}{4}$</p> <p>Addition for Winter North Atlantic Freeboard (if required) = ✓</p>	<p>Deduction for Fresh Water.</p> <p>Displacement in salt water at summer load water line</p> <p>$\Delta = 13770$</p> <p>Tons per inch immersion at summer load water line</p> <p>$T = 48.21$</p> <p>Deduction = $\frac{\Delta}{40T}$ inches</p> <p style="text-align: center;">$= 7.14$</p> <p style="text-align: center;">$= 7\frac{1}{4}"$</p>	<p>TABULAR FREEBOARD corrected for Flush Deck (if required)</p> <p>Correction for coefficient. $\frac{771 + .68}{1.36} = \frac{1451}{1.36}$</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 50%;"></th> <th style="width: 10%; text-align: center;">+</th> <th style="width: 10%; text-align: center;">-</th> <th style="width: 30%;"></th> </tr> <tr> <td>Depth Correction ...</td> <td style="text-align: center;">28.68</td> <td style="text-align: center;">-</td> <td></td> </tr> <tr> <td>Deduction for superstructures ...</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> <td></td> </tr> <tr> <td>Sheer correction ...</td> <td style="text-align: center;">-</td> <td style="text-align: center;">.44</td> <td></td> </tr> <tr> <td>Round of Beam correction ...</td> <td style="text-align: center;">-</td> <td style="text-align: center;">.09</td> <td></td> </tr> <tr> <td>Correction for Thickness of Deck amidships ...</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> <td></td> </tr> <tr> <td>Other corrections, scantlings, etc. TO CORRESPOND TO A SUMMER MOULDED DRAUGHT OF 26'-10" (26'-10 1/8" ACTUAL)</td> <td style="text-align: center;">9.57</td> <td style="text-align: center;">-</td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">38.25</td> <td style="text-align: center;">.53</td> <td></td> </tr> </table> <p style="text-align: right;">Summer Freeboard = 126.50</p>		+	-		Depth Correction ...	28.68	-		Deduction for superstructures ...	-	-		Sheer correction ...	-	.44		Round of Beam correction ...	-	.09		Correction for Thickness of Deck amidships ...	-	-		Other corrections, scantlings, etc. TO CORRESPOND TO A SUMMER MOULDED DRAUGHT OF 26'-10" (26'-10 1/8" ACTUAL)	9.57	-			38.25	.53	
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SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, ~~Wood~~ Steel, Deck:—

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

Names of sister ships.....S.S. "FORT STIKINE" - Prince Rupert Dry Dock & Shipyard, Prince Rupert, B. C.
(Yard No. 43)

Builder's name and yard number.....Prince Rupert Dry Dock & Shipyard, Prince Rupert, B. C. (Yard No. 44).....

Minister of Munitions & Supply of Canada

Fee £ **\$100.00**