Lloyd's Register of Shipping.
SURVEYS FOR FREEBOARD.
(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

2 OCT 1950

Ship's Name	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build
SHINWA MARU.	✓	JAPAN / TOKYO	1948	1941.

Port of Survey OSAKA.
Date of Survey June 8th 30th 1950
Surveyor's Signature G. Young.
Particulars of Classification 100 A.1.

Moulded Dimensions: Length 82·442 / 82·3ft. To ℄ of Rudder Stock. Breadth 12·2m ✓ Depth 6·20m ✓

Moulded displacement at moulded draught=85 per cent. of moulded depth 4025. K. tons

Coefficient of fineness for use with Tables ·74

Depth for Freeboard (D).

Moulded depth ... ... 6·200 ✓
Stringer plate ... ... ·015 ✓
Sheathing on exposed deck
$T\left(\dfrac{L-S}{L}\right)=$

Depth for Freeboard (D)= 6·215 ✓

Depth correction.

(a) Where D is greater than Table depth
(D—Table depth) R =
$\dfrac{8·33(6·215-5·496)}{·719}$

(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) 12·200
Standard Round of Beam =$\dfrac{B}{50}$= 244 ✓
Ship's Round of Beam = 250 ✓
Difference + 6
Restricted to
Correction=$\dfrac{\text{Diff}^e}{4}\times\left(1-\dfrac{S_1}{L}\right)$ =$\dfrac{6}{4}\times ·5698.$ = -1 m/m

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S₁)	Height	Height Correction	Effective Length (E)
Poop enclosed	26·408 / 550	26·550	2·130		26·550
„ overhang	'				
R.Q.D. enclosed	'				
„ overhang	'				
Bridge enclosed	'				
„ overhang aft	'				
„ overhang forward ...	'				
F'cle enclosed	8·922 ✓	8·922	1·980		8·922
„ overhang	'				
Trunk aft	'				
„ forward	'				
Tonnage opening aft... ...	'				
„ „ forward ...	✓				
Total	35·472	35·472			35·472

Standard Height of Superstructure 1·893
„ „ R.Q.D. ✓
Deduction for complete superstructure 840 m/ms.
Percentage covered $\dfrac{S}{L}$ }
„ „ $\dfrac{S_1}{L}$ = } 43·02.
„ „ $\dfrac{E}{L}$ }
Percentage from Table, Line A. 26·07
(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= 840 × ·2607 = 219 m/ms.

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P.	941	1	941	950	950	1	950
⅙L from A.P. ...	418	4	1672	420	420	4	1680
⅔L „ ...	105	2	210	150	150	2	300
Amidships ...	—	4	—	0	—	4	—
⅔L from F.P. ...	209	2	418	240	240	2	480
⅙L „ ...	836	4	3344	860	860	4	3440
F.P.	1882	1	1882	1900	1900	1	1900
Total ...			8467				8750

$\dfrac{\text{Mean actual sheer aft}}{\text{Mean standard sheer aft}}=$ } Excess.
$\dfrac{\text{Mean actual sheer forward}}{\text{Mean standard sheer forward}}=$
$\dfrac{\text{Length of enclosed superstructure}}{L}$ forward of amidships = } Nil.
„ „ aft of „ =

Correction=$\dfrac{\text{Difference between sums of products}}{18}\left(·75-\dfrac{S}{2L}\right)$ = $\dfrac{283}{18}\dfrac{(·75-·2151)}{·5349}$ = -8 m/ms.
If limited on account of midship superstructure. Yes Nil. If limited to maximum allowance of 1½ ins. per 100 ft. ✓

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

Ft.
Depth to Freeboard Deck =
Summer freeboard =
Moulded draught (d) =
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
△= 4125. KT.
Tons per inch immersion at summer load water line
T= 8·6 KT.
Deduction =$\dfrac{△}{40T}$ inches
=

TABULAR FREEBOARD (corrected for Flush Deck (if required)) 931

Correction for coefficient

|	+	—
Depth Correction		
Deduction for superstructures ...		
Sheer correction		
Round of Beam correction ...		
Correction for Thickness of Deck amidships ...		
Other corrections, scantlings, etc. ...		
Summer Freeboard =		

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

| | | | | Tropical Fresh Water Freeboard ... ... |
Tropical Fresh Water Line above Centre of Disc			
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.

FORECASTLE FRONT.
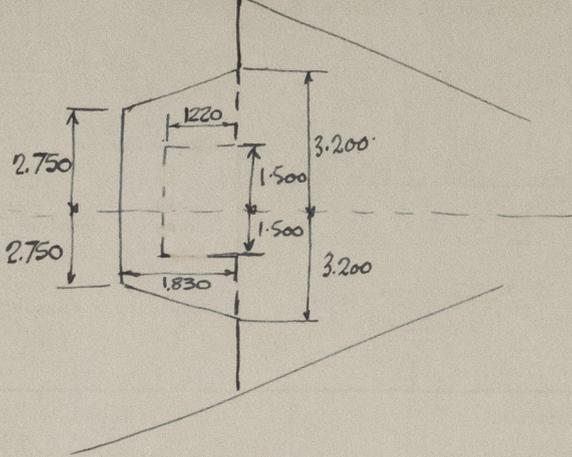
POOP FRONT.
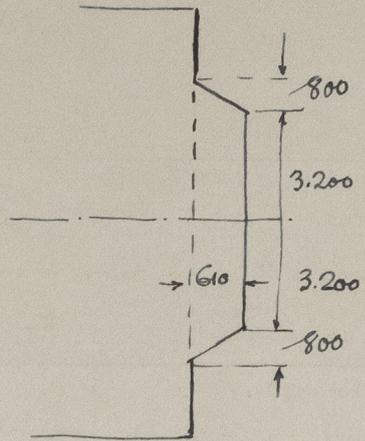
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