

Castal
38662

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

GRK. REPORT N° 23549

Ship's Name "ARGUS"	Official Number 181821	Nationality and Port of Registry BRITISH LONDON.	Gross Tonnage 1917.97	Date of Build 1947	Port of Survey PORT GLASGOW
Moulded Dimensions: Length 250'-0" ✓ <i>250'-40" TO CENTRE OF RUDDER STOCK.</i>					Date of Survey WHILST BUILDING.
Breadth 40'-0" ✓					Surveyor's Signature <i>J. A. Jamieson</i>
Depth 18'-6" TO MAIN DECK ✓ 26'-3 1/2" "UPPER" ✓					Particulars of Classification +100 A.I. "WITH FREEBOARD" (CONTEMPLATED)
Moulded displacement at moulded draught = 85 per cent. of moulded depth (15,725) 2872 4396 tons					
Coefficient of fineness for use with Tables .687					

Depth for Freeboard (D).		Depth correction.		Round of Beam correction.	
Moulded depth ...	26'-3" ✓	(a) Where D is greater than Table depth (D - Table depth) R =	(26'-45" - 16'-69") 1.926 = +18'-80"	Moulded Breadth (B)	40'-0" ✓
Stringer plate34"	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =	9'-76"	Standard Round of Beam = $\frac{B \times 12}{50}$	= 9'-60"
Sheathing on exposed deck 3/2" WOOD AFT.				Ship's Round of Beam	= 10"
$T \left(\frac{L-S}{L} \right) = \frac{2L}{1} \times \frac{156.50}{250.40}$.13			Difference	Excess = 40
Depth for Freeboard (D) =	26'-45"	If restricted by superstructures		Restricted to	
				Correction = $\frac{\text{Diff}^*}{4} \times \left(1 - \frac{S_1}{L} \right)$	= 40/4 = -10" ✓

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	
Poop enclosed ...						Standard Height of Superstructure 6'-00"
.. overhang R.Q.D. ✓
R.Q.D. enclosed ...						Deduction for complete superstructure 31'-04"
.. overhang ...						Percentage covered $\frac{S}{L} =$
Bridge enclosed $\frac{S_1}{L} =$
.. overhang aft $\frac{E}{L} =$
.. overhang forward						Percentage from Table, Line A. (corrected for absence of forecastle (if required))
F'cle enclosed ...						Percentage from Table, Line B. (corrected for absence of forecastle (if required))
.. overhang ...						Interpolation for bridge less than .2L (if required)
Trunk aft ...						Deduction = NIL
.. forward ...						
Tonnage opening aft ...						
.. forward						
Total ...						

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product	
A.P. ...	35.04	1		35.04	32"	32.00	1		32.00	Mean actual sheer aft = > .75
1/4 L from A.P. ...	15.59	4		62.36	13.5"	13.50	4		54.00	Mean actual sheer forward = Excess
1/2 L ..	3.855	2		7.71	3.25"	3.25	2		6.50	Length of enclosed superstructure forward of amidships =
Amidships ...	-	4		-	0	-	4		-	.. aft of .. = Flush Deck
3/4 L from F.P. ...	7.71	2		15.42	9"	9.00	2		18.00	
1/4 L ..	31.185	4		124.74	34.25"	34.25	4		137.00	
F.P. ...	70.08	1		70.08	75.5"	75.50	1		75.50	
Total ...				315.35					323.00	

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{7.65}{18} \times .75 = -.32"$
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)	36.14
Addition for Winter and Winter North Atlantic Freeboard.	Displacement in salt water at summer load water line	Correction for coefficient	36.33
Depth to Freeboard Deck = 26'-53"	$\Delta = 16.3" = 3024$	$\frac{.687 + .68}{1.36} = \frac{1.367}{1.36}$	
Summer freeboard = 10'-79"	$\Delta = 15.3" = 2797$		
Moulded draught (d) = 15'-74"	Tons per inch immersion at summer load water line	Depth Correction ...	18.80
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 3.95" = 4"	$T = 16.3" = 19.3$	Deduction for superstructures ...	-
Addition for Winter North Atlantic Freeboard (if required) = 4" + 2" = 6"	$T = 15.3" = 18.9$	Sheer correction32
	Deduction = $\frac{\Delta}{40T}$ inches = 3.83	Round of Beam correction10
	= 3 3/4"	Correction for Thickness of Deck amidships96
		Other corrections, scantlings, etc. <i>to correspond with the position of the lowest side scuttle</i>	73.83
			93.59
		Summer Freeboard =	129.50

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

Tropical Fresh Water Line above Centre of Disc ...	3 3/4"	Tropical Fresh Water Freeboard ...	10'-9 1/2"
Fresh Water Line ..	3 3/4"	Fresh Water ..	10'-5 3/4"
Tropical Line ..	Nil	Tropical ..	10'-5 3/4"
Winter Line below ..	Nil	Winter ..	10'-9 1/2"
Winter North Atlantic Line ..	Nil	Winter North Atlantic ..	10'-9 1/2"

Argus.

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.

Height of side of main-deck scuttle above top of keel. $16'-3''$

Summer and Tropical draught limited to $\frac{6}{15'-9''}$

Trade of ship LIGHTHOUSE TENDER.

Names of sister ships —

Builder's name and yard number FERGUSON BROS (PORT GLASGOW) LR.

Owners CORPORATION OF TRINITY HOUSE.

Fee £ 11-0-0.

MLD



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