Rpt. C111 (Comp.).

Blue Peter 38367

Amended

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

Ship's Name	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build
"HAIYU" ex "OTTAWA PANDORA"	-	Chinese Shanghai	1300 approx.	May, 1946 Alterations August, 1946

Port of Survey Victoria, B. C.

Date of Survey During alterations in August, 1946

Surveyor's Signature *J H Gill.*

Moulded Dimensions: Length 210.33 ft. Breadth 36.5 ft. Depth 21.66[7] ft.

Moulded displacement at moulded draught = 85 per cent. of moulded depth 2970 tons
(18'-5") (T.P.I. - 15.9)

Coefficient of fineness for use with Tables .735

Particulars of Classification ✠100 A1 with freeboard

Depth for Freeboard (D).

Moulded depth ... ... 21.66[T.]

Stringer plate 14.lbs...(.34") 03

2½" Sheathing on exposed deck 182.83

$T\left(\dfrac{L-S}{L}\right) = \dfrac{2.5}{12}\left(\dfrac{210.33-27.5}{210.33}\right)$ .18

Depth for Freeboard (D) = 21.88

Depth correction.

(a) Where D is greater than Table depth
(D—Table depth) R=
$\dfrac{(21.88-14.02)\ 1.618}{7.86} = +12.72"$

(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) 36'-6"

Standard Round of Beam $= \dfrac{B \times 12}{50} =$ 8.76

Ship's Round of Beam = 12"

Difference + 3.24

Restricted to

Correction $= \dfrac{\text{Diff}^e}{4} \times \left(1-\dfrac{S_1}{L}\right) = \dfrac{3.24 \times .9257}{4} = -.75"$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S₁)	Height	Height Correction	Effective Length (E)
Poop enclosed					
" overhang ...					
R.Q.D. enclosed ...					
" overhang ...					
Bridge enclosed ...					
" overhang aft ...					
" overhang forward	27.5				
F'cle enclosed	23.5	15.63	7.0'	✓	15.63
" overhang	4.0'				
Trunk aft					
" forward					
Tonnage opening aft ...					
" " forward					
Total	27.5	15.63			15.63

Standard Height of Superstructure 6.00

" " R.Q.D. ✓

Deduction for complete superstructure 27.03

Percentage covered $\dfrac{S}{L} =$ 13.07

" " $\dfrac{S_1}{L} =$ } 7.43

" " $\dfrac{E}{L} =$ }

Percentage form Table, Line A. ~~(corrected for absence of forecastle (if required))~~ 3.71

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

Interpolation for bridge less than .2L (if required)

Deduction = 27.03 × .0371 = -1.00

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate Ins.	Effective Ordinate	S M	Product
A.P.	31.03	1	31.03	27.0	27.0	1	27.0
⅙L from A.P. ...	13.81	4	55.24	8.5	8.5	4	34.0
⅔L " ...	3.415	2	6.83	-	-	2	
Amidships ...	-	4	-	-	-	4	
⅔L from F.P. ...	6.83	2	13.86	-	-	2	
⅙L " ...	27.62	4	110.48	17.5	17.5	4	70.0
F.P.	62.07	1	62.07	45.0	45.0	1	45.0
Total ...			279.31				176.0

$\dfrac{\text{Mean actual sheer aft}}{\text{Mean standard sheer aft}} =$ } Deficient

$\dfrac{\text{Mean actual sheer forward}}{\text{Mean standard sheer forward}} =$

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

Sheer forward :- std   actual   std   actual

0	0	1	20.49 -
6.83	0	3	82.86 52.5
27.62	17.5	1	62.07 45.0
62.07	45.0		165.42 97.5

97.5 / 165.42 = 58.94%

Correction $= \dfrac{\text{Difference between sums of products}}{18}\left(.75-\dfrac{S}{2L}\right) = \dfrac{103.31}{18}\dfrac{(.75-.0653)}{.6847} = +3.93"$

If limited on account of midship superstructure. ✓

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 =	21.91
Summer freeboard =	5.46
Moulded draught (d) =	16.45

Deduction for Tropical freeboard and addition for Winter freeboard $= \dfrac{d}{4}$ inches = 4.11 = 4"

Addition for Winter North Atlantic Freeboard (~~if required~~) = 6"

Deduction for Fresh Water.

Displacement in salt water at summer load water line
Δ = 2609

Tons per inch immersion at summer load water line
T = 15.5

Deduction $= \dfrac{\Delta}{40T}$ inches = 4.21 = 4¼"

TABULAR FREEBOARD corrected for Flush Deck (if required)
partial 24.86 + .81   25.67

Correction for coefficient. $\dfrac{.735+.68}{1.36} = \dfrac{1.415}{1.36}$ 26.71

	+	−
Depth Correction	12.72	-
Deduction for superstructures ...	-	1.00
Sheer correction	3.93	-
Round of Beam correction ...		.75
Correction for Thickness of Deck amidships ...	.36	
Other corrections, scantlings, etc. *corresponding*	23.53	-
to a summer moulded draught		
of 16-5¼" (16'-5⅜" actual)	40.54	1.75

38.79

Summer Freeboard = 65.50

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, ~~Steel~~, Deck:— 5'-5½"

Tropical Fresh Water Line above Centre of Disc ...	8¼"	Tropical Fresh Water Freeboard ...	4'-9¼"
Fresh Water Line " "	4¼"	Fresh Water "	5'-1¼"
Tropical Line " "	4"	Tropical "	5'-1½"
Winter Line below "	4"	Winter "	5'-9½"
Winter North Atlantic Line " ...	6"	Winter North Atlantic "	5'-11½"
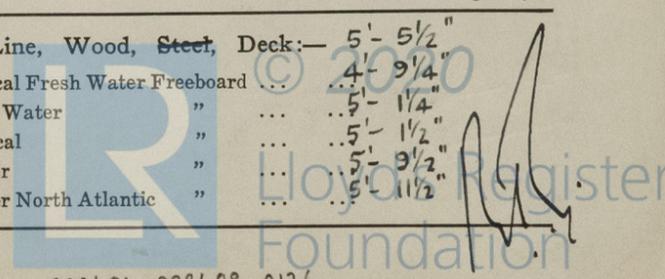
1M-6-41 PRINTED IN U.S.A. 008401 - 008408 - 0126

This ship ("B" Type Coaster - open shelter deck type) laid up in Victoria, B.C. after completion in May, 1946 has now been sold by War Assets Corporation to the Chinese Government Supply Agency.

The new Owners desired the ship made a closed shelter deck type and structural alterations to enable her to obtain 30" more draught have been carried out as follows:-

Nos.1 & 2 Holds - a 5"x3/8" flat bar has been welded on face of bulb angle frames on every 4th frame as per approved plan (15 frames P. & S.).

Nos.I & 2 'tween decks - new 6"x3½"x.28" B.A. frames have been fitted between 2nd & upper decks where frames previously extended to upper deck alternately (frs.32 to 82 - 22 frs. P.&S.).

Ship's side doors permanently closed, Port and Starboard.

Bulkhead 69 - Tonnage openings permanently closed by plates welded all round and stiffeners fitted in way. 1 - 5" dia. screw down non-return valve, P. & S. in original tonnage well, now removed & opening in shell closed W.T. by an efficient welded steel plate. Upper deck - tonnage opening hatch removed also wood deck in way. Deck opening plated over with beams under, bracketted to hatch side girder.

Fore end of boiler casing extended to form a wash place.

Steel doors in halves fitted at aft and fore ends of after side house passage, Port and Starboard and at after end of midship deckhouse passageway, Port side, - Doors operated from each side.

Alterations have also been affected to accommodation to suit new Owners requirements.

Intermediate Displacements and Tons per Inch

15'-6" W. L. =	2417	tons Displ.	T. P. I. =	15.3
16'-6" W. L. =	2609	"	"	" =	15.5
17'-6" W. L. =	2799	"	"	" =	15.7

Forecastle:-

$$L/10 \qquad 21.03 \times .5894 = 12.39$$

$$27.5-21.03 \quad \underline{6.47} \times .50 \quad = \underline{3.24}$$

$$\underline{27.50} \qquad\qquad \underline{15.63}$$

Trade of ship............International...

Names of sister ships.........."B" Type Coaster....................................

Builder's name and yard number......Victoria Machinery Depot Co. Ltd., Yard No. 42 (Conversion by Victoria Machinery Depot Co. Ltd.)

Owners ....Chinese Government Supply Agency.................................

Fee $40.00..