

Amended computation
T.O. closed by C.F.S./T.O. draught amended

Index No. 36460
(For London Office only.)

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 United Kingdom Glasgow	Gross Tonnage 5081	Date of Build 1940	Port of Survey
Moulded Dimensions: Length 425.58 Breadth 56.0 Depth 36.82					Date of Survey 30.5.47
Moulded displacement at moulded draught = 85 per cent. of moulded depth tons					Surveyor's Signature
Coefficient of fineness for use with Tables .754 Estimated					Particulars of Classification +100A1W.F.C.

DEPTH FOR FREEBOARD (D).	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth ... 36.82	(a) Where D is greater than Table depth $(36.82 - 28.37) R = +25.56$	Moulded Breadth (B) 56.00'
Stringer plate85	(b) Where D is less than Table depth (if allowed) (Table depth - D) R = 8.52	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 = 14.00"
Depth for Freeboard (D) = 36.89		Difference .56"
		Restricted to
		Correction = $\frac{\text{Diff}^e}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.56}{4} \times .9189 = -.13"$

DEDUCTION FOR SUPERSTRUCTURES.					Standard Height of Superstructure 7.5'
	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	R.Q.D.
Poop enclosed ...					Deduction for complete superstructure 42.00"
" overhang ...					Percentage covered $\frac{S}{L} =$
R.Q.D. enclosed ...					" $\frac{S_1}{L} =$ 8.11%
" overhang ...					" $\frac{E}{L} =$
Bridge enclosed ...					Percentage from Table, Line A. 4.05%
" overhang aft ...					(corrected for absence of forecastle (if required)) -
" overhang forward ...					Percentage from Table, Line B. -
F'cle enclosed ...	34.50	34.5	7.5'	34.50	(corrected for absence of forecastle (if required)) -
" overhang ...					Interpolation for bridge less than .2L (if required) -
Trunk aft ...					Deduction = 42 x .0405 = -1.70"
" forward ...					
Tonnage opening aft ...					
" " forward ...					
Total ...	34.50			34.50	

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
$\frac{3}{8}L$ " ...	5.78	2	11.56	6.00	6.00	2	12.00
Amidships ...	-	4	-	-	-	4	-
$\frac{5}{8}L$ from F.P. ...	11.56	2	23.12	12.00	12.00	2	24.00
$\frac{7}{8}L$ " ...	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 = >1 Mean standard sheer aft = >1							
Mean actual sheer forward = >1 Mean standard sheer forward = >1							
Length of enclosed superstructure forward of amidships = Nil " " aft of " = Nil							
Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{.75 - S}{2L} \right) = \frac{15.31}{18} \left(\frac{.75 - .0405}{2 \times 425.58} \right) = -.60"$ If limited on account of midship superstructure. Yes, Nil. If limited to maximum allowance of 1 1/2 ins. per 100 ft. -							

Deduction for Tropical Freeboard.	Deduction for Fresh Water.	TABULAR FREEBOARD corrected for Flush Deck (if required) 79.53 + 1.21
Addition for Winter and Winter North Atlantic Freeboard.	Displacement in salt water at summer load water line $\Delta = 12303$	Correction for coefficient $.754 \times .68 = .5136$
Depth to Freeboard Deck = 36.89	Tons per inch immersion at summer load water line T = 46.79	Depth Correction ... 25.56
Summer freeboard = 12.21	Deduction = $\frac{\Delta}{40 T} = \frac{12303}{40 \times 46.79} = 6.57$	Deduction for superstructures ... 1.70
Moulded draught (d) = 24.68	= 6 1/2"	Sheer correction ... -
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 6.17 = 6 1/4"		Round of Beam correction13
Addition for Winter North Atlantic Freeboard (if required) = -		Correction for Thickness of Deck amidships ... -
		Other corrections, scantlings, etc. 37.63
		Summer Freeboard = 146.50

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck :-			
Tropical Fresh Water Line above Centre of Disc ...	12 3/4"	Tropical Fresh Water Freeboard ...	12' - 2 1/2"
Fresh Water Line " " ...	6 1/2"	Fresh Water " " ...	11' - 1 3/4"
Tropical Line " " ...	6 1/4"	Tropical " " ...	11' - 8"
Winter Line below " " ...	6 1/4"	Winter " " ...	11' - 8 1/4"
Winter North Atlantic Line " " ...	-	Winter North Atlantic " " ...	12' - 8 3/4"