

LLOYD'S REGISTER OF SHIPPING

UNITED WITH THE BRITISH CORPORATION REGISTER

SURVEYS FOR FREEBOARD

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER)

For LONDON OFFICE ONLY

Received

Index No.

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Owners C11

Ship's Name ASSIDUOUS	Official Number 169321	Nationality and Port of Registry BRITISH	Gross Tonnage 1743	Date of Build 1743	Port of Survey Amph. 8. 9.54
Moulded Dimensions: Length 142'-6" Breadth 33'-0" Depth 16'-0"					Surveyor's Signature for Irving Services
Freeboard Length					Particulars of Classification +101A1
Moulded displacement at moulded draught = 85 per cent. of moulded depth 1010 tons					
Coefficient of fineness for use with Tables .68 (Actual .663)					

DEPTH FOR FREEBOARD (D).	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth 16.00	(a) Where D is greater than Table depth (D-Table depth) R = (16.03 - 9.50) 1.096 = 7.16"	Moulded Breadth (B) 33.00
Stringer plate03	(b) Where D is less than Table depth (if allowed) (Table depth-D) R = 6.53	Standard Round of Beam = $\frac{B \times 12}{50} =$ 7.92
Wood Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$	If restricted by superstructures	Ship's Round of Beam = 9.00
Depth for Freeboard (D) = 16.03		Difference 1.08
		Restricted to
		Correction = $\frac{\text{Diff}^a}{4} \times \left(1 - \frac{S_1}{L} \right) =$ $\frac{1.08}{4} \times .4544 = .12"$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed					
" overhang					
R.Q.D. enclosed					
" overhang					
Bridge enclosed					
" overhang aft					
" overhang forward	77.50	77.50	4.0	✓	77.50
F'cle enclosed50	.25			.25
" overhang					
Trunk aft					
" forward					
Tonnage opening aft					
" " forward					
Total	78.00	77.75			77.75

Standard Height of Superstructure 6.00'	
" " R.Q.D. ✓	
Deduction for complete superstructure 20.25"	
Percentage covered $\frac{S}{L} =$ 54.74	
" " $\frac{S_1}{L} =$ 54.56	
" " $\frac{E}{L} =$ 54.56	
Percentage from Table, Line A. 38.38	
(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 .3838 = -7.97	

SHEER CORRECTION.

Actual from Dr. Lloyd's = **4.00'**
 Standard " " = **6.00**
2.00
1.00
12.00"

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
$\frac{1}{8}L$ from A.P.	10.79	4		43.16	12.33	12.33	4		49.32
$\frac{2}{8}L$ "	2.67	2		5.34	2.92	2.92	2		6.84
Amidships	0	4		0	0	0	4		0
$\frac{3}{8}L$ from F.P.	5.34	2		10.68	8.08	9.43	2		18.86
$\frac{4}{8}L$ "	21.58	4		86.32	29.67	38.16	4		152.64
F.P.	48.50	1		48.50	73.75	86.75	1		86.75
Total				218.35	+12.00				341.91

Mean actual sheer aft = **EXCESS**
 Mean standard sheer aft = **EXCESS**

Mean actual sheer forward = **EXCESS**
 Mean standard sheer forward = **EXCESS**

Length of enclosed superstructure forward of amidships = **.5L**
 " " aft of " = **.0439L**

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{128.66}{18} \left(.75 - \frac{.75}{2} \right) = 3.27$
 If limited on account of midship superstructure. **YES** $\frac{1.439}{2} \times .327 = 2.35$ If limited to maximum allowance of $1\frac{1}{2}$ ins. per 100 ft. **YES = 2.14**

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = 16.03	Ft.
Summer freeboard = 1.87	
Moulded draught (d) = 14.16	
Keel allowance =	
Extreme draught =	
Deduction for Tropical freeboard and addition for =	
Winter freeboard = $\frac{d}{4}$ inches = 3.54 = 3$\frac{1}{2}$"	
Addition for Winter North Atlantic Freeboard (if required) =	

Deduction for Fresh Water.

Displacement in salt water at summer load water line	
$\Delta =$ 1078	
Tons per inch immersion at summer load water line	
T = 3.69	
Deduction = $\frac{\Delta}{40T}$ inches	
= 3.40	
3"	

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient **NIL**

	+	-
Depth Correction	7.16	✓
Deduction for superstructures	7.74	✓
Sheer correction	2.14	✓
Round of Beam correction12	✓
Correction for Thickness of Deck amidships	✓	✓
Other corrections, scantlings, etc. to	16.84	✓
CORRESPOND WITH POSITION OF LOWEST 506 SCUTLE	18.00	10.03
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$\frac{1}{2}$"
Fresh Water Line " " ... 3"	Fresh Water " " ... 1'-7$\frac{1}{2}$"
Tropical Line " " ... NIL	Tropical " " ... 1'-10$\frac{1}{2}$"
Winter Line below " " ... NIL	Winter " " ... 1'-10$\frac{1}{2}$"
Winter North Atlantic Line " " ... 2"	Winter North Atlantic " " ... 2'-0$\frac{1}{2}$"