

LLOYD'S REGISTER OF SHIPPING

UNITED WITH THE BRITISH CORPORATION REGISTER

SURVEYS FOR FREEBOARD

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER)

Received
Index No.
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Ship's Name: SHAHJEHAN
Official Number: 180970
Nationality and Port of Registry: BRITISH PANAMA LONDON
Gross Tonnage: 5460
Date of Build: 1946
Port of Survey:
Date of Survey: 25/1/54
Surveyor's Signature:
Particulars of Classification: +100A1
Moulded Dimensions: Length 404'-0" Breadth 53'-7 1/2" Depth 31'-2 1/2"
Freeboard Length 404'-5 1/2" to 2 1/2" of RS
Moulded displacement at moulded draught = 85 per cent. of moulded depth 12296 tons
Coefficient of fineness for use with Tables .745

DEPTH FOR FREEBOARD (D).
Moulded depth 31'-2 1/2"
Stringer plate .04
Wood Sheathing on exposed deck
T (L-S)/L =
Depth for Freeboard (D) = 31'-2 1/2"
DEPTH CORRECTION.
(a) Where D is greater than Table depth (D-Table depth) R = (31'-2 1/2" - 26'-9 1/2") 3 = +12'-9 1/2"
(b) Where D is less than Table depth (if allowed) (Table depth-D) R =
If restricted by superstructures
ROUND OF BEAM CORRECTION.
Moulded Breadth (B) = 53'-7 1/2"
Standard Round of Beam = B x 12 / 50 = 12'-90
Ship's Round of Beam = 13'-50
Difference .60
Restricted to
Correction = Diff / 4 x (1 - S1/L) = .60 / 4 x .5116 = .08"

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S1)	Height	Height Correction	Effective Length (E)
Poop enclosed	40'-7 1/2"	40'-7 1/2"	7'-9"		40'-7 1/2"
" overhang					
R.Q.D. enclosed					
" overhang					
Bridge enclosed EQUIV.	116'-8 1/2"	116'-8 1/2"	7'-9"		116'-8 1/2"
" overhang aft	7'-6 1/2"	5'-7 1/2"			5'-7 1/2"
" overhang forward					
F'cle enclosed EQUIV.	30'-4 1/2"	30'-4 1/2"	7'-6"		30'-4 1/2"
" overhang	3'-8 1/2"	3'-8 1/2"			3'-8 1/2"
Trunk aft					
" forward					
Tonnage opening aft					
" " forward					
Total	199'-4 1/2"	197'-5 1/2"			197'-5 1/2"

Standard Height of Superstructure 7'-5"
" " R.Q.D.
Deduction for complete superstructure 42"
Percentage covered S/L = 49.30
" " S1/L = 48.84
Percentage from Table, Line A.
(corrected for absence of forecastle (if required))
Percentage from Table, Line B. 35.01
(corrected for absence of forecastle (if required))
Interpolation for bridge less than .2L (if required)
Deduction = 42 x .3501 = -14'-7 1/2"

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P.	50.46	1	50.46	60.00	60.00	1	60.00
1/4 L from A.P.	22.45	4	89.80	26.75	26.75	4	107.00
1/2 L	5.55	2	11.10	6.75	6.75	2	13.50
Amidships	0	4	0	0	0	4	0
3/4 L from F.P.	11.10	2	22.20	13.50	13.50	2	27.00
1/4 L	44.90	4	179.60	53.50	53.50	4	214.00
F.P.	100.91	1	100.91	120.00	120.00	1	120.00
Total			454.07				541.50

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 " =
Correction = Difference between sums of products / 18 = (75 - 2465) / 18 = -2.45"
If limited on account of midship superstructure. .5035
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.
Depth to Freeboard Deck = 31'-2 1/2"
Summer freeboard = 6'-00"
Moulded draught (d) = 25'-2 1/2"
Keel allowance =
Extreme draught =
Deduction for Tropical freeboard and addition for =
Winter freeboard = d/4 inches = 6'-3 1/2" = 6'-4"
Addition for Winter North Atlantic Freeboard (if required) =
Deduction for Fresh Water.
Displacement in salt water at summer load water line
Delta = 11755
Tons per inch immersion at summer load water line
T = 43.07
Deduction = Delta / 40 T = 6.82 = 6'-3 1/4"
TABULAR FREEBOARD corrected for Flush Deck (if required)
Correction for coefficient 745 + 68 / 1.36 = 1.425 / 1.36
Depth Correction ... 1296
Deduction for superstructures ... 1471
Sheer correction ... 248
Round of Beam correction08
Correction for Thickness of Deck amidships ...
Other corrections, scantlings, etc. ...
1296 1724 - 428
Summer Freeboard = 72'-12"

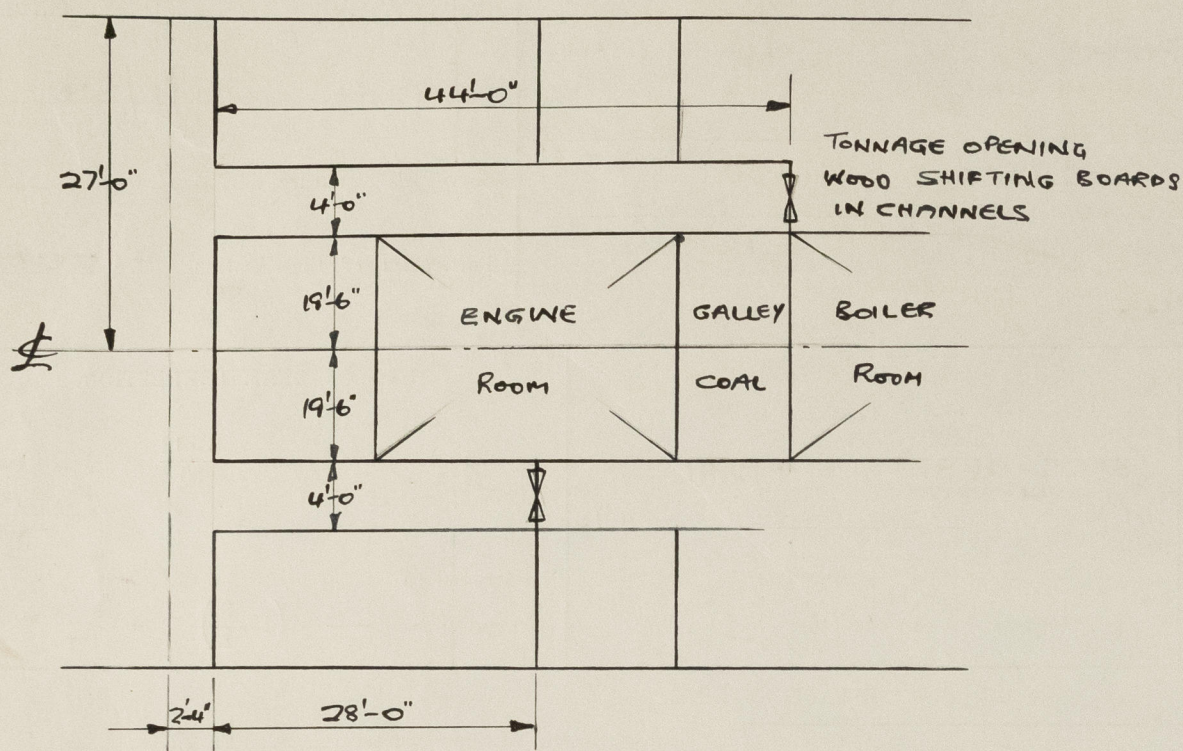
SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Steel, Deck :-

Tropical Fresh Water Line above Centre of Disc	13"	Tropical Fresh Water Freeboard	4'-0"
Fresh Water Line	6 3/4"	Fresh Water	5'-5 1/4"
Tropical Line	6 1/4"	Tropical	5'-5 3/4"
Winter Line below	6 1/4"	Winter	6'-6 1/4"
Winter North Atlantic Line		Winter North Atlantic	

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Shahjehan

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.



Bridge

Length at centre	123.75	
" " side	119.00	119.00 ✓
	$4.75 \times \frac{2}{3}$	3.17 ✓
		122.17 ✓
		5.36 ✓
	$-(28 \times 4) + (44 \times 4)$	
	53.75	
Equiv. length		116.81 ✓
Overhang	$2.33 + 5.36$	7.69 ✓

Fore

Length at side	= 34.21
$-\frac{22 \times 6.75}{39}$	= 3.81
	30.40 ✓

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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