

See also B.C. Comp. dated 4/4/39 and passed by Committee of B.C. on 1/5/40.

# LLOYD'S REGISTER OF SHIPPING

UNITED WITH THE BRITISH CORPORATION REGISTER

## SURVEYS FOR FREEBOARD

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER)

Received .....  
 Index No. ....  
 Govt. Copy .....  
 Owners C11 .....

Ship's Name <b>"GEORGE HINDMAN"</b> EX. "RISACUA"	Official Number 150,232	Nationality and Port of Registry British Owen Sound	Gross Tonnage 1936.20	Date of Build 4/1921.	Port of Survey <u>Owen Sound, Ont., Canada.</u> Date of Survey <u>March 17th, 1954.</u> Surveyor's Signature <u>[Signature]</u> contemplated Particulars of/Classification <u>100 A1</u> <u>and River St. Lawrence, 'Great Lakes Service'</u>
Moulded Dimensions: Length <u>251' 10"</u> Breadth <u>42' 6"</u> Depth <u>21' 0 1/2"</u> Freeboard Length <u>251' 10"</u> ( <u>251.83'</u> ) Moulded displacement at moulded draught = 85 per cent. of moulded depth (excluding bossing) ..... tons Coefficient of fineness for use with Tables <u>.83</u> (from previous comp.)					

**DEPTH FOR FREEBOARD (D).**

Moulded depth	21.042'
Stringer plate 27 LBS... .66"	.055'
Wood Sheathing on exposed deck	N11
$T \left( \frac{L-S}{L} \right) =$	
Depth for Freeboard (D) =	<u>21.10</u>

**DEPTH CORRECTION.**

(a) Where D is greater than Table depth (D-Table depth) R =  $(21.10 - 16.79) \cdot 1.937 = + 8.35$

(b) Where D is less than Table depth (if allowed) (Table depth-D) R = -

If restricted by superstructures -

**ROUND OF BEAM CORRECTION.**

Moulded Breadth (B)	42.50'
Standard Round of Beam = $\frac{B \times 12}{50}$	10.20"
Ship's Round of Beam	6"
Difference (deficiency)	4.20"
Restricted to	-
Correction = $\frac{\text{Diff}^\circ}{4} \times \left( 1 - \frac{S_1}{L} \right)$	$\frac{4.20}{4} \times \left( 1 - \frac{40.43}{42.50} \right) = + .50$

**DEDUCTION FOR SUPERSTRUCTURES.**

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed					
" overhang					
R.Q.D. enclosed	92'	92.00	3'	3.00	68.58
" overhang	N11				
Bridge enclosed					
" overhang aft					
" overhang forward					
F'cle enclosed	40'	40.00	5'	5.00	39.23
" overhang	N11				
Trunk aft					
" forward					
Tonnage opening aft					
" " forward					
Total	132.00	132.00			101.81

Standard Height of Superstructure 6.0183'

" " R.Q.D. 4.0244'

Deduction for complete superstructure 31.183"

Percentage covered  $\frac{S}{L} = 52.4\%$

" "  $\frac{S_1}{L} = 40.43\%$

Percentage from Table, Line A. 23.87%

(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 =  $31.183 \times .2387 = - 7.44"$

**SHEER CORRECTION.**

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.	35.18	1	35.18	8"	8.00	1	8.00		
1/2 L from A.P.	15.66	4	62.64	.5"	0.50	4	2.00		
3/4 L "	3.87	2	7.74	0	0.00	2	0.00		
Amidships	0	4	0	0	0.00	4	0.00		
1/4 L from F.P.	7.74	2	15.48	0	0.00	2	0.00		
1/2 L "	31.31	4	125.24	2.5"	6.50	4	10.00		
F.P.	70.37	1	70.37	21"	21.00	1	21.00		
Total			316.65				41.00		

Mean actual sheer aft  
 Mean standard sheer aft = } Deficient.

Mean actual sheer forward  
 Mean standard sheer forward =

Length of enclosed superstructure forward of amidships = } No superstructure amidships.  
 " " aft of " =

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) = \frac{275.65}{18} \times \left( .75 - \frac{262.1}{487.9} \right) = + 7.47"$

If limited on account of midship superstructure. If limited to maximum allowance of 1 1/2 ins. per 100 ft. -

**Deduction for Tropical Freeboard.**  
 Addition for Intermediate Winter and Winter North Atlantic Freeboard.

**Deduction for Fresh Water Freeboard.**  
 Displacement in salt water at summer load water line

**TABULAR FREEBOARD** corrected for Flush Deck (if required)

Depth to Freeboard Deck = 21.10 Ft.

Summer freeboard = 3.60

Moulded draught (d) = 17.50

Keel allowance =

Extreme draught =

**Deduction for Tropical Freeboard and Addition for Intermediate Winter Freeboard** =  $\frac{d}{4}$  inches =  $\frac{17.50}{4} = 4.375 = 4 \frac{3}{8}$

**Addition for Winter North Atlantic Freeboard (if required)** =  $\frac{d}{2} = 8.75 = 8 \frac{3}{4}$

$\Delta =$

Tons per inch immersion at summer load water line

$T =$

Deduction =  $\frac{\Delta}{40 T}$  inches =  $\frac{17.5 \times 3}{40 \times 5.75} = 5.75 = 5 \frac{3}{4}$

Correction for coefficient  $\frac{.83 + .65}{1.36} = 1.51$

Depth Correction	8.35	-
Deduction for superstructures	-	7.44
Sheer correction	7.47	-
Round of Beam correction	.50	-
Correction for Thickness of Deck amidships	-	-
Other corrections, scantlings, etc. to correspond to summer mid. draught of 17' 6"	.78	-
	17.10	7.44
Summer Freeboard =	43.75	

+ 9.66

30.25

33.59

3-7/4"

**SUMMER FREEBOARD** amidships from Centre of Disc to top of Deck Line, ~~Welded~~ Steel, Deck :-

Tropical Fresh Water Line above Centre of Disc	
Fresh Water Line	
Midsummer Tropical Line	0' - 5/4"
Intermediate Winter Line below	0' - 4 1/2"
Winter Winter-North Atlantic Line	0' - 8 3/4"

Tropical Fresh Water Freeboard	
Fresh Water	
Midsummer Tropical	3' - 0"
Intermediate Winter	3' - 11 3/4"
Winter North Atlantic	4' - 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.

Trade of ship Cargo in bulk, on Great Lakes and River St. Lawrence.

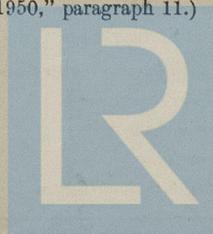
Names of sister ships \_\_\_\_\_

Builder's name and yard number Midland Shipbuilding Co. Ltd. Yard No. 9.

<sup>New</sup> Owners Hindman Transportation Co. Ltd., Owen Sound, Ontario, Canada.

Fee \$90.00 : \_\_\_\_\_

List of plans forwarded for reference. (See "Instructions to Surveyors, Part 4, 1950," paragraph 11.)



© 2021

Lloyd's Register  
Foundation