

Allegiance 37250

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

4 JUN 1943

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.) (TUG)

Ship's Name "ANTIC"	Official Number NONE 169288	Nationality and Port of Registry BRITISH Hull NONE	Gross Tonnage 597	Date of Build 1943	Port of Survey Hull
Moulded Dimensions: Length 142'6" Breadth 33'0" Depth 16'0"					Date of Survey During construction
Moulded displacement at moulded draught = 85 per cent. of moulded depth 1010 tons					Surveyor's Signature <i>J. Macleod</i>
Coefficient of fineness for use with Tables .68 (actual .553) T.P.I. = 8.8					Particulars of Classification *100 A.1. "FOR TOWING SERVICES". (CONTEMPLATED)

Depth for Freeboard (D).	Depth correction.	Round of Beam correction.
Moulded depth 160'	(a) Where D is greater than Table depth (D - Table depth) R = $(16.03 - 9.50) \times 1.096 = +7.16$ 6.53	Moulded Breadth (B) 33'
Stringer plate03	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =	Standard Round of Beam = $\frac{B \times 12}{50} =$ 7.92
Sheathing on exposed deck NONE	If restricted by superstructures	Ship's Round of Beam = 9"
$T \left(\frac{L-S}{L} \right) =$		Difference = 1.08
Depth for Freeboard (D) = 1603'		Restricted to
		Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{1.08}{4} \times 0.6327 = -.17$

DEDUCTION FOR SUPERSTRUCTURES.

Mean Covered Length (S)	Equivalent Enclosed Length (S _i)	Height	Height Correction	Effective Length (E)
Poop enclosed				
.. overhang				
R.Q.D. enclosed				
.. overhang				
Bridge enclosed... ..				
.. overhang aft				
.. overhang forward				
F'cle enclosed	52.33	7'0"	-	52.33
.. overhang				
Trunk aft				
.. forward				
Tonnage opening aft ...				
.. forward				
Total	52.33			52.33

Standard Height of Superstructure **6'0"**
R.Q.D.
Deduction for complete superstructure **20.25**
Percentage covered $\frac{S}{L} =$ } **36.73**
 $\frac{S_1}{L} =$
 $\frac{E}{L} =$
Percentage from Table, Line A. **20.72**
(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 = **20.25 x 20.72 = -4.20**

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P.	24.25	1	24.25	29.50	29.50	1	29.50
1/4 L from A.P.	10.79	4	43.16	12.33	12.33	4	49.32
1/2 L	2.67	2	5.34	2.92	2.92	2	5.84
Amidships	-	4	-	-	-	4	-
3/4 L from F.P.	5.34	2	10.68	8.08	8.08	2	16.16
1/4 L	21.58	4	86.32	29.67	29.67	4	118.68
F.P.	48.50	1	48.50	73.75	73.75	1	73.75
Total			218.25				293.25

Mean actual sheer aft =
Mean standard sheer aft = } **Excess**
Mean actual sheer forward =
Mean standard sheer forward = }
Length of enclosed superstructure forward of amidships =
.. .. aft of .. = } **Nil**

Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{.75 - S}{2L} \right) = \frac{75}{18} \times \left(\frac{.75 - .1836}{.5664} \right) = -2.36$
If limited on account of midship superstructure. **Yes Nil**
If limited to maximum allowance of 1 1/2 ins. per 100 ft.

Deduction for Tropical Freeboard. Addition for Winter and Winter North Atlantic Freeboard.	Deduction for Fresh Water.	TABULAR FREEBOARD corrected for Flush Deck (if required)
Depth to Freeboard Deck = 16'03"	Displacement in salt water at summer load water line $\Delta = 1078$	Correction for coefficient Nil
Summer freeboard = 1'87"	Tons per inch immersion at summer load water line $T = 8.69$	Depth Correction 7.16
Moulded draught (d) = 14'16"	Deduction = $\frac{\Delta}{40T}$ inches	Deduction for superstructures 4.20
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 3'54" = 3 1/2"	MLO DRAFT. EXT. DISD. T.P.I.	Sheer correction 1.17
Addition for Winter North Atlantic Freeboard (if required) =	14' 1/2" 1100 8.75	Round of Beam correction 1.17
	13' 1/2" 996 8.45	Correction for Thickness of Deck amidships
	12' 4 1/2" 892 8.20	Other corrections, scantlings, etc. 5.18
		Summer Freeboard = 22'50"

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

Tropical Fresh Water Line above Centre of Disc	3"	Tropical Fresh Water Freeboard	1' - 10 1/2"
Fresh Water Line	3"	Fresh Water	1' - 7 1/2"
Tropical Line	Nil	Tropical	1' - 7 1/2"
Winter Line below	Nil	Winter	1' - 10 1/2"
Winter North Atlantic Line	2"	Winter North Atlantic	2' - 0 1/2"

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25/6/43

"ANTIC"

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.

ANTIC	NONE	BRITISH	NONE
ANTIC	NONE	BRITISH	NONE
ANTIC	NONE	BRITISH	NONE

$L = 142.5; \frac{L}{2} = 71.25$
 $\frac{42.00}{29.25} \times 2.02 = 0.83$
 $\frac{13.83}{14.66} - .50 = 14.16$
 Minimum Draught.

Trade of ship FOR TOWING SERVICES.

Names of sister ships "ALLEGIANCE" - "STORMKING"

Builder's name and yard number COCHRANE & SONS LTD - YARD NO 1764.

Owners THE ADMIRALTY.

Fee TO BE CHARGED WITH FIRST ENTRY.