

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

Ship's Name <del>OTTAWA</del> "MAY MERE"	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build 1946	Port of Survey
Moulded Dimensions: Length 140.62 Breadth 27.0 Depth 17.5					Date of Survey 11-11-46
Moulded displacement at moulded draught = 85 per cent. of moulded depth _____ tons					Surveyor's Signature
Coefficient of fineness for use with Tables estimated .75					Particulars of Classification <del>1000</del> with freeboard

<b>DEPTH FOR FREEBOARD (D).</b> Moulded depth ... .. 17.50 Stringer plate ... .. .03 Sheathing on exposed deck $T \left( \frac{L-S}{L} \right) =$ Depth for Freeboard (D) = 17.53	<b>DEPTH CORRECTION.</b> (a) Where D is greater than Table depth (D-Table depth) R = $(17.53-9.57) \times 1.081 = +8.82$ (b) Where D is less than Table depth (if allowed) (Table depth-D) R = If restricted by superstructures	<b>ROUND OF BEAM CORRECTION.</b> Moulded Breadth (B) 27.00 Standard Round of Beam = $\frac{B \times 12}{50} = 6.48$ Ship's Round of Beam = 7.00 Difference .52 Restricted to Correction = $\frac{\text{Diff}^{\circ}}{4} \times \left( 1 - \frac{S}{L} \right) = \frac{.52}{4} = -.13$
--	---	--

<b>DEDUCTION FOR SUPERSTRUCTURES.</b>					Standard Height of Superstructure	
	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)	" " R.Q.D.
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 ... ..						

Percentage covered  $\frac{S}{L} =$   
" "  $\frac{S_1}{L} =$   
" "  $\frac{E}{L} =$   
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 =

<b>SHEER CORRECTION.</b>								Mean actual sheer aft Mean standard sheer aft =		
Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product	Mean actual sheer forward Mean standard sheer forward =
A.P. ... ..	24.06	1		24.06	15.50	15.50	1		15.50	} Deficient
$\frac{1}{8}L$ from A.P. ... ..	10.71	4		42.84	6.50	6.50	4		26.00	
$\frac{3}{8}L$ " ... ..	2.65	2		5.30	.50	.50	2		1.00	
Amidships ... ..	-	4		-	-	-	4		-	
$\frac{5}{8}L$ from F.P. ... ..	5.29	2		10.58	-	-	2		-	
$\frac{7}{8}L$ " ... ..	21.42	4		85.68	6.75	6.75	4		27.00	
F.P. ... ..	48.12	1		48.12	31.50	31.50	1		31.50	
Total ... ..				216.58					101.00	
Correction = $\frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) = \frac{115.58 \times .75}{18} = +4.82$										Length of enclosed superstructure forward of amidships =
If limited on account of midship superstructure.										" " aft of " =

<b>Deduction for Tropical Freeboard.</b> <b>Addition for Winter and Winter North Atlantic Freeboard.</b> Depth to Freeboard Deck = 17.53 Summer freeboard = 6.02 Moulded draught (d) = 11.51 Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 2.877 Addition for Winter North Atlantic Freeboard (if required) =	<b>Deduction for Fresh Water.</b> Displacement in salt water at summer load water line $\Delta =$ Tons per inch immersion at summer load water line T = Deduction = $\frac{\Delta}{T}$ inches $\frac{d}{4} = 3^4$	<b>TABULAR FREEBOARD</b> corrected for Flush Deck (if required) Correction for coefficient Depth Correction ... .. 8.82 Deduction for superstructures ... .. 4.82 Sheer correction ... .. .13 Round of Beam correction ... .. Correction for Thickness of Deck amidships ... .. Other corrections, scantlings, etc. <del>11'-6"</del> (11'-6 1/2" actual) Summer Freeboard = 72.25
---	---	--

<b>SUMMER FREEBOARD</b> amidships from Centre of Disc to top of Deck Line, <del>Wood</del> , Steel, Deck :-					
Tropical Fresh Water Line above Centre of Disc	...	6'	Tropical Fresh Water Freeboard	...	5'-6 1/4"
Fresh Water Line	"	3'	Fresh Water	"	5'-9 1/4"
Tropical Line	"	3'	Tropical	"	5'-9 1/4"
Winter Line below	"	3'	Winter	"	6'-3 1/4"
Winter North Atlantic Line	"	-	Winter North Atlantic	"	-