

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 GEORGE HINDMAN EX RISACUA EX ANTICOSTI	Official Number	Nationality and Port of Registry ✓	Gross Tonnage	Date of Build	Port of Survey
Moulded Dimensions: Length 251.83 Breadth 42.50 Depth 21.04					Date of Survey 12.9.53
Freeboard Length					Surveyor's Signature Contemplan
Moulded displacement at moulded draught = 85 per cent. of moulded depth (excluding bossing)					Particulars of Classification
Coefficient of fineness for use with Tables .83					

DEPTH FOR FREEBOARD (D).

Moulded depth ... **21.04**

Stringer plate ... **.06**

Wood Sheathing on exposed deck

$T \left(\frac{L-S}{L} \right) =$

Depth for Freeboard (D) = **21.10**

DEPTH CORRECTION.

(a) Where D is greater than Table depth (D-Table depth) R = **4.31**

(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 **+4.20**

Restricted to

Correction = $\frac{\text{Diff}^2}{4} \times \left(1 - \frac{S_1}{L} \right) = 4.20 \times 0.757 = +3.17$

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 ...	92.0	92.0	3.0	3.0/4.25	68.57
" overhang ...					
Bridge enclosed ...					
" overhang aft ...					
" overhang forward ...					
F'cle enclosed ...	40.0	40	5.0	5.0/6.04	33.23
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft					
" " forward ...					
Total ...	132	132			101.80

Standard Height of Superstructure **6.018**

" " R.Q.D. **4.025**

Deduction for complete superstructure **31.183**

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

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

" " $\frac{E}{L} = 40.42$

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 23.86 = 7.45**

SHEER CORRECTION.

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

Correction = $\frac{\text{Difference between sums of products} \left(\frac{S}{2L} - \frac{S_1}{2L} \right)}{18} = \frac{275.62 - 262.2}{18} = +7.47$

If limited on account of midship superstructure.

If limited to maximum allowance of $1\frac{1}{2}$ ins. per 100 ft.

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

Depth to Freeboard Deck = **21.10**

Summer freeboard = **3.54**

Moulded draught (d) = **17.56**

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 $\frac{83.68}{1.36} = 1.51$

	+	-
Depth Correction ...	8.35	✓
Deduction for superstructures ...	7.45	✓
Sheer correction ...	7.47	✓
Round of Beam correction ...	1.50	✓
Correction for Thickness of Deck amidships ...		✓
Other corrections, scantlings, etc. ...		✓
	16.32	7.45

Summer Freeboard = **42.46**

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

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

Tropical Fresh Water Freeboard ...	
Fresh Water " " ...	
Tropical " " ...	
Winter " " ...	
Winter North Atlantic " " ...	