

NEWCASTLE-ON-TYNE

96394

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Index No. 35160
(For London Office only).

Ship's Name M.S. REGENT TIGER	Official Number 166521	Nationality and Port of Registry British London	Gross Tonnage 10176.50	Date of Build 1938	Port of Survey Newcastle on Tyne
Moulded Dimensions: Length 500' Breadth 68' Depth 35.75'					Date of Survey 4th July 1938
Moulded displacement at moulded draught = 85 per cent. of moulded depth 22215 tons					Surveyor's Signature A. J. Akester
Coefficient of fineness for use with Tables .7525					Particulars of Classification + 100 A1 Carrying petroleum in bulk

Depth for Freeboard (D).		Depth correction.		Round of Beam correction.	
Moulded depth	35.75'	(a) Where D is greater than Table depth (D - Table depth) R = (35.82 - 33.38) 3 = 7.32"	Moulded Breadth (B)	68.0'	
Stringer plate	.87"	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =	Standard Round of Beam = $\frac{B \times 12}{50}$	16.32"	
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$		If restricted by superstructures	Ship's Round of Beam	17"	
Depth for Freeboard (D) =	35.82		Difference Excess.	.68"	
			Restricted to		
			Correction = $\frac{\text{Diff}^{\circ}}{4} \times (1 - \frac{S_1}{L})$	$\frac{.68}{4} (.5530) = -.09$	

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed	111.60'	111.60'	7.5'		111.60'
" overhang					
R.Q.D. enclosed					
" overhang	44.39'	44.39'	7.5'		44.39'
Bridge enclosed	44.39'	44.39'	7.5'		44.39'
" overhang aft					
" overhang forward	67.83'	67.83'	7.5'		67.83'
Fore enclosed					
" overhang					
Trunk aft					
" forward					
Tonnage opening aft					
" forward					
Total	223.82	223.82			223.82

Standard Height of Superstructure **7.50'**
" " R.Q.D. **42.00"**
Deduction for complete superstructure
Percentage covered $\frac{S}{L} = 44.70\%$
" " $\frac{S_1}{L} = 44.70\%$
" " $\frac{E}{L} = 44.70\%$
Percentage from Table, Line **Tanker** **35.70%**
(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 = $42.00" \times 35.70\% = 14.99"$

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.	60.09'	1		60.09	61.62	61.62	1		61.62
$\frac{1}{4}$ L from A.P.	26.75	4		106.92	27.75	27.75	4		111.00
$\frac{3}{4}$ L	6.61	2		13.22	6.875	6.875	2		13.75
Amidships	-	4		-	-	-	4		-
$\frac{3}{4}$ L from F.P.	13.21	2		26.42	13.25	13.25	2		26.50
$\frac{1}{4}$ L	53.46	4		213.84	54.75	54.75	4		219.00
F.P.	120.14	1		120.14	121.00	121.00	1		121.00
Total				540.61					552.87

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 = } Tanker.
" " aft of " = }
Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{.75 - \frac{S}{2L}}{.75} \right) = \frac{12.26}{18} \left(\frac{.75 - .2235}{.75} \right) = -.36$
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.	Deduction for Fresh Water.	TABULAR FREEBOARD corrected for Flush Deck (if required)
Addition for Winter and Winter North Atlantic Freeboard.	Displacement in salt water at summer load water line	Correction for coefficient
Depth to Freeboard Deck = 35.82	$\Delta = 21020$	$.7515 + .68 = 1.4315$
Summer freeboard = 7.02	Tons per inch immersion at summer load water line	$\frac{1.36}{1.36} = 1$
Moulded draught (d) = 28.80	T = 68.0	
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 7.20 = 7$\frac{1}{4}$"	Deduction = $\frac{\Delta}{40T}$ inches = 7.73"	
Addition for Winter North Atlantic Freeboard (if required) = 7.20 + 5.01 = 12.21 = 12$\frac{1}{4}$"	= 7$\frac{3}{4}$"	
		Depth Correction ... 7.32
		Deduction for superstructures ... 14.99
		Sheer correction36
		Round of Beam correction09
		Correction for Thickness of Deck amidships ...
		Other corrections, scantlings, etc. ...
		7.32 15.44 - 8.12
		Summer Freeboard = 84.15

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

Tropical Fresh Water Line above Centre of Disc	15'	Tropical Fresh Water Freeboard	15'
Fresh Water Line	7 $\frac{3}{4}$ "	Fresh Water	7 $\frac{3}{4}$ "
Tropical Line	7 $\frac{1}{4}$ "	Tropical	7 $\frac{1}{4}$ "
Winter Line below	7 $\frac{1}{4}$ "	Winter	7 $\frac{1}{4}$ "
Winter North Atlantic Line	12 $\frac{1}{4}$ "	Winter North Atlantic	12 $\frac{1}{4}$ "

Regent Tiger.

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.

Equivalent Length of Bridge

Centre = 47.58

Side = 38.06

$$9.52 \times \frac{2}{3} = 6.33$$

38.06

44.39

Trade of ship.

Names of sister ships

Builder's name and yard number

Swan Hunter & Wigham Richardson Ltd. No 1545

Owners

C.T. Bowring & Co. Ltd.

Fee £

with F.E.



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