

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Computation of Freeboard for ~~Steamer, Sailing Ship, Tanker~~
having a Poop and a Forecastle

(Type of Superstructures.)

Ship's Name Sheddreech Nationality and Port of Registry Official Number Gross Tonnage Date of Build

Moulded Dimensions: Length 402.08 Breadth 53.0 Depth 28.0
Moulded displacement at moulded draught = 85 per cent. of moulded depth .80 Assumed tons
Coefficient of fineness for use with Tables

Port of Survey
Date of Survey
Name of Surveyor
Particulars of Classification +100 A.1
Carrying petroleum in bulk

Depth for Freeboard (D)
Moulded depth 28.0
Stringer plate04
Sheathing on exposed deck
 $T \left(\frac{L-S}{L} \right) =$
Depth for Freeboard (D) = 28.04

Depth correction
(a) Where D is greater than Table depth
(D - Table depth) R = (28.04 - 26.81) 3 + 3.69
(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) 53.0
Standard Round of Beam = $\frac{B \times 12}{50} =$ 12.72
Ship's Round of Beam = 13.25
Difference .53
Restricted to
Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) =$ $\frac{.53}{4} \times .661 = .09$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...	99.25	99.25	7.5	-	99.25
" overhang ...					
R.Q.D. enclosed ...					
" overhang ...					
Bridge enclosed ...					
" overhang aft ...					
" overhang forward					
Forecastle enclosed <u>Seamless</u>	36.87	36.87	7.5		36.87
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" forward					
Total ...	136.12	136.12			136.12

Standard Height of Superstructure 7.5
" " R.Q.D.
Deduction for complete superstructure 42.0
Percentage covered $\frac{S}{L} =$ 33.86%
" $\frac{S_1}{L} =$ 33.86%
" $\frac{E}{L} =$ 33.86%
Percentage from Table, Line A.
(corrected for absence of forecastle (if required))
Percentage from Table, Line B. Tanker 24.85
(corrected for absence of forecastle (if required))
Interpolation for bridge less than 2L (if required)
Deduction = 42.0 x .2485 = 10.44

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	50.21	1		50.21	31.75	31.75	1		31.75
1/4 L from A.P. ...	32.34	4		89.36	8.0	8.0	4		32.00
1/2 L " ...	5.52	2		11.04	1.0	1.0	2		2.00
Amidships ...	-	4		-	-	-	4		-
3/4 L from F.P. ...	11.05	2		22.10	3.25	3.25	2		6.50
1/4 L " ...	44.68	4		178.72	19.0	19.0	4		76.00
F.P. ...	100.42	1		100.42	64.0	64.0	1		64.00
Total ...				451.85					212.25

Mean actual sheer aft = Deficient
Mean standard sheer aft =
Mean actual sheer forward = Deficient
Mean standard sheer forward =

Length of enclosed superstructure forward of amidships =
" " aft of " = Does not apply.

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) =$ $\frac{239.6}{18} (.75 - .169) + 4.74$
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 = 28.04
Summer freeboard = 5.79
Moulded draught (d) = 22.25

Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 5.56

Addition for Winter North Atlantic Freeboard (if required) =

Deduction for Fresh Water.

Displacement in salt water at summer load water line

$\Delta =$
Tons per inch immersion at summer load water line
 $T =$

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

=

TABULAR FREEBOARD Tanker corrected for Fresh Deck (if required)

Correction for coefficient $\frac{.80 + .68}{1.36}$

	+	-
Depth Correction ...	3.69	-
Deduction for superstructures ...	-	10.44
Sheer correction ...	4.74	-
Round of Beam correction ...	-	.09
Correction for Thickness of Deck amidships ...	-	-
Other corrections, scantlings, etc. ...	-	-
	11.43	10.53

Summer Freeboard = 69.46

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck:— 5" 9 1/2

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 " " ...	

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Foundation

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS									
Description of Hatchway									
Dimensions of Hatchway									
COAMINGS	Height above Deck								
	Thickens								
	Stiffeners								
	Brackets, Stays								
HATCH BEAMS	Number								
	Spacing								
	Scantling and Sketch								
	Bearing Surface								
FORE AND AFTERS	Number								
	Spacing								
	Unsupported Lengths								
	Scantling* and Sketch								
	Bearing Surface								
HATCH COVERS	Material								
	Thickens								
	How fitted								
	Bearing Surface								
Spacing of Cleats									
Number of Tarpaulins									

*Are wood fore and afters steel shod at all bearing surfaces?
 Are battens and wedges efficient and in good condition?
 Are tarpaulins in good condition and in accordance with rule requirements?
 Are lashings provided in accordance with rule requirements?

Particulars of fiddle, funnel and ventilator coamings:—

Particulars of Flush Bunker Scuttles:—

Particulars of Companionways:—

Particulars of Ventilators in exposed positions on freeboard and superstructure decks:—

Particulars of Air Pipes in exposed positions on freeboard, raised quarter, or superstructure decks:—

Particulars of Gangway Cargo and Coaling Ports:—

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Particulars of Scuppers and Sanitary Discharge Pipes:—

Particulars of Side Scuttles:—

Particulars of Guard Rails:—

Particulars of Gangways, Lifelines, etc.:—

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 ...						
Forward Well ...						

State position of each freeing port ... } After Well:—
 (F. and A. position and height above deck edge) } Forward Well:—
 State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:—
 Additional area where sheer is less than standard.

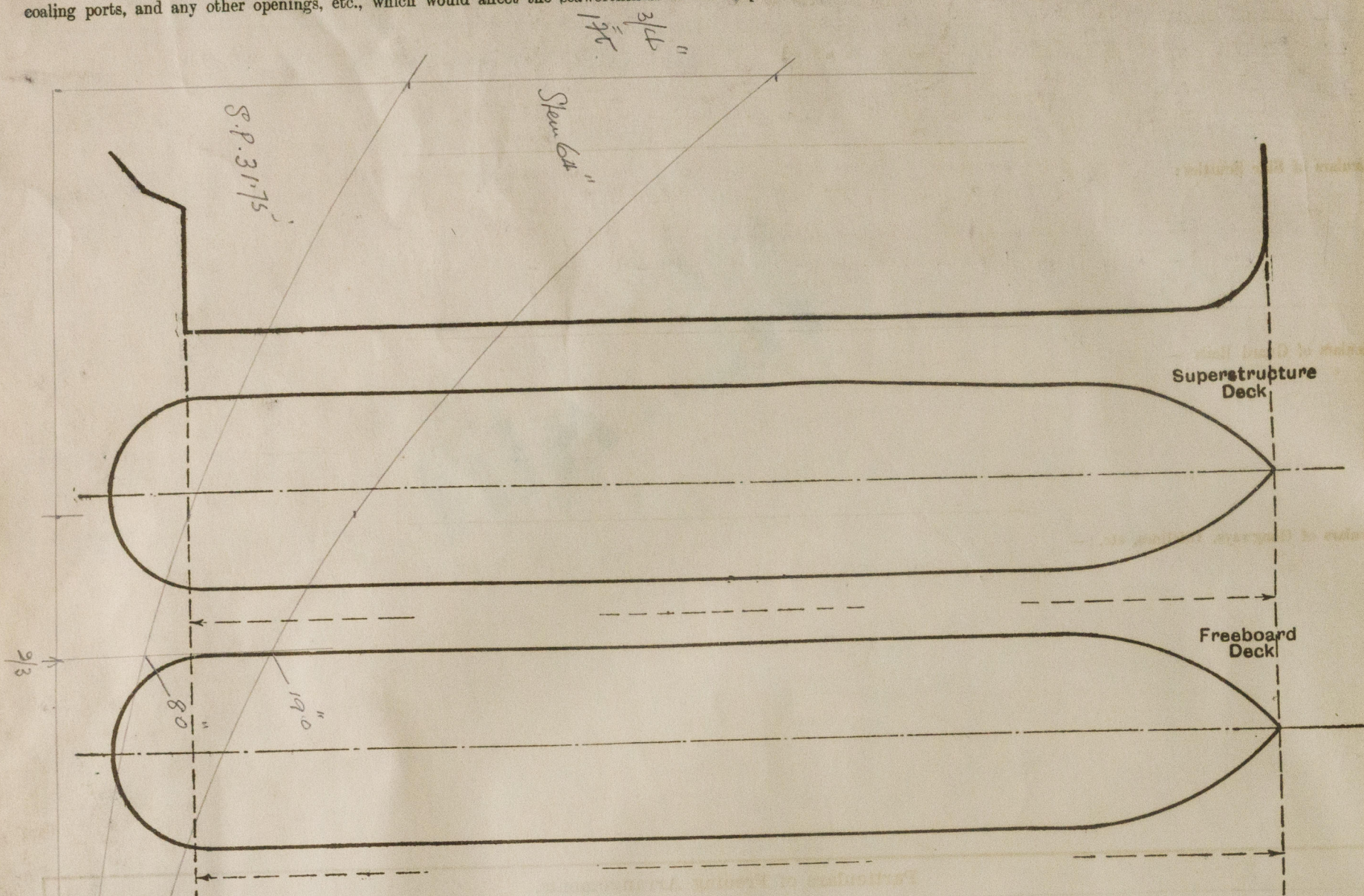
Particulars of Superstructures, Trunks, Casings, Deckhouses.

	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 ...								
Bridge, Forward Bulkhead ...								
Forecastle Bulkhead ...								
Trunk, Aft ...								
Trunk, Forward ...								
Exposed Machinery Casings on Freeboard or Raised Quarter Decks ...								
Exposed Machinery Casings on Superstructure Decks ...								
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 ...	
Bridge, After Bulkhead ...	
Bridge, Forward Bulkhead ...	
Forecastle Bulkhead ...	
Exposed Machinery Casings on Freeboard or Raised Quarter Decks ...	
Exposed Machinery Casings on Superstructure Decks ...	
Machinery Casings within Superstructures not fitted with Class I Closing Appliances ...	
Deckhouses on Flush Deck Ships ...	

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:—

Builder's name and yard number

Names of sister ships

Owners

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