

FOR SCANTLING IN
"C S D" CONDITION

For LONDON OFFICE ONLY

LLOYD'S REGISTER OF SHIPPING SURVEYS FOR FREEBOARD

(COMPUTATION FOR STEAMER, ~~SAILING SHIP, TANKER~~)

Received
Index No.
Govt. Copy
Owners C11

Ship's Name YOUSUFBAKSH	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build	Port of Survey LONDON
Moulded Dimensions: Length	Breadth 57'-3 1/2"	Depth 38'-00"			Date of Survey 31/3/60
Freeboard Length 427'-00"					Surveyor's Signature gmc
Moulded displacement at moulded draught = 85 per cent. of moulded depth (excluding bossing)					Particulars of Classification 100 A1 CONTINGENT
Coefficient of fineness for use with Tables 0.772	758				

DEPTH FOR FREEBOARD (D).	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth ... 38.00	(a) Where D is greater than Table depth (D-Table depth) R = 38.00 - 28.47 = +28.80	Moulded Breadth (B) 57.29
Stringer plate 0.54 ... 0.05	(b) Where D is less than Table depth (if allowed) (Table depth-D) R =	Standard Round of Beam = $\frac{B \times 12}{50} = 13.75$
Wood Sheathing on exposed deck	If restricted by superstructures	Ship's Round of Beam = 14.00
$T \left(\frac{L-S}{L} \right) = 21 \left(\frac{40}{427} \right) = 0.02$		Difference = .25
Depth for Freeboard (D) = 38.07		Restricted to
		Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.25}{4} = .06$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	
Poop enclosed						Standard Height of Superstructure
" overhang						" " R.Q.D.
R.Q.D. enclosed						Deduction for complete superstructure
" overhang						Percentage covered $\frac{S}{L}$
Bridge enclosed						" " $\frac{S_1}{L}$
" overhang aft						" " $\frac{E}{L}$
" overhang forward						Percentage from Table, Line A.
F'cle enclosed						(corrected for absence of forecastle (if required))
" overhang						Percentage from Table, Line B.
Trunk aft						(corrected for absence of forecastle (if required))
" forward						Interpolation for bridge less than .2L (if required)
Tonnage opening aft						Deduction =
" forward						
Total						

FLUSH DECK

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.	52.70	1	52.70	75.00	75.00	1	75.00		
1/4 L from A.P.	23.45	4	93.80	33.00	33.00	4	132.00		
3/4 L	5.80	2	11.60	8.50	8.50	2	17.00		
Amidships	0	4	0	0	0	4	0		
3/4 L from F.P.	11.59	2	23.18	15.00	15.00	2	30.00		
1/4 L	46.90	4	187.60	59.00	59.00	4	236.00		
F.P.	105.40	1	105.40	135.00	135.00	1	135.00		
Total			474.28				625.00		

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 = $\frac{\text{Difference between sums of products}}{18} \left(\frac{.75 - S}{2L} \right) = \frac{150.72}{18} \left(\frac{.75}{18} \right) = -6.28$

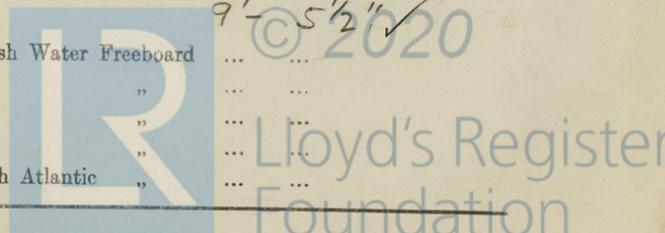
If limited on account of midship superstructure. *NO FLUSH DECK*

If limited to maximum allowance of 1 1/4 ins. per 100ft. *NO*

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
Depth to Freeboard Deck = 38.05	$\Delta =$	$\frac{79.97 + 6.41}{75840.68} = \frac{1.438}{736}$
Summer freeboard = 9.46	Tons per inch immersion at summer load water line	
Moulded draught (d) = 28.59	T =	
Keel allowance =	Deduction = $\frac{\Delta}{40 T}$ inches	
Extreme draught =		
Deduction for Tropical freeboard and addition for =		
Winter freeboard = $\frac{d}{4}$ inches =		
Addition for Winter North Atlantic Freeboard (if required) =		
		28.80
		-
		- 6.28
		- 0.06
		- 0.24
		-
		28.80
		6.58
		+22.22
		Summer Freeboard = 113.54

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.

CHANGE OF CB

$$= 0.748 + \left[\frac{.85 - .85 \times \frac{28.2}{27.0}}{0.1} \right] \times 0.012$$

$$= 0.748 + \frac{.85 \times 9 \times .12}{38} = 0.748 + 0.024 = 0.772$$

$$= .748 + \left[\frac{.85 - .85 \times \frac{25.69}{28.5}}{.10} \right] \times .012$$

$$= .758 \quad .01 \checkmark$$

Trade of ship _____

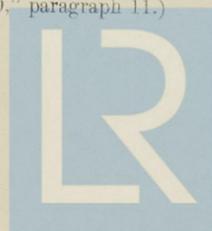
Names of sister ships _____

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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Foundation