TIMBER DECK CARGO FREEBOARDS.

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
"BLOOMFIELD PARK." SUNDALE				

Port of Survey ... *St John N.B.*

Date of Survey ... *During Construction.*

Surveyor's Signature ... *J. TODD.*

Particulars of Classification ... *100A1 (Contemplated)*

Moulded Dimensions : Length 310.44 Breadth 46.33 Depth 25.16

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

Coefficient of fineness for use with Tables ....

Depth for Freeboard (D).	Depth correction.	Round of Beam correction.
Moulded depth	(a) Where D is greater than Table depth (D − Table depth) R = +10.72	Moulded Breadth (B)
Stringer plate		Standard Round of Beam = $\frac{B \times 12}{50}$ =
Sheathing on exposed deck $T\left(\frac{L-S}{L}\right)$ =	(b) Where D is less than Table depth (if allowed) (Table depth − D) R =	Ship's Round of Beam =
		Difference
		Restricted to
Depth for Freeboard (D) =	If restricted by superstructures	Correction = $\frac{\text{Diff}^{\text{ce}}}{4} \times \left(1 - \frac{S_1}{L}\right)$ = +.02

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S₁)	Height	Height Correction	Effective Length (E)
Poop enclosed	31.21		7.75		
„ overhang ...	2.00				
R.Q.D. enclosed ...	-				
„ overhang ...	-				
Bridge enclosed	76.00		9.00		
„ overhang aft ...	4.00		„		
„ overhang forward	2.00		„		
F'cle enclosed	31.23		7.0		
„ overhang					
Trunk aft					
„ forward					
Tonnage opening aft ...					
„ „ forward					
Total	146.44				

Standard Height of Superstructure 6.604

„ „ R.Q.D. .... 36.03.

Deduction for complete superstructure ....

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

„ „ $\frac{S_1}{L}$ =

„ „ $\frac{E}{L}$ = 46.20

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

Percentage from Table, Line B. *Timber* 66.87. (corrected for absence of forecastle (if required))

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

Deduction = $36.03 \times .6687 = -24.09$.

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P.		1				1	
¼L from A.P. ...		4				4	
⅜L „ ...		2				2	
Amidships ...		4				4	
⅜L from F.P. ...		2				2	
¼L „ ...		4				4	
F.P.		1				1	
Total ...							

$\frac{\text{Mean actual sheer aft}}{\text{Mean standard sheer aft}}$ =

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

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

„ „ „ aft of „ =

Correction = $\frac{\text{Difference between sums of products}}{18}\left(\cdot75 - \frac{S}{2L}\right)$ = +6.26

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.	Deduction for Fresh Water.	TABULAR FREEBOARD corrected for Flush Deck (if required)		46.01
		Correction for coefficient		48.75.

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

Ft.
Depth to Freeboard Deck = 25.19.

Summer freeboard = 3.48

Moulded draught (d) = 21.71.

Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 5.43 = 5½"

Addition for Winter North Atlantic Freeboard (if required) = $\frac{d}{3}$ = 7.24 = 7¼"

Deduction for Fresh Water.

Displacement in salt water at summer load water line

Δ = 6903

Tons per inch immersion at summer load water line

T = 29.18

Deduction = $\frac{\Delta}{40 T}$ inches = 5.91 = 6¾"

	+	−
Depth Correction	10.72	−
Deduction for superstructures	−	24.09
Sheer correction	6.26	−
Round of Beam correction	.02	−
Correction for Thickness of Deck amidships ...	−	−
Other corrections, scantlings, etc.	−	−
	17.00	24.09 = −7.09

Summer Freeboard = 41.66

82.B 2-8-44

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

			3'-5¾"
TIMBER Tropical Fresh Water Line above Centre of Disc ...		Tropical Fresh Water Freeboard	2'-6¼" 3'-6½"
„ Fresh Water Line „ „		Fresh Water	2'-4¾" 3'-0¾"
„ Tropical Line „ „ ...	17¼"	Tropical	3'-0¼"
„ Winter Line ~~below~~ ABOVE „	5"	Winter	4'-1¼"
„ Winter North Atlantic Line BELOW „	7¼"	Winter North Atlantic	5'-1¼"

SUMMER LINE ABOVE 12¼"

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