

29 JAN 1935

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

now named "TOWER FIELD" of London

Index No. **34619**
(For London Office only.)

18783.

 Computation of Freeboard for Steamer, Sailing Ship, Tanker
 having *Poop, Longbridge, and Foyle*
Port of Survey *Leith*Date of Survey *While building*Name of Surveyor *Ernest Edwards*Particulars of Classification *+100A1 contemplated*
 (Type of Superstructures.)
 Ship's Name **ROXBURGH**
 Nationality and Port of Registry *London Newcastle*
 Official Number **161579**
 Gross Tonnage **4241**
 Date of Build **1935**
 Moulded Dimensions: Length **368-0**, Breadth **52-2**, Depth **27-6 1/2**
 Moulded displacement at moulded draught = 85 per cent. of moulded depth **9916** tons
 Coefficient of fineness for use with Tables **.7728**

 Depth for Freeboard (D)
 Moulded depth ... **27.54**
 Stringer plate ... **.04**
 Sheathing on exposed deck
 $T \left(\frac{L-S}{L} \right) =$ **none**
 Depth for Freeboard (D) = **27.58**

 Depth correction
 (a) Where D is greater than Table depth
 $(D - \text{Table depth}) R =$ **2.831 = 8.608**
 (b) Where D is less than Table depth (if allowed)
 $(\text{Table depth} - D) R =$
 If restricted by superstructures ☒

 Round of Beam correction
 Moulded Breadth (B) **52.17**
 Standard Round of Beam = $\frac{B \times 12}{50} =$ **12.52**
 Ship's Round of Beam = **12.5**
 Difference **.02 Deficient**
 Restricted to
 Correction = $\frac{\text{Diff}^2}{4} \times \left(1 - \frac{S_1}{L} \right) =$ **.02 x .1805 = .0036**

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...	48.08	48.08	7.40	✓	48.08
" overhang ...	✓	✓	✓	✓	✓
R.Q.D. enclosed	✓	✓	✓	✓	✓
" overhang	✓	✓	✓	✓	✓
Bridge enclosed...	225.92	225.92	8.30	✓	225.92
" overhang aft	✓	✓	✓	✓	✓
" overhang forward	✓	✓	✓	✓	✓
F'cle enclosed ...	27.58	27.58	7.25	✓	27.58
" overhang ...	✓	✓	✓	✓	✓
Trunk aft	✓	✓	✓	✓	✓
" forward	✓	✓	✓	✓	✓
Tonnage opening aft	✓	✓	✓	✓	✓
" " forward	✓	✓	✓	✓	✓
Total ...	301.58	301.58	✓	✓	301.58

 Standard Height of Superstructure **7.18**
 " " R.Q.D. **✓**
 Deduction for complete superstructure **39.87**
 Percentage covered $\frac{S}{L} =$ **81.95%**
 " " $\frac{S_1}{L} =$ **81.95%**
 " " $\frac{E}{L} =$ **81.95%**
 Percentage from Table, Line A. **✓**
 (corrected for absence of forecastle (if required))
 Percentage from Table, Line B. **77.72%**
 (corrected for absence of forecastle (if required))
 Interpolation for bridge less than 2L (if required)
 Deduction = **39.87 x .7772 = -30.99**

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	46.80	1	✓	46.80	72 3/4	72.75	1	✓	72.75
1/4 L from A.P. ...	20.83	4	✓	83.32	32 1/2	32.50	4	✓	130.00
1/2 L " ...	5.15	2	✓	10.30	8	8.00	2	✓	16.00
Amidships ...	✓	4	✓	✓	0	✓	4	✓	✓
3/4 L from F.P. ...	10.30	2	✓	20.60	14 1/2	14.50	2	✓	29.00
1/4 L " ...	41.60	4	✓	166.40	57 3/4	57.75	4	✓	231.00
F.P. ...	93.60	1	✓	93.60	130	130.00	1	✓	130.00
Total ...	✓	✓	✓	421.26	✓	✓	✓	✓	608.75

 Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) =$ **-3.54**
 If limited on account of midship superstructure. ☒

 Mean actual sheer aft = **Excess**
 Mean standard sheer aft

 Mean actual sheer forward = **Excess**
 Mean standard sheer forward

 Length of enclosed superstructure forward of amidships = **.33L**
 " " aft of " = **.28L**

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

 Depth to Freeboard Deck = **27.58**
 Summer freeboard = **3.33**
 Moulded draught (d) = **24.25**

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = **6.06 = 6"**Addition for Winter North Atlantic Freeboard (if required) = **✓**

Deduction for Fresh Water.

 Displacement in salt water at summer load water line **10359**
 $\Delta =$ **10359 - 10369**
 Tons per inch immersion at summer load water line
 $T =$ **37.66**
 Deduction = $\frac{\Delta}{40T}$ inches = **.688**
7"

TABULAR FREEBOARD corrected for Flash Deck (if required)

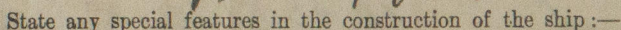
 Correction for coefficient $\frac{.772 + .68}{1.36} = \frac{1.452}{1.36}$

	+	-
Depth Correction ...	8.63	-
Deduction for superstructures ...	-	30.99
Sheer correction ...	-	3.54
Round of Beam correction ...	-	-
Correction for Thickness of Deck amidships ...	-	-
Other corrections, scantlings, etc. ...	-	-
	8.63	34.53
Summer Freeboard =		40.08

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, **Wood, Steel, Deck:-**
 Tropical Fresh Water Line above Centre of Disc ... **13"**
 Fresh Water Line " " ... **7"**
 Tropical Line " " ... **6"**
 Winter Line below " " ... **6"**
 Winter North Atlantic Line " " ... **✓**

 Tropical Fresh Water Freeboard ... **3'-4"**
 Fresh Water " " ... **2'-3"**
 Tropical " " ... **2'-9"**
 Winter " " ... **2'-10"**
 Winter North Atlantic " " ... **3'-10"**

Superstructure bulkheads, trunks, deckhouses, casings, cargo and coaling hatchways, extent and thickness of sheathing on the freeboard deck, gangway, cargo and coaling ports, and any other openings, etc., which would affect the seaworthiness of the ship are to be shewn on the following sketches:—



for reference.
This Vessel is proceed to Newcastle under Law, for installment of
Engines & Boilers. The survey for grubboard & completed
with exception of examination of fiddley top, funnel &
ventilators in way of fiddley.

Received by me.

Goods Tonnage not arrived
Fee to be charged with First Entry Feb 14