

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

4-0011932

Ship's Name "CLYDEFIELD"	Official Number 169242	Nationality and Port of Registry BRITISH NEWCASTLE.	Gross Tonnage 11163	Date of Build 1952.	Port of Survey Glasgow
Moulded Dimensions: Length 516.0' Breadth 70.0' Depth 37.765' To C. of R.S.					Date of Survey Whilst building
Moulded displacement at moulded draught = 85 per cent. of moulded depth 24,810. tons					Surveyor's Signature D. B. Cook
Coefficient of fineness for use with Tables 749					Particulars of Classification * 100 A1 carrying petroleum in bulk (contemplated).

DEPTH FOR FREEBOARD (D).

Moulded depth (as measured) **37.765** ... **37.77**

Stringer plate **88** ... **.07**

Sheathing on exposed deck

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

Depth for Freeboard (D) **37.84**

DEPTH CORRECTION.

(a) Where D is greater than Table depth
(D - Table depth) R = **(37.84 - 34.40) 3 = 10.32**

(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) **70.0'**

Standard Round of Beam = $\frac{B \times 12}{50} = 16.80$

Ship's Round of Beam **17"** = **17.00**

Difference **.20**

Restricted to

Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.20}{4} \times .5404 = .02702$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed EQUIV...	128.83	128.83	8.0'	—	128.83
" overhang ...					
R.Q.D. enclosed ...					
" overhang ...					
Bridge enclosed EQUIV...	42.33	42.33	7.5'	—	42.33
" overhang aft ...					
" overhang forward ...					
F'cle enclosed ...	66.00		7.5'		66.00
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" " forward ...					
Total ...	237.16	237.16			237.16

Standard Height of Superstructure **7.50'**

" " R.Q.D. **—**

Deduction for complete superstructure **42.00**

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

" " $\frac{S_1}{L} =$ **45.96**

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

Percentage from Table, Line A. **TANKER 36.96**

(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 = **42.00 x .3696 = 15.52**

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	61.60	1		61.60	61.28	61.28	1		61.28
$\frac{1}{2}$ L from A.P. ...	27.41	4		109.64	20.06	20.06	4		80.24
$\frac{3}{4}$ L " ...	6.775	2		13.55	—	—	2		—
Amidships ...		4		—	—	—	4		—
$\frac{3}{4}$ L from F.P. ...	13.55	2		27.10	—	—	2		—
$\frac{1}{2}$ L " ...	54.825	4		219.30	49.32	49.32	4		197.28
F.P. ...	123.20	1		123.20	120.00	120.00	1		120.00
Total ...				554.39					458.80

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{95.59}{18} \left(.75 - \frac{237.16}{516.0} \right) = + 2.76$

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 = **37.84**

Summer freeboard = **7.77**

Moulded draught (d) = **30.07**

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = **7.52 + 7.5**

Addition for Winter North Atlantic Freeboard (if required)

7.52 + 5.16 = 12.68

Deduction for Fresh Water.

Displacement in salt water at summer load water line

$\Delta = 23220$

Tons per inch immersion at summer load water line

T = **72.71**

Deduction = $\frac{\Delta}{40 T}$ inches

7.98 + 2.8

Draft **24.0** Disb. **23940** T.P.I. **73.08**

30.0 **23075** **72.64**

TABULAR FREEBOARD

Correction for coefficient

$\frac{74 + 68}{1.36} = 1.429$

Depth Correction ... **10.32**

Deduction for superstructures ... **15.52**

Sheer correction ... **2.76**

Round of Beam correction ... **.03**

Correction for Thickness of Deck amidships ...

Other corrections, scantlings, etc. ...

13.08 **15.55** **2.47**

Summer Freeboard = **93.34**

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

Tropical Fresh Water Line above Centre of Disc ... **15.12**

Fresh Water Line " " ... **8**

Tropical Line " " ... **7.5**

Winter Line below " " ... **7.5**

Winter North Atlantic Line " " ... **12.34**

Tropical Fresh Water Freeboard **6.12**

Fresh Water " **2.12**

Tropical " **7.12**

Winter " **8.12**

Winter North Atlantic " **8.12**

Clydefield.

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.

Roop.

Length at side 124'-6" /
+ $2\frac{1}{3} \times 6'-6"$ 4'-4" /
Equivalent length. 128'-10" ✓

Bridge.

Length at side 39'-3" /
+ $2\frac{1}{3} \times 6'-6"$ 4'-4" /
43'-7" ✓
Equivalent length = $43.58 \times \frac{68}{70}$
= 42.33 ✓

Trade of ship International

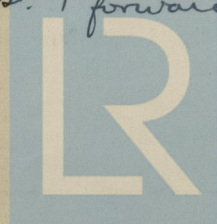
Names of sister ships none

Builder's name and yard number Harland & Wolff, Glasgow. 43487
Yard No 1436 G.

Owners Hunting & Son Ltd

Fee £ Will be applied for later.

Plans of midship section, Framing Profile, Steel
Decks, Suttles & Discharges and Gen. Arrgt.
forwarded herewith. Rpt. 9 forwarded herewith.



Lloyd's Register
Foundation