

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name L. KAGANOVICH	Official Number ?	Nationality and Port of Registry RUSSIAN VLADIVOSTOK	Gross Tonnage 5621	Date of Build 1937	Port of Survey London
Moulded Dimensions: Length (on 9.15 m draft) 98.21 m Breadth (Max) 23.1 m Depth (to U.D.C.) 12.68 metres <i>Freeboard L = 96 L = 98.21 m (= 102.3 metres.)</i>					Date of Survey July 1949
Moulded displacement at moulded draught = 85 per cent. of moulded depth not known tons					Surveyor's Signature E. Little
Coefficient of fineness for use with Tables .68 (Assumed)					Particulars of Classification 100A1 (Icebreaker) Contemplated

DEPTH FOR FREEBOARD (D). Moulded depth 12.680 metres Stringer plate0125 Sheathing on exposed deck 75 mm wood $T \left(\frac{L-S}{L} \right) =$.075 Depth for Freeboard (D) = 12.767	DEPTH CORRECTION. (a) Where D is greater than Table depth $\frac{(D - \text{Table depth}) R}{100} = \frac{8.33(12.767 - 6.548)}{100} = 24.80 = +12.85$ (b) Where D is less than Table depth (if allowed) (Table depth - D) R = 0 If restricted by superstructures <input checked="" type="checkbox"/>	ROUND OF BEAM CORRECTION. Moulded Breadth (B) (Max) 23.1 metres (22.8 on 9.15 draft) Standard Round of Beam = $\frac{B \times 12}{50} = 462$ mm Ship's Round of Beam = 450 mm Difference = 12 mm Restricted to Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L}\right) = \frac{12}{4} = +3$ mm
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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
 " " R.Q.D.
 Deduction for complete superstructure
 Percentage covered $\frac{S}{L} =$ } **Nil.**
 " " $\frac{S_1}{L} =$ }
 " " $\frac{E}{L} =$ }
 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.	1072	1	1072	250	250	250	1	250	250
$\frac{1}{4}$ L from A.P.	476	4	1904	✓	✓	✓	4	✓	✓
$\frac{2}{4}$ L "	119	2	238	✓	✓	✓	2	✓	✓
Amidships	✓	4	✓	✓	✓	✓	4	✓	✓
$\frac{2}{4}$ L from F.P.	238	2	476	✓	✓	✓	2	✓	✓
$\frac{1}{4}$ L "	953	4	3812	✓	✓	✓	4	✓	✓
F.P.	2144	1	2144	250	250	250	1	250	250
Total			9646						500

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{9146}{18} \times .75 = +381$ mm

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 = 12.697 Summer freeboard = 3.065 Moulded draught (d) = 9.632 Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{8}$ inches = 200 Addition for Winter North Atlantic Freeboard (if required) = 200 + 50 = 250	Deduction for Fresh Water. Displacement in salt water at summer load water line $\Delta = 11,000$ tons Tons per inch immersion at summer load water line $T = 44.2$ (per cm = 17.4) Deduction = $\frac{\Delta}{40 T}$ inches = 158 Say 170 on logane	TABULAR FREEBOARD corrected for Flush Deck (if required) Correction for coefficient Nil <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>+</td><td>-</td></tr> <tr><td>Depth Correction</td><td>1270</td></tr> <tr><td>Deduction for superstructures</td><td>381</td></tr> <tr><td>Sheer correction</td><td>3</td></tr> <tr><td>Round of Beam correction</td><td>3</td></tr> <tr><td>Correction for Thickness of Deck amidships</td><td>-</td></tr> <tr><td>Other corrections, scantlings, etc.</td><td>-</td></tr> <tr><td>Summer Freeboard =</td><td>3019</td></tr> </table>	+	-	Depth Correction	1270	Deduction for superstructures	381	Sheer correction	3	Round of Beam correction	3	Correction for Thickness of Deck amidships	-	Other corrections, scantlings, etc.	-	Summer Freeboard =	3019
+	-																	
Depth Correction	1270																	
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Round of Beam correction	3																	
Correction for Thickness of Deck amidships	-																	
Other corrections, scantlings, etc.	-																	
Summer Freeboard =	3019																	

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, ~~Flt.~~ Deck :-

Tropical Fresh Water Line above Centre of Disc ... 370 mm	Tropical Fresh Water Freeboard ... 26.95 m
Fresh Water Line " " ... 170 mm	Fresh Water " " ... 28.95 m
Tropical Line " " ... 200 mm	Tropical " " ... 28.65 m
Winter Line below " " ... 200 mm	Winter " " ... 32.65 m
Winter North Atlantic Line " " ... 250 mm	Winter North Atlantic " " ... 33.15 m

Freeboard increased by 8.19 m assigned by Russian authorities was Russian.

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.

Trade of ship

ICEBREAKER

Names of sister ships

Builder's name and yard number

Built at Nicolief State Yards

Owners

U.S.S.R.

Fee £

Inclusive Fee with ?

First Entry



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Foundation