

LAKES FREEBOARD

For LONDON OFFICE ONLY

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 <i>GEORGE HINDMAN EX RISACUA EX ANTICOSTI</i>	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build
Moulded Dimensions: Length <i>251.83</i> Breadth <i>42.50</i> Depth <i>21.04</i>				
Freeboard Length <i>251.83</i>				
Moulded displacement at moulded draught = 85 per cent. of moulded depth (excluding bossing) _____ tons				
Coefficient of fineness for use with Tables <i>.83</i>				

Port of Survey _____
 Date of Survey *12.9.53*
 Surveyor's Signature _____
 Particulars of Classification *Contemplated*

DEPTH FOR FREEBOARD (D).

Moulded depth	21.04
Stringer plate	.06
Wood Sheathing on exposed deck	
$T \frac{(L-S)}{L} =$	
Depth for Freeboard (D) =	<i>21.10</i>

DEPTH CORRECTION.

(a) Where D is greater than Table depth (D - Table depth) R = *(21.10 - 16.79) 1.737 = 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)	<i>42.50</i>
Standard Round of Beam = $\frac{B \times 12}{50}$	<i>10.20</i>
Ship's Round of Beam	<i>6"</i>
Difference	<i>+4.20</i>
Restricted to	
Correction = $\frac{Diff^2}{4} \times (1 - \frac{S_1}{L})$	<i>= 4.20 x .757 = +3.17</i>

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	<i>92.0</i>	<i>92.0</i>	<i>3.0</i>	<i>3.0 x .25</i>	<i>68.57</i>
" overhang					
Bridge enclosed					
" overhang aft					
" overhang forward					
F'cle enclosed	<i>40.0</i>	<i>40</i>	<i>5.0</i>	<i>5.0 x .618</i>	<i>33.23</i>
" overhang					
Trunk aft					
" forward					
Tonnage opening aft					
" " forward					
Total	<i>132</i>	<i>132</i>			<i>101.80</i>

Standard Height of Superstructure *6.018*

" " R.Q.D. *4.025*

Deduction for complete superstructure *31.183*

Percentage covered $\frac{S}{L} =$ *52.43*

" " $\frac{S_1}{L} =$ *40.42*

Percentage from Table, Line A. *23.86*

(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 = *31.18 x .2386 = 7.45*

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.	<i>35.18</i>	1			<i>8.0</i>	<i>8.0</i>	1		<i>8.0</i>
$\frac{1}{4}L$ from A.P.		4			<i>.5</i>	<i>.5</i>	4		<i>2.0</i>
$\frac{2}{4}L$ "		2			<i>0</i>	<i>0</i>	2		<i>0</i>
Amidships	<i>0</i>	4		<i>0</i>	<i>0</i>	<i>0</i>	4		<i>0</i>
$\frac{3}{4}L$ from F.P.		2			<i>0</i>	<i>0</i>	2		<i>0</i>
$\frac{1}{4}L$ "		4			<i>2.5</i>	<i>2.5</i>	4		<i>10.0</i>
F.P.	<i>70.36</i>	1			<i>21.0</i>	<i>21.0</i>	1		<i>21.0</i>
Total				<i>316.62</i>					<i>41.0</i>

Mean actual sheer aft = _____
 Mean standard sheer aft = _____

Mean actual sheer forward = _____
 Mean standard sheer forward = _____

Length of enclosed superstructure forward of amidships = _____
 " " aft of " = _____

Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{.75 - S}{2L} \right) = \frac{275.62 - 2622}{18} = +4.47$

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 Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck	<i>21.10</i>
Summer freeboard	<i>3.54</i>
Moulded draught (d)	<i>17.56</i>
Keel allowance	
Extreme draught	
Deduction for Tropical freeboard and addition for = _____	
Winter freeboard = $\frac{d}{4}$ inches = _____	
Addition for Winter North Atlantic Freeboard (if required) = _____	

Deduction for Fresh Water.

Displacement in salt water at summer load water line	
$\Delta =$	
Tons per inch immersion at summer load water line	
T = _____	
Deduction = $\frac{\Delta}{40 T}$ inches	

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient $\frac{83 + 68}{136} = 1.51$	
Depth Correction	<i>8.35</i>
Deduction for superstructures	<i>7.45</i>
Sheer correction	<i>4.47</i>
Round of Beam correction	<i>3.50</i>
Correction for Thickness of Deck amidships	
Other corrections, scantlings, etc.	
Summer Freeboard = <i>42.46</i>	

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

Tropical Fresh Water Line above Centre of Disc	...	Tropical Fresh Water Freeboard	...
Fresh Water Line	...	Fresh Water	...
Tropical Line	...	Tropical	...
Winter Line below	...	Winter	...
Winter North Atlantic Line	...	Winter North Atlantic	...

