Rpt. C.11 (Comp.)

LLOYD'S REGISTER OF SHIPPING
UNITED WITH THE BRITISH CORPORATION REGISTER

SURVEYS FOR FREEBOARD
(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER)

Ship's Name	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build
MORO ex SHUN FUNG		Panama		

Moulded Dimensions: Length 180 Breadth 29 Depth 10-10¾

Freeboard Length _____

Moulded displacement at moulded draught = 85 per cent. of moulded depth _____ tons (excluding bossing)

Coefficient of fineness for use with Tables ·789

Port of Survey _____

Date of Survey 23·1·58.

Surveyor's Signature _____

Particulars of Classification 100A1 coasting Haiphong to Swatow

DEPTH FOR FREEBOARD (D).

Moulded depth ... ... 10·90

Stringer plate ... ... ·04

Wood Sheathing on exposed deck

$T\left(\dfrac{L-S}{L}\right) =$ —

Depth for Freeboard (D) = 10·94

DEPTH CORRECTION.

(a) Where D is greater than Table depth (D—Table depth) R =

(b) Where D is less than Table depth (if allowed) (Table depth—D) R =
$$(12·00 - 10·94)·386$$
$$\frac{1·06}{} = -1·47$$

If restricted by superstructures

ROUND OF BEAM CORRECTION.

Moulded Breadth (B) 29·00

Standard Round of Beam $\dfrac{B \times 12}{50} =$ 6·96

Ship's Round of Beam = 7·00

Difference ·04

Restricted to

Correction = $\dfrac{\text{Diff}^e}{4} \times \left(1 - \dfrac{S_1}{L}\right) = \dfrac{·04}{4} \times ·1447 = ·01$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...	5·00	5·00	7·5	—	5·00
„ overhang	18·00	9·00			9·00
R.Q.D. enclosed ...					
„ overhang ...					
Bridge enclosed ...					
„ overhang aft ...					
„ overhang forward ...					
F'cle enclosed ...	23·00	23·00	7·5	—	23·00
„ overhang ...	121·17	90·88			90·88
Trunk aft ...					
„ forward ...					
Tonnage opening aft ...	12·83	26·06			26·06
„ „ forward ...					
Total ...	180·00	153·94			153·94

9·00
30·29
12·83
52·12

Standard Height of Superstructure 6·0

„ „ R.Q.D. _____

Deduction for complete superstructure 24

Percentage covered $\dfrac{S}{L} =$ 100

„ „ $\dfrac{S_1}{L} =$ 85·53

„ „ $\dfrac{E}{L} =$ "

Percentage from Table, Line A. and B. 82·16 (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 = 24 × ·8216 = 19·72

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P. ...	28·00	1	28·00	19·0	15 33	1	28·00
¼L from A.P. ...	12·46	4	49·84	4·0	0 14·68	4	49·84
⅔L „	3·08	2	6·16	0	+4 3·13	2	6·16
Amidships ...	0	4	0	4·0	0 0	4	0
⅔L from F.P. ...	6·16	2	12·32	8·0	4 6·05	2	12·10
¼L „	24·92	4	99·68	18·0	14 24·48	4	97·92
F.P. ...	56·00	1	56·00	41·0	37 55·0	1	55·09
Total ...			252·00				249·02

Mean actual sheer aft = > 1
Mean standard sheer aft

7·5
6·0
18·

Mean actual sheer forward = < 1
Mean standard sheer forward

Length of enclosed superstructure forward of amidships =
$\dfrac{}{L}$

„ „ aft of „ =

Correction = $\dfrac{\text{Difference between sums of products}}{18}\left(·75 - \dfrac{S}{2L}\right) = \dfrac{2·98}{72} = -·04$

If limited on account of midship superstructure. If limited to maximum allowance of 1½ ins. per 100ft.

Deduction for Tropical Freeboard.
Addition for Winter and Winter North Atlantic Freeboard.

Ft.
Depth to Freeboard Deck = 11·17
Summer freeboard = ·9
Moulded draught (d) = 10·27
Keel allowance =
Extreme draught =
Deduction for Tropical freeboard and addition for =
Winter freeboard = $\dfrac{d}{4}$ 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 = $\dfrac{\Delta}{40\,T}$ inches
=

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient $\dfrac{·789 + ·68}{1·36} = \dfrac{1·469}{}$ 1·36

19·80
1·36 / 21·39

	+	−
Depth Correction ...		1·47
Deduction for superstructures ...	−	19·72
Sheer correction ...	−	·04
Round of Beam correction ...		·01
Correction for Thickness of Deck amidships ...	2·75	
Other corrections, scantlings, etc. ...	7·85	
	10·60	21·24

Corrected with Summer moulded draught of

19·80 21·24 −10·64
Summer Freeboard = 10·75

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

0' 10¾"

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	...	
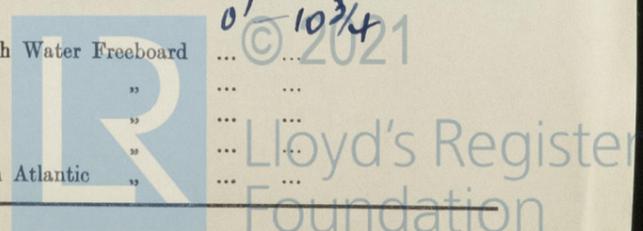
A new form should be prepared if any alterations that affect the freeboard have been made. If no such alterations have been made, the Surveyor should endorse the form on this side with his signature and the date.

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.)