Rpt. C.11.

17 FEB '34

Index. No. A246
(For London Office only.)

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, ~~Sailing Ship, Tanker~~

having Part Awning Deck

(Type of Superstructures.)

Ship's Name	Nationality and Port of Registry	Official Number	Gross Tonnage	Date of Build
Delia	British Halifax N.S.	148292	1267	1907-8

Moulded Dimensions: Length 225' Breadth 34' Depth 16'6½"

Moulded displacement at moulded draught = 85 per cent. of moulded depth 2342 tons

Coefficient of fineness for use with Tables ·762

Port of Survey Halifax, N.S.

Date of Survey Jany 21st & 27th 1934

Name of Surveyor [illegible]

Particulars of Classification ✠100A1 Pt Awning deck with forecastle

Depth for Freeboard (D)

Moulded depth ... ... Awning dk 16·54

Stringer plate ... ... Shelter dk ~~4·20~~ ·04

Sheathing on exposed deck $T\left(\frac{L-S}{L}\right)$ = ✓

Depth for Freeboard (D) = 16·58

Depth correction

(a) Where D is greater than Table depth (D—Table depth) R = (16·58 − 15·00) 1·731
1·58
= + 2·73"

(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) 34·00

Standard Round of Beam = $\frac{B \times 12}{50}$ = 8·16"

Ship's Round of Beam = 8·50"

Difference ·34" excess

Restricted to

Correction = $\frac{Diff^{ce}}{4} \times \left(1-\frac{S_1}{L}\right)$ = $\frac{·34}{4} \times (1-1)$ = Nil.

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S_1)	Height	Height Correction	Effective Length (E)
Poop enclosed					
„ overhang					
R.Q.D. enclosed ...	80·50	80·50	3'-9"	3·75 / 3·833	78·75
„ overhang ...					
Bridge enclosed	~~48·4~~ 97·75	97·75	(3'2") 7'-0"		97·75
„ overhang aft ...					
„ overhang forward					
F'cle enclosed	~~28'~~ 27·50	27·50	(3'6") 7'-0"		27·50
„ overhang					
~~Trunk~~ Raised Deck forward	19·25	19·25	3'-9"	~~3·75 / 3·833~~ 6·00	12·03 ~~18·83~~
Tonnage opening aft ...					
„ „ forward					
Total	225·00	225·00			216·03 ~~222·83~~

Standard Height of Superstructure 6·00'

„ „ R.Q.D. 3·833

Deduction for complete superstructure 28·50"

Percentage covered $\frac{S}{L}$ = 100%

„ „ $\frac{S_1}{L}$ = 100%

„ „ $\frac{E}{L}$ = ~~99·04~~ 96·03%

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

Percentage from Table, Line B. ~~(corrected for absence of forecastle (if required))~~ ~~98·82~~ 96·12%

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

Deduction = 28·50 × ~~·9882~~ ·9612 = − ~~28·16~~ 27·11"

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate		S M	Product
A.P.	32·50	1	32·50	34"	36·00	36·00	1	36·00
$\frac{1}{6}$L from A.P. ...	14·46	4	57·84	15"	15·80	15·80	4	63·20
$\frac{2}{6}$L „ ...	3·57	2	7·14	2"	3·95	3·95	2	7·90
Amidships ...	✓	4	✓	–	✓	✓	4	✓
$\frac{2}{6}$L from F.P. ...	7·15	2	14·30	10"	8·49	8·49	2	16·98
$\frac{1}{6}$L „ ...	28·72	4	115·68	35"	33·97	33·97	4	135·88
F.P.	65·00	1	65·00	75"	78·50	78·50	1	78·50
Total ...			292·46					338·46

Mean actual sheer aft / Mean standard sheer aft = Excess

Mean actual sheer forward / Mean standard sheer forward = Excess

Length of enclosed superstructure / L forward of amidships =
„ „ aft of „ = } C.S.S

Correction = $\frac{\text{Difference between sums of products}}{18}\left(·75-\frac{S}{2L}\right)$ = $\frac{46}{18}$(·75 − ·50) = −·64"

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 =

Summer freeboard =

Moulded draught (d) =

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

Addition for Winter North Atlantic Freeboard (if required) =

Deduction for Fresh Water.

Displacement in salt water at summer load water line

Δ =

Tons per inch immersion at summer load water line

T =

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

TABULAR FREEBOARD ~~corrected for Flush Deck (if required)~~ 27·55

Correction for coefficient $\frac{·762 + ·68}{1·36} = \frac{1442}{1360}$ 29·21

	+	−
Depth Correction ...	2·73	–
Deduction for superstructures ...	–	27·11 ~~28·16~~
Sheer correction ...	–	·64
Round of Beam correction ...	–	–
Correction for Thickness of Deck amidships ...	–	–
Other corrections, ~~scantlings, etc.~~ Ht of tween decks ...	84·00	27·75
	86·73	~~28·80~~

\+ ~~57·93~~ 58·98

Summer Freeboard = ~~87·11~~ 88·19

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, ~~Wood~~, Steel, Part Awning Deck :— 7'- ~~3¼~~ 4¼"

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 „ ... ...

Existing freeboards reassigned.

Rm.2,31

Made in England.

WS2S-0038½

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS

		No 1	No 2	No 3	No 4	Coal hatch
Description of Hatchway		No 1	No 2	No 3	No 4	Coal hatch
Dimensions of Hatchway		15'6" x 14'3"	21' x 16'	19' x 16'	19' x 16'	11'6" x 3'4"
COAMINGS	Height above Deck	30"	32"	32"	As No 3	60"
	Thickness: Sides	.38	7/16"	7/16		5/16
	Thickness: Ends	.38	7/16	3/8		5/16
	Stiffeners	7 x 3½ channel	7 x 3½ channel	7 x 3½ channel		
	Brackets, Stays	✓	✓	✓		✓
HATCH BEAMS	Number	1	2	1	As No 3	✓
	Spacing	7'9"	7'	9'6"		
	Scantling and Sketch	9" bulb bar with 3½ x 3 x 3/8 double angles	35" x 7/16" plate with 3½ x 3 x 3/8" angles	3/8 x 34 plate with 3½ x 3 x 3/8 angles		
	Bearing Surface	~~2~~ 3" ×	6	6		
FORE AND AFTERS	Number	3	3	3	As No 3	✓
	Spacing	42"	48"	48"		
	Unsupported Lengths	7'9"	7'	9'6"		
	Scantling* and Sketch	2 bulb beams 7" x 5" and 1-6" x 6" wood with 6 x 3 T bar attached	2 bulb bars 7 x 5 and 1-6 x 6 wood with 6 x 3 T bar attached as No 1	2 bulb bars 7 x 5 and 1-6 x 6 wood with 6 x 3 T bar attached as No 1	Rule 7½" x 7	
	Bearing Surface	~~2~~ 3" ×	~~2~~ 3" ×	~~2~~ 3" ×		
HATCH COVERS	Material	Wood	Wood	Wood	Wood	Wood
	Thickness	2½	2½	2½	2½	2½
	How fitted	Thwartships	Thwartships	Thwartships	Thwartships	F & A
	Bearing Surface	2"	2"	2"	2"	2"
Spacing of Cleats		24"	24"	24"	24"	24"
Number of Tarpaulins		3	3"	3"	3"	3

*Are wood fore and afters steel shod at all bearing surfaces? Yes

Are battens and wedges efficient and in good condition? Yes

Are tarpaulins in good condition and in accordance with rule requirements? Yes

Are lashings provided in accordance with rule requirements? Yes

Particulars of fiddley, funnel and ventilator coamings:— 2 ventilators, coamings 12", dia 20" fitted with canvas covers
2 " " 28", " 12" "
Funnel, coaming 12", " 72" "
Fidley " 3½ x 3½ x 3/8, plating 5/16", height 54" with hinged covers & securities

Particulars of Flush Bunker Scuttles:— ✓

Particulars of Companionways:— On forecastle head, 4'9" x 3', coaming 3 x 3 x 5/16, plating ¼, opening 42" x 31", sill 11½"
fitted with wood hell doors at aft side, with ordinary lock.

Particulars of Ventilators in exposed positions on freeboard and superstructure decks:—
2 - Coamings 18", dia 9" fitted with canvas covers
6 - " 48" " 13" " "
(adequately supported) 2 - " 80" " 13" " "
3 fidley gratings, fitted with steel hinged plates and bolts.
Specially supported

Particulars of Air Pipes in exposed positions on freeboard, raised quarter, or superstructure decks:—
2 - 27" high with goosenecks and canvas covers
1 - 18" " "
1 - 19" " "

Particulars of Gangway Cargo and Coaling Ports:— ✓

Particulars of Scuppers and Sanitary Discharge Pipes — All open scuppers
2 sanitary discharge pipes above awning deck and discharging below.

Particulars of Side Scuttles: 6 in forecastle, 8" dia., and fitted with deadlights.

Particulars of Guard Rails:— From amidships to fore end of awning deck and on forecastle
Height 40", stanchions 5'4" apart and 3 rails 12" apart.

RETAIN

Particulars of ~~Gangways~~, Lifelines, etc.:— ~~To be fitted~~

Particulars of Freeing Arrangements.

	Length of Bulwark	Height of Bulwark	Size of Freeing Ports	Number each side	Area each side	Rule area each side
After Well	84'	46"	30" x 20" / 36 x 18	2 } 2	17¼ ft / ~~9~~	16.8 ft / 17
Forward Well	19'	46"	36" x 18"	2	9	8.54

State position of each freeing port (F. and A. position and height above deck edge) { After Well:— From fore end, No 1 to centre of port 9'-7", No 2 - 24'-4" } 12" above deck edge.
{ Forward Well:— From aft end, No 1 to centre of port 31", No 2 - 13'9" }

State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:— Fitted with swing shutters

Additional area where sheer is less than standard.

2 ports on R.Q.D with 2 horizontal bars approximately 15 ft apart aft of existing ports

Particulars of Superstructures, Trunks, Casings, Deckhouses.

RETAIN

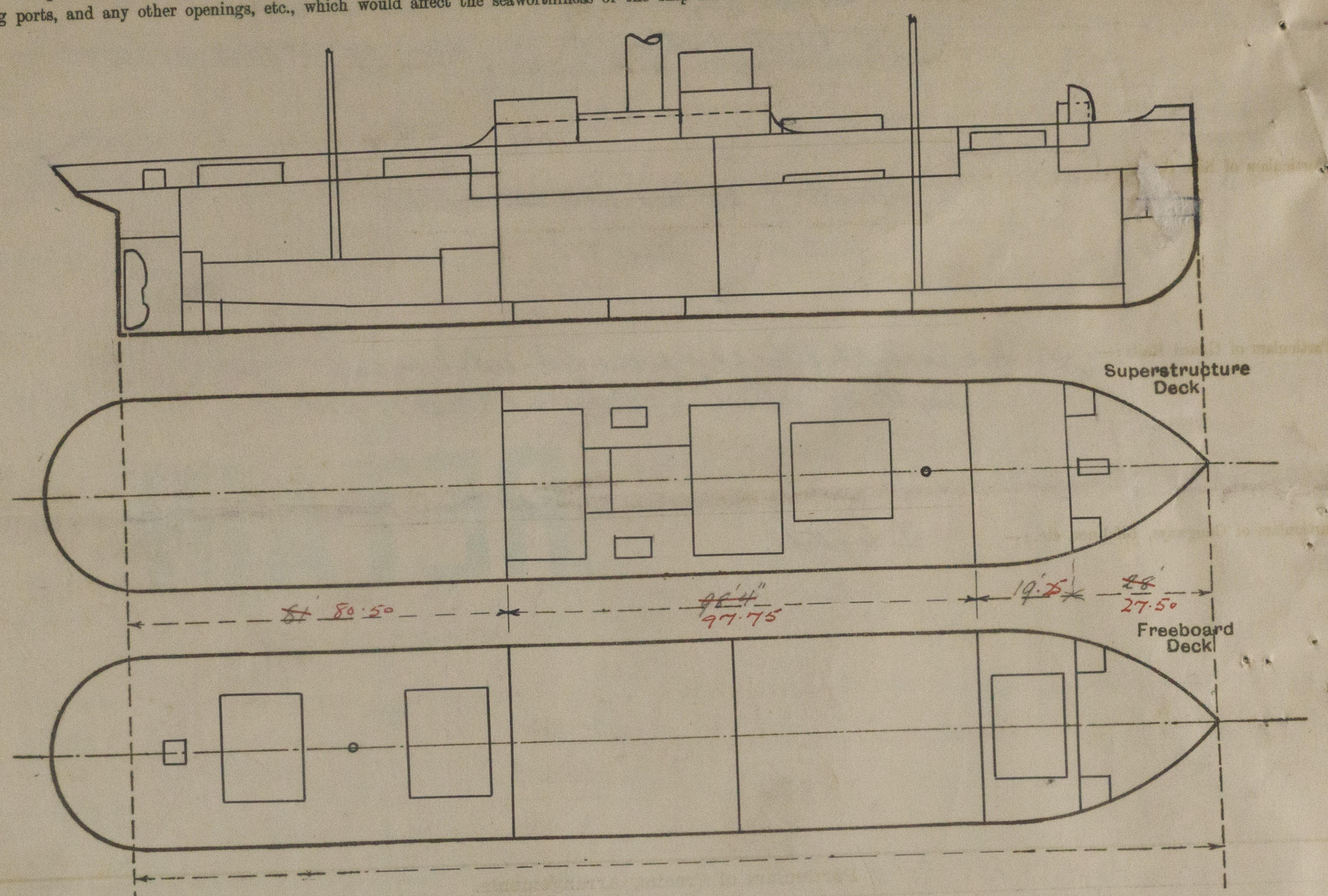
	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Poop Bulkhead	✓							
Raised Quarter Deck Bulkhead	✓							
Bridge, After Bulkhead	4 x 3½ x 7/16	5/16	3½ x 3½ x 3/8	30"	✓	18 x 18	11	38"
Bridge, Forward Bulkhead	3 x 3 x 3/8	5/16	4-24 x 3/8 plates + 3 x 3 x 3/8 L and 5½ x 3 x 3/8 B.A.	30"	18 x 18 x 3/8 brkts	✓	✓	38"
Forecastle Bulkhead	3 x 3 x 5/16	5/16	3 x 2½ x ¼	30	✓	✓	✓	42"
Trunk, Aft								
Trunk, Forward								
Exposed Machinery Casings on Freeboard or Raised Quarter Decks								
Exposed Machinery Casings on Superstructure Decks	3 x 3 x 3/8	.25	3 x 3 x 3/8 with 3 x 3 x 3/8 reverse bars	30	✓	45 x 23	17	7'
Machinery Casings within Superstructures not fitted with Class I Closing Appliances								
Deckhouses on Flush Deck Ships								

Particulars of Closing Appliances (state if capable of being manipulated from both sides).

Poop Bulkhead	✓
Raised Quarter Deck Bulkhead	~~[illegible]~~ No openings.
Bridge, After Bulkhead	2 plate ~~doors~~ fitted with through bolts and nuts, permanently bolted, bolts spaced 4" apart
Bridge, Forward Bulkhead	No openings
Raised Deck Forward { Fore end Bulkd } No openings	
Forecastle Bulkhead { aft	✓ No openings
Exposed Machinery Casings on Freeboard or Raised Quarter Decks	✓
Exposed Machinery Casings on Superstructure Decks	1 hinged steel door at aft end of E.R., fitted with ordinary lock manipulated both sides, and 6 skylight lids 26 x 34 hinged steel, closed inside
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	✓
Deckhouses on Flush Deck Ships	✓

WS25-00382/2

Superstructure bulkheads, trunks, deckhouses, casings, cargo and coaling hatchways, extent and thickness of sheathing on the freeboard deck, gangway, cargo and coaling ports, and any other openings, etc., which would affect the seaworthiness of the ship are to be shewn on the following sketches :—



State any special features in the construction of the ship :— The survey was held at Halifax N.S. the vessel lying on the Marine Railway and afloat, and the Owners request the freeboards computed under the 1906 Rules.

Builder's name and yard number Messrs Wood, Skinner & Co. Ld. Newcastle

Names of sister ships

Owners Delia Shipping Co. Ld. (F.K. Warren.)

Fee £ $.40.00 Received by me