

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name CORFIELD	Official Number 165504	Nationality and Port of Registry UK London	Gross Tonnage 1786 1791.44	Date of Build 1937	Port of Survey Leith
Moulded Dimensions: Length 257.0 Breadth 39.25 Depth 16.75					Date of Survey While building
Moulded displacement at moulded draught = 85 per cent. of moulded depth 3462 tons					Surveyor's Signature Ernest Edwards
Coefficient of fineness for use with Tables 7547 755					Particulars of Classification +100A1.

Depth for Freeboard (D).	Depth correction.	Round of Beam correction.
Moulded depth ... 18.75	(a) Where D is greater than Table depth (D - Table depth) R = (18.78 - 17.11) 1.974 = +3.30"	Moulded Breadth (B) 39.25
Stringer plate033	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =	Standard Round of Beam = $\frac{B \times 12}{50} =$ 9.42"
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$	If restricted by superstructures	Ship's Round of Beam = 9.42"
Depth for Freeboard (D) = 18.783		Difference .33 excess
		Restricted to
		Correction = $\frac{\text{Diff}^2}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.33^2}{4} \times .322 = -.03$

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 ...	150.0	150.00	4.5		150.0
„ overhang ...					
Bridge enclosed ...					
„ overhang aft ...					
„ overhang forward ...					
F'cle enclosed ...	24.0	24.00	7.0		24.0
„ overhang ...					
Trunk aft ...					
„ forward ...					
Tonnage opening aft ...					
„ „ forward ...					
Total ...	174.00	174.00			174.00

Standard Height of Superstructure	6.066
„ „ R.Q.D.	4.088
Deduction for complete superstructure	31.66
Percentage covered $\frac{S}{L} =$	67.8
„ „ $\frac{S_1}{L} =$	67.8
„ „ $\frac{E}{L} =$	67.8
Percentage from Table, Line A.	59.26
(corrected for absence of fore-castle (if required))	
Percentage from Table, Line B.	
(corrected for absence of fore-castle (if required))	
Interpolation for bridge less than 2L (if required)	
Deduction = $31.66 \times .5926 =$	-18.76

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	35.66	1	35.66	34	38.94	1	38.94		
$\frac{1}{4}$ L from A.P. ...	15.87	4	63.48	15.125	17.33	4	69.32		
$\frac{3}{4}$ L „ ...	3.92	2	7.84	3.75	4.28	2	8.56		
Amidships ...		4				4			
$\frac{3}{4}$ L from F.P. ...	7.84	2	15.68	9.250	9.25	2	18.50		
$\frac{1}{4}$ L „ ...	31.74	4	126.96	37.375	37.375	4	149.50		
F.P. ...	71.33	1	71.33	84	84.00	1	84.00		
Total ...			320.95				368.82		

Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{.75 - S}{L} \right) = \frac{47.87}{18} \times \left(\frac{.75 - .339}{.75} \right) = -1.09$
If limited on account of midship superstructure. $1.09 \times \frac{.75}{.200} = -1.01$

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	.0845L		
„ „ aft of „	>.1L		

Deduction for Tropical Freeboard.	
Addition for Winter and Winter North Atlantic Freeboard.	
RAISED QUARTER	
Depth to Freeboard Deck =	23.28
Summer freeboard =	6.08
Moulded draught (d) =	17.20
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches =	4.30 = 4 3/4
Addition for Winter North Atlantic Freeboard (if required) =	6 1/4

Deduction for Fresh Water.	
Displacement in salt water at summer load water line	3792
Tons per inch immersion at summer load water line	20.15
Deduction = $\frac{\Delta}{40T}$ inches	4.70
	4 3/4

TABULAR FREEBOARD corrected for Flush Deck (if required)	
Correction for coefficient	1.36
Depth Correction ...	3.30
Deduction for superstructures ...	18.76
Sheer correction ...	1.01
Round of Beam correction03
Correction for Thickness of Deck amidships	54.00
Other corrections, scantlings, etc. ...	
Summer Freeboard =	73.06

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

Tropical Fresh Water Line above Centre of Disc ...	9
Fresh Water Line „ „ ...	4 3/4
Tropical Line „ „ ...	4 1/4
Winter Line below „ „ ...	4 1/4
Winter North Atlantic Line „ „ ...	6 1/4

Tropical Fresh Water Freeboard ...	5' 4"
Fresh Water „ „ ...	5' 8 1/4"
Tropical „ „ ...	5' 8 3/4"
Winter „ „ ...	6' 5 1/4"
Winter North Atlantic „ „ ...	6' 7 1/4"

18 JUN 1937

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 Collier

Names of sister ships Carbrae, Corburn

Builder's name and yard number The Burntisland SB Co Ltd. No. 214

Owners William Gory & Sons Ltd.

Fee £ 11 : 0 : 0



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Lloyd's Register
Foundation

corfield.