

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, ~~SAILING SHIP, TUG, OR~~)

Ship's Name "MUKSON"	Official Number —	Nationality and Port of Registry U.S.S.R. MURMANSK.	Gross Tonnage 684	Date of Build 1956	Port of Survey LOWESTOFT.
Moulded Dimensions: Length 172'-3" Breadth 32'-0" Depth 16'-6" FREE BOARD 169'-75"					Date of Survey DURING CONSTRUCTION.
Moulded displacement at moulded draught = 85 per cent. of moulded depth 1195 tons					Surveyor's Signature <i>[Signature]</i>
Coefficient of fineness for use with Tables .68 (Actual .529)					Particulars of Classification 100. A1. MOTOR TRAWLER. STRENGTHENED FOR NAVIGATION IN ICE

Depth for Freeboard (D).		Depth correction.	Round of Beam correction.
Moulded depth ...	16'-50"	(a) Where D is greater than Table depth (D—Table depth) R = (16'-69" - 11'-32") / 306 = 7'-01"	Moulded Breadth (B) 32'-00"
Stringer plate ...	03'-45"	(b) Where D is less than Table depth (if allowed) (Table depth—D) R = 5'-37"	Standard Round of Beam = $\frac{B \times 12}{50} =$ 7'-68"
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) = \frac{21 \times 129.34}{169.75} =$.16	2'-1/2"	If restricted by superstructures	Ship's Round of Beam = 9"
Depth for Freeboard (D) = 16'-69"			Difference 1'-32"
			Restricted to
			Correction = $\frac{\text{Diff}^2}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{1.32^2}{4} \times .7619 =$ -.25"

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S _i)	Height	Height Correction	Effective Length (E)	
Poop enclosed ...	1'-4"	2'-16"	7'-3"	—	2'-16"	Standard Height of Superstructure 6'-00"
.. overhang ...	30'-4"					" " R.Q.D. 3'-46"
R.Q.D. enclosed ...						Deduction for complete superstructure 22'-98"
.. overhang ...						Percentage covered $\frac{S}{L} =$ 23.81
Bridge enclosed ...						" " $\frac{S_1}{L} =$
.. overhang aft ...						" " $\frac{E}{L} =$
.. overhang forward	38'-25"					Percentage from Table, Line A. 11.90
F'cle enclosed ...	40'-9"	38'-25"	7'-3"	—	38'-25"	(corrected for absence of forecastle (if required))
.. overhang ...						Percentage from Table, Line B.
Trunk aft ...						(corrected for absence of forecastle (if required))
.. forward ...						Interpolation for bridge less than 2L (if required)
Tonnage opening aft ...						Deduction = 22.98 × .1190 = 2.73"
" " forward						
Total ...	40'-41"	40'-41"			40'-41"	

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product	
A.P. ...	26.98	1		26.98	47 3/8"	47.38	1		47.38	Mean actual sheer aft = Mean standard sheer aft = } EXCESS.
1/8 L from A.P. ...	12.00	4		48.00	23"	23.00	4		92.00	
2/8 L " ...	2.97	2		5.94	6"	6.00	2		12.00	Mean actual sheer forward = Mean standard sheer forward = }
Amidships ...	—	4		—	0	—	4		—	Length of enclosed superstructure forward of amidships = L
3/8 L from F.P. ...	5.93	2		11.86	9"	9.00	2		18.00	" " aft of " = } NIL.
1/8 L " ...	24.01	4		96.04	32 3/4"	32.75	4		131.00	
F.P. ...	53.95	1		53.95	64 1/2"	64.50	1		64.50	
Total ...				242.77					364.88	

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{122.11}{18} \left(.75 - \frac{1190}{172} \right) =$ **4.28"**
If limited on account of midship superstructure. **YES-NIL.** If limited to maximum allowance of 1 1/2 ins. per 100 ft.

Deduction for Tropical Freeboard.	Deduction for Fresh Water.	TABULAR FREEBOARD corrected for Fresh Deck (if required)	18.26
Addition for Winter and Winter North Atlantic Freeboard.	Displacement in salt water at summer load water line	Correction for coefficient	18.26
2 1/2" wood ~	$\Delta =$ 1183		
Depth to Freeboard Deck = 16'-74"	Tons per inch immersion at summer load water line	Depth Correction ...	7'-01"
Summer freeboard = 1'-92"	$T =$ 10.15 Tons.	Deduction for superstructures ...	2.73
Moulded draught (d) = 14'-82"	Deduction = $\frac{\Delta}{40 T}$ inches	Sheer correction ...	2.73
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 3'-71" = 3'-3/4"	= 2.91	Round of Beam correction25
Addition for Winter North Atlantic Freeboard (if required) = 3'-3/4" + (8'-3/4" - 2') = 5'-3/4"	= 3"	Correction for Thickness of Deck amidships60
		Other corrections, scantlings, etc. ...	7.61
		Summer Freeboard = 22.89	4.63

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

Tropical Fresh Water Line above Centre of Disc	6 3/4"
Fresh Water Line " "	3"
Tropical Line " "	3 3/4"
Winter Line below " "	3 3/4"
Winter North Atlantic Line " "	5 3/4"

Tropical Fresh Water Freeboard ...	1'-11"
Fresh Water " "	1'-8"
Tropical " "	1'-7 1/4"
Winter " "	2'-2 3/4"
Winter North Atlantic " "	2'-4 3/4"

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.

Length of Pops

ax side = 133'

+ 11.6 + 8.0 = 19.6

2.118

83

2.16

[Signature]

100 AL. H. 100.00

STRENGTHENED FOR HANDLING IN ICE

2

44703

46335

[Signature]

Trade of ship

TRAWLER.

Names of sister ships

"PIONEER" "PULONA"

Builder's name and yard number

BROOKE MARINE LTD. YARD N° 243.

Owners

V/O SUDJIMPORT.

MANAGERS. TRADE DELEGATION OF THE U.S.S.R. 32 HIGHGATE HILL WEST. LONDON. N.6.

Fee £ 18.0.0.



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