

LLOYD'S REGISTER OF SHIPPING

UNITED WITH THE BRITISH CORPORATION REGISTER

SURVEYS FOR FREEBOARD

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER)

Received
 Index No.
 Govt. Copy
 Owners C11

Ship's Name "ADELLEN"	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build	Port of Survey
Moulded Dimensions: Length 476'-4 1/2" Breadth 68'-0" Depth 36'-0"					Date of Survey 2/5/56
Freeboard Length 476.96' to 4 of R.S.					Surveyor's Signature
Moulded displacement at moulded draught = 85 per cent. of moulded depth 21480 tons					Particulars of Classification 100A1 from +100A1 C.P.B.
Coefficient of fineness for use with Tables .757					

DEPTH FOR FREEBOARD (D). FT	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth ... 36.00	(a) Where D is greater than Table depth (D-Table depth) R = 4.27	Moulded Breadth (B) 68.00'
Stringer plate82"	(b) Where D is less than Table depth (if allowed) (Table depth-D) R = 36.07 - 31.86 = 4.21	Standard Round of Beam = $\frac{B \times 12}{50} = \frac{68 \times 12}{50} = 16.32$
Wood Sheathing on exposed deck	If restricted by superstructures	Ship's Round of Beam = 17.00
$T \left(\frac{L-S}{L} \right) =$		Difference .68
Depth for Freeboard (D) = 36.07		Restricted to
		Correction = $\frac{\text{Diff}^e}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.68}{4} \times .2335 = -.04$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed EQUIV ...	113.21	113.21	7.5'	-	113.21
" overhang ...					
R.Q.D. enclosed ...					
" overhang ...					
Bridge enclosed ...					
" overhang aft ...					
" overhang forward ...					
F'cle enclosed ...	34.54	34.54	7.5'	-	34.54
" overhang ...			7.5'	-	
Trunk aft ... EQUIV ...		217.86			217.86
" forward ...					
Tonnage opening aft ...					
" " forward ...					
Total ...	147.75	365.61			365.61

Standard Height of Superstructure	7.5'
" " R.Q.D.	-
Deduction for complete superstructure	42.00"
Percentage covered $\frac{S}{L} =$	30.98
" " $\frac{S_1}{L} =$	76.65
" " $\frac{E}{L} =$	
Percentage from Table, Line A. 28	71.18
(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 x .7118	= 29.90

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P. ...	57.700	1	57.70	45.75	45.75	1	45.75
1/4 L from A.P. ...	25.675	4	102.70	20.75	20.75	4	83.00
3/4 L " ...	6.350	2	12.70	5.625	5.625	2	11.25
Amidships ...	0	4	0	0	0	4	0
3/4 L from F.P. ...	12.695	2	25.39	6.89	6.89	2	13.78
1/4 L " ...	51.350	4	205.40	26.75	26.75	4	107.00
F.P. ...	115.390	1	115.39	61.625	61.625	1	61.63
Total ...			519.28				322.41

Mean actual sheer aft =
 Mean standard sheer aft =

Mean actual sheer forward =
 Mean standard sheer forward =

Length of enclosed superstructure forward of amidships =

" " aft of " =

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{196.87}{18} \left(.75 - \frac{.5951}{1549} \right) = + 6.51"$
 If limited on account of midship superstructure. If limited to maximum allowance of 1 1/2 ins. per 100ft.

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = **36.07**
 Summer freeboard = **7.52**
 Moulded draught (d) = **28.55**
 Keel allowance =
 Extreme draught =
 Deduction for Tropical freeboard and addition for =

Winter freeboard = $\frac{d}{4}$ inches =

Addition for Winter North Atlantic Freeboard (if required) =

Deduction for Fresh Water.

Displacement in salt water at summer load water line
 $\Delta =$
 Tons per inch immersion at summer load water line
 $T =$

Deduction = $\frac{\Delta}{40 T}$ inches

TABULAR FREEBOARD corrected for Fresh Water (if required)

Correction for coefficient $\frac{.757 + .68}{1.36} = 1.437 / 1.36$

Depth Correction ... **12.81**
 Deduction for superstructures ... **29.90**
 Sheer correction ... **6.51**
 Round of Beam correction ... **.04**
 Correction for Thickness of Deck amidships ...
 Other corrections, scantlings, etc. ...

Summer Freeboard = **90.18**

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

Tropical Fresh Water Line above Centre of Disc	...	Tropical Fresh Water Freeboard	...
Fresh Water Line	"	Fresh Water	"
Tropical Line	"	Tropical	"
Winter Line below	"	Winter	"
Winter North Atlantic Line	"	Winter North Atlantic	"

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.

Length of Trunk from Poop front bldg to fore front bldg = 329.21

$$\therefore \text{Equiv length of Trunk} = 329.21 \times \frac{22.5}{34} = 217.86'$$

Hatches 2' high

117.21
/ 34.54
329.21
471.96

Trade of ship

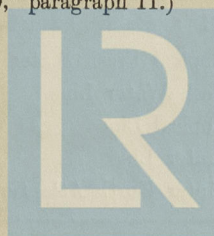
Names of sister ships

Builder's name and yard number

Owners

Fee £ : :

List of plans forwarded for reference. (See "Instructions to Surveyors, Part 4, 1950," paragraph 11.)



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