

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, ~~SAILING SHIP, TANKER.~~)

Ship's Name CAPE HAWKE.	Official Number 168672	Nationality and Port of Registry British, Glasgow	Gross Tonnage	Date of Build 1940	Port of Survey
Moulded Dimensions: Length 415.58' Breadth 56.0 Depth 36.82.					Date of Survey 20. XI. 41
Moulded displacement at moulded draught = 85 per cent. of moulded depth					Surveyor's Signature
Coefficient of fineness for use with Tables .754 Estimated					Particulars of Classification + 100A1 with freeboard.

Depth for Freeboard (D).		Depth correction.		Round of Beam correction.	
Moulded depth ...	36.82	(a) Where D is greater than Table depth (D - Table depth) R = (36.82 - 28.37) 3 = 8.52		Moulded Breadth (B)	56.0
Stringer plate85	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =	+ 25.56	Standard Round of Beam = $\frac{B \times 12}{50}$	= 13.44
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$	✓	If restricted by superstructures		Ship's Round of Beam	= 14"
Depth for Freeboard (D) =	36.89			Difference	.56"
				Restricted to	
				Correction = $\frac{\text{Diff}^*}{4} \times \left(1 - \frac{S_1}{L} \right)$	= .56" x .9189 = .51"

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S _i)	Height	Height Correction	Effective Length (E)
Poop enclosed ...					
„ overhang ...					
R.Q.D. enclosed ...					
„ overhang ...					
Bridge enclosed ...					
„ overhang aft ...					
„ overhang forward ...					
F'cle enclosed ...	34.5	34.5	7.5	✓	34.5
„ overhang ...					
Trunk aft ...					
„ forward ...					
Tonnage opening aft ...					
„ „ forward ...					
Total ...	34.5	34.5			34.5

Standard Height of Superstructure **7.5** ✓
 „ „ R.Q.D. **✓**
 Deduction for complete superstructure **42.00** ✓
 Percentage covered $\frac{S}{L} =$
 $\frac{S_i}{L} =$ **8.11%** ✓
 $\frac{E}{L} =$ **5**
 Percentage from Table, Line A. **4.08%**
 (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 = **42 x .0408 = - 1.71**

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	52.56	1		52.56	54.75	54.75	1		54.75
$\frac{1}{8}$ L from A.P. ...	23.39	4		93.56	24.40	24.40	4		97.60
$\frac{2}{8}$ L „ ...	5.78	2		11.56	6.00	6.00	2		12.00
Amidships ...	-	4		-	-	-	4		-
$\frac{2}{8}$ L from F.P. ...	11.56	2		23.12	12.00	12.00	2		24.00
$\frac{1}{8}$ L „ ...	46.78	4		187.12	48.00	48.00	4		192.00
F.P. ...	105.12	1		105.12	108.00	108.00	1		108.00
Total ...				473.04					488.35

Mean actual sheer aft = **Excess**
 Mean standard sheer aft = **Excess**
 Mean actual sheer forward = **Excess**
 Mean standard sheer forward = **Excess**
 Length of enclosed superstructure forward of amidships = **NIL** ✓
 „ „ aft of „ = **NIL** ✓
 Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{.75 - S}{.2L} \right) = \frac{15.31}{18} \left(\frac{.75 - .0405}{.7095} \right) = -.60$ ✓
 If limited on account of midship superstructure. **YES. NIL** ✓
 If limited to maximum allowance of 1½ ins. per 100 ft. ✓

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = **36.89** Ft.
 Summer freeboard = **11.21**
 Moulded draught (d) = **25.68**
 Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = **6.42 = 6½"**
 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 = $\frac{\Delta}{40T}$ inches = **6¾"**

TABULAR FREEBOARD corrected for Flush Deck (if required)

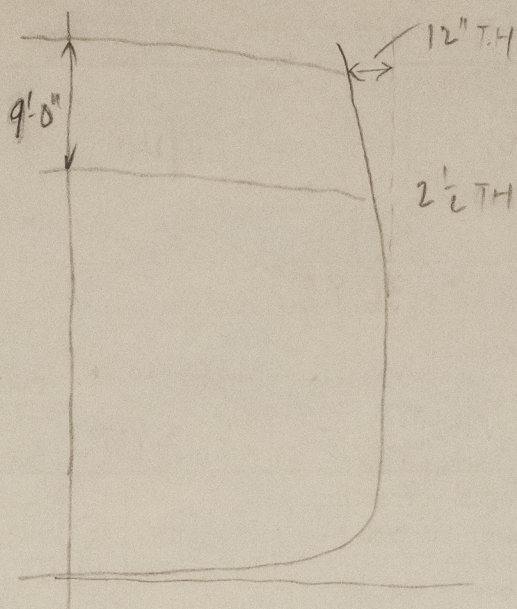
Correction for coefficient **.754 + .68 = 1.33** ✓
 Depth Correction ... **25.56** ✓
 Deduction for superstructures ... **1.71** ✓
 Sheer correction ... **.13** ✓
 Round of Beam correction ... **.13** ✓
 Correction for Thickness of Deck amidships ... **25.64** ✓
 Other corrections, scantlings, etc. **TO CORRESPOND TO A SUMMER MOULDED DRAUGHT OF 25.68** ✓
 Summer Freeboard = **134.50** ✓

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

Tropical Fresh Water Line above Centre of Disc	...	13¼"
Fresh Water Line	...	6¾"
Tropical Line	...	6½"
Winter Line	below	6½"
Winter North Atlantic Line	...	✓

Tropical Fresh Water Freeboard	...	11'-2½"
Fresh Water	...	10'-1¼"
Tropical	...	10'-7¾"
Winter	...	10'-8"
Winter North Atlantic	...	11'-9"

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.



Partial flush-deck correction

$$\begin{array}{r} 425.58 \\ 212.79 \\ \hline 638.37 \end{array} \times \begin{array}{r} 1.000 \\ .811 \\ \hline 1.811 \end{array} = +1.21''$$

Trade of ship

Names of sister ships

Builder's name and yard number

Owners */*

Fee £ : :



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Foundation