

Modification on account

of strengthening for

9-1/4" more draught.

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name "SUN JEWEL"	Official Number 176025	Nationality and Port of Registry Hong Kong PORT ALFRED Canadian	Gross Tonnage 7150	Date of Build 1945	Port of Survey of Survey MONTREAL, P.Q.
Moulded Dimensions: Length _____ Breadth _____ Depth _____					Date of Survey October, 1950
Moulded displacement at moulded draught = 85 per cent. of moulded depth _____ tons					Surveyor's Signature <i>Hubert</i>
Coefficient of fineness for use with Tables _____					Particulars of Classification * 100 A1 with freeboard

DEPTH FOR FREEBOARD (D).

Moulded depth

Stringer plate

Sheathing on exposed deck

$$T \left(\frac{L-S}{L} \right) =$$

Depth for Freeboard (D) =

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 =

If restricted by superstructures

ROUND OF BEAM CORRECTION.

Moulded Breadth (B)

$$\text{Standard Round of Beam} = \frac{B \times 12}{50} =$$

Ship's Round of Beam =

Difference

Restricted to

$$\text{Correction} = \frac{\text{Diff}^c}{4} \times \left(1 - \frac{S_1}{L} \right) =$$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height Correction	Effective Length (E)
Poop enclosed				
„ overhang				
R.Q.D. enclosed				
„ overhang				
Bridge enclosed				
„ overhang aft				
„ overhang forward				
F'cle enclosed				
„ overhang				
Trunk aft				
„ forward				
Tonnage opening aft				
„ „ forward				
Total				

Standard Height of Superstructure

„ „ R.Q.D.

Deduction for complete superstructure

$$\text{Percentage covered} \frac{S}{L} =$$

$$\frac{S_1}{L} =$$

$$\frac{E}{L} =$$

Percentage from Table, Line A.

(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 =

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P.		1				1	
1/8 L from A.P.		4				4	
3/8 L „		2				2	
Amidships		4				4	
3/8 L from F.P.		2				2	
1/8 L „		4				4	
F.P.		1				1	
Total							

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 „ =

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

If limited on account of midship superstructure.

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 = 37.39

Summer freeboard = 9.79

Moulded draught (d) = 27.60

Deduction for Tropical freeboard and addition for

$$\text{Winter freeboard} = \frac{d}{4} \text{ inches} = \frac{27.6}{4} = 6.9$$

Addition for Winter North Atlantic Freeboard (if required) = Not required.

Deduction for Fresh Water.

Displacement in salt water at summer load water line

$$\Delta = 14207 \text{ tons}$$

Tons per inch immersion at summer load water line

$$T = 48.4$$

Deduction = $\frac{\Delta}{40 T}$ inches

$$= \frac{14207}{40 \times 48.4} = 7.33$$

$$= 7 \frac{1}{4}''$$

TABULAR FREEBOARD corrected for Flush Deck (if required)

$$\text{Correction for coefficient} \frac{.771 + .68}{1.36} = \frac{1.451}{1.36}$$

Depth Correction

Deduction for superstructures

Sheer correction

Round of Beam correction

Correction for Thickness of Deck amidships

Other corrections, scantlings, etc. to

correspond with summer moulded

draught of 27.6 feet

83.21

88.78

28.71

-

-

.45

.09

-

.53

29.24

.54

+ 28.70

Summer Freeboard = 117.48

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

Tropical Fresh Water Line above Centre of Disc

Fresh Water Line „ „

Tropical Line „ „

Winter Line below „ „

Winter North Atlantic Line „ „

Tropical Fresh Water Freeboard

Fresh Water „ „

Tropical „ „

Winter „ „

Winter North Atlantic „ „