

T/O closed (W.E.)

Index. No. 34785
(For London Office only).

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name ARABIAN PRINCE	Official Number 164728	Nationality and Port of Registry British London	Gross Tonnage	Date of Build 1936	Port of Survey
Moulded Dimensions: Length 290.0' Breadth 44.0' Depth 27.16'					Date of Survey 28.3.41.
Moulded displacement at moulded draught = 85 per cent. of moulded depth					Surveyor's Signature
Coefficient of fineness for use with Tables .726 estimated					Particulars of Classification + 100 A1 with freeboard.

Depth for Freeboard (D).	Depth correction.	Round of Beam correction.
Moulded depth ... 27.16	(a) Where D is greater than Table depth (D - Table depth) R = (27.16 - 19.33) × 2231 = +17.54	Moulded Breadth (B) 44.0
Stringer plate34	(b) Where D is less than Table depth (if allowed) (Table depth - D) R = 7.86	Standard Round of Beam = $\frac{B \times 12}{50} = 10.56$
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$	If restricted by superstructures	Ship's Round of Beam = 10.50
Depth for Freeboard (D) = 27.19		Difference Excess .06
		Restricted to
		Correction = $\frac{\text{Diff}}{4} \times (1 - \frac{S_1}{L}) = \frac{.06}{4} \times .6897 = -.01$

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, open ...	90.00	67.50	8.0'	✓	67.50
" overhang aft ...					
" overhang forward ...					
Fore enclosed ...	11.50	11.50	7.5	✓	11.50
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" forward ...					
Total ...	112.50	90.00			90.00

Standard Height of Superstructure **6.40'**

" " R.Q.D. **✓**

Deduction for complete superstructure **34.67**

Percentage covered $\frac{S}{L} = 38.79$

" " $\frac{S_1}{L} = 31.03$

" " $\frac{E}{L} = 31.03$

Percentage from Table, Line A.
(corrected for absence of forecastle (if required)) **19.87**

Percentage from Table, Line B.
(corrected for absence of forecastle (if required)) **✓**

Interpolation for bridge less than 2L (if required) **✓**

Deduction = **34.67 × .1987 = -6.89"**

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	39.00	1		39.00	39.37	39.37	1		39.37
$\frac{1}{8}$ L from A.P. ...	17.35	4		69.40	17.62	17.62	4		70.48
$\frac{2}{8}$ L " ...	4.29	2		8.58	4.37	4.37	2		8.74
Amidships ...	-	4		-	-	-	4		-
$\frac{3}{8}$ L from F.P. ...	8.58	2		17.16	8.12	8.12	2		16.24
$\frac{4}{8}$ L " ...	34.71	4		138.84	34.12	34.12	4		136.48
F.P. ...	78.00	1		78.00	81.5	81.50	1		81.50
Total ...				350.98					352.81

Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{.75 - \frac{S}{2L}}{.75} \right) = \frac{1.83(.75 - .1940)}{18} = \frac{.5560}{18} = -.03$

If limited on account of midship superstructure. **Yes, no allowance**

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 = **Open bridge**

aft of " = **Open bridge**

From sheer standard **8.58 3 25.74 8.12 3 24.36**

Actual **34.71 3 104.13 34.12 3 101.36**

78.00 1 78.00 81.5 1 81.5

207.87 208.12

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 .726 + .68 = 1.406 / 1.36
Depth to Freeboard Deck = 27.19	$\Delta = 5190$	Depth Correction ... 17.54
Summer freeboard = 7.40	Tons per inch immersion at summer load water line	Deduction for superstructures ... 6.89
Moulded draught (d) = 19.79	T = 15.4	Sheer correction01
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 4.95 = 5"	Deduction = $\frac{\Delta}{40T}$ inches = 5"	Round of Beam correction01
Addition for Winter North Atlantic Freeboard (if required) = 7"		Correction for Thickness of Deck amidships ... 53.26
		Other corrections, scantlings, etc. to correspond 55.72
		Summer Freeboard = 88.75

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

Tropical Fresh Water Line above Centre of Disc	10"
Fresh Water Line	5"
Tropical Line	5"
Winter Line below	5"
Winter North Atlantic Line	7"

Tropical Fresh Water Freeboard	6' - 6 3/4"
Fresh Water	6' - 11 3/4"
Tropical	6' - 11 3/4"
Winter	7' - 9 3/4"
Winter North Atlantic	7' - 11 3/4"

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NOT MARKED

13/9/41

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.

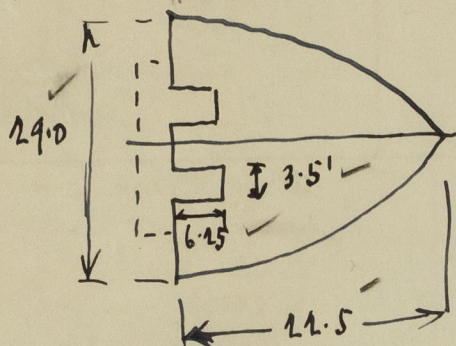
$$\begin{array}{r} .85 \\ - .599 \\ \hline .251 \end{array} \times .150 \quad \begin{array}{r} .038 \\ .688 \\ \hline .726 \end{array}$$

Equivalent bulkhead.

Forecastle.

$$\frac{1 \times 6.25 \times 3.5}{29}$$

$$\begin{array}{r} 12.5 \\ 1.51 \\ \hline 10.99 \end{array} \quad \begin{array}{l} \text{= working} \\ \text{= equiv enclosed} \end{array}$$



Trade of ship

Names of sister ships

Builder's name and yard number

Owners

Fee £



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