Rpt. C.11.

Lloyd's Register of Shipping.
SURVEYS FOR FREEBOARD.

Index. No. 28847
(For London Office only.)

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

having *a flush deck, without forecastle*
(Cable ship)

(Type of Superstructures.)

Port of Survey _____

Date ~~of Survey~~ 16 - 7 - 31.

Ship's Name	Nationality and Port of Registry	Official Number	Gross Tonnage	Date of Build
"*All America*"	U.S.A New York			1921

Name of Surveyor _____

Moulded Dimensions: Length 269.75 Breadth 36.83 Depth 24.75'

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

Coefficient of fineness for use with Tables

Particulars of Classification + 100 A 1.
Awning deck, with fbd

Depth for Freeboard (D)

Moulded depth ... ... 24.75'

Stringer plate ... ... .04

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

Depth for Freeboard (D) = 24.79

Depth correction

(a) Where D is greater than Table depth
(D—Table depth) R =
$(24.79 - 14.98)\ 2.075''$
$\frac{6.81}{}$ + 14.13

(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) 36.83

Standard Round of Beam = $\frac{B \times 12}{50}$ = 8.84

Ship's Round of Beam = 9.0

Difference .16

Restricted to

Correction = $\frac{Diff^n}{4} \times \left(1 - \frac{S_1}{L}\right)$ = $\frac{.16}{4} \times .716 = -.03$

DEDUCTION FOR SUPERSTRUCTURES.

Particulars of Bridge and opening to be checked

	Mean Covered Length (S)	Equivalent Enclosed Length (S₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...					
„ overhang...					
R.Q.D. enclosed ...					
„ overhang					
Bridge ~~enclosed~~ *open* ...	76.67	57.50	7-6	—	57.50
„ overhang aft					
„ overhang forward					
F'cle enclosed ...					
„ overhang ...					
Trunk aft ...					
„ forward ...					
Tonnage opening aft ...					
„ „ forward					
Total	76.67	57.50			57.50

Standard Height of Superstructure 6.21

„ „ R.Q.D. _____

Deduction for complete superstructure 33.07

Percentage covered $\frac{S}{L} =$ 28.4%

„ „ $\frac{S_1}{L} =$ 21.3%

„ „ $\frac{E}{L} =$ 21.3%

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

Percentage from Table, Line B. 13.52 - 5% (fcle)
(corrected for absence of forecastle (if required)) = 8.52

Interpolation for bridge less than .2L (if required) .213

Deduction = 33.07 × .0852 = — 2.82

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P.	36.97	1		24.0	24.0	1	24.0
⅙L from A.P. ...		4		8.1	8.1	4	32.4
⅔L „ ...		2		2.02	2.02	2	4.0
Amidships ...		4		—	—	4	—
⅔L from F.P. ...		2		7.8	7.8	2	15.6
⅙L „ ...	32.90	4		31.2	31.2	4	124.8
F.P.	73.94	1		65.5	65.5	1	65.5
Total ...			332.73				266.3

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

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

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

„ „ „ aft of „ = Deficient sheer

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L}\right)$ = $\frac{66.43}{18} (.75 - .142) = + 2.24$
$.608$

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

$\triangle =$

Tons per inch immersion at summer load water line

$T =$

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

TABULAR FREEBOARD ~~corrected for Flush Deck (if required)~~ 36.46

Correction for coefficient

	+	—
Depth Correction	14.13	—
Deduction for superstructures	—	2.82
Sheer correction	2.24	
Round of Beam correction... ...		.03
Correction for Thickness of Deck amidships	—	—
Other corrections, scantlings, etc.	—	—
	16.37	2.85
		+ 13.52

Summer Freeboard =

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

				Tropical Fresh Water Freeboard ... ...
Tropical Fresh Water Line above Centre of Disc				Fresh Water „ „
Fresh Water Line „ „				Tropical „ „
Tropical Line „ „				Winter „ „
Winter Line below „				Winter North Atlantic „ „
Winter North Atlantic Line „ „				

10m. 2.31

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PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS

Description of Hatchway											
Dimensions of Hatchway											
COAMINGS { Height above Deck ... / Thickness { Sides ... / { Ends ... / 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 ... ... / Thickness... ... / 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 fiddley, 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 :—

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 Free-board or Raised Quarter Decks ...								
Exposed Machinery Casings on Super-structure Decks								
Machinery Casings within Superstruc-tures 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 Free-board or Raised Quarter Decks ...	
Exposed Machinery Casings on Super-structure Decks	
Machinery Casings within Superstruc-tures 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:—

Superstructure Deck

Freeboard Deck
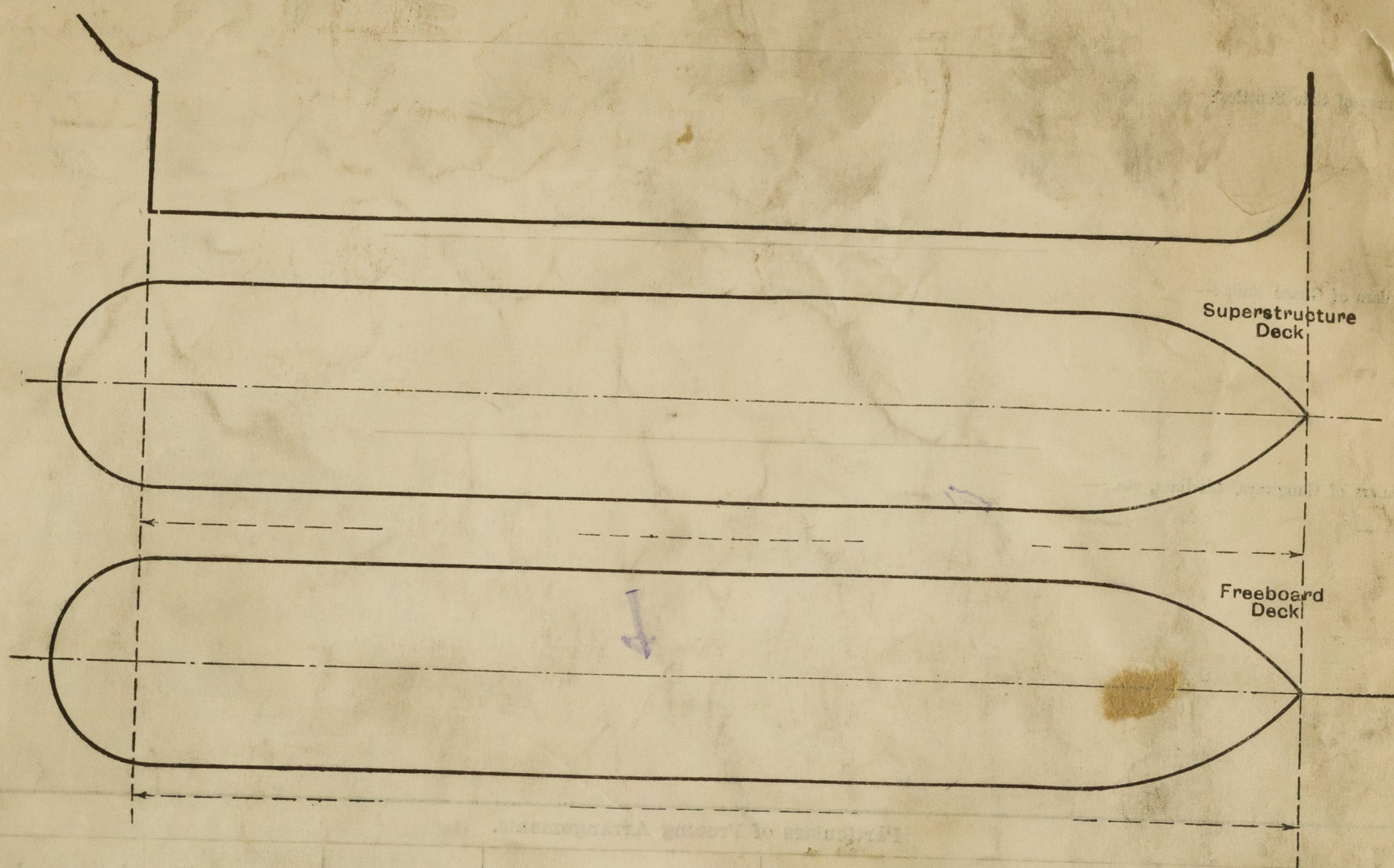
State any special features in the construction of the ship:—

Builder's name and yard number _____

Names of sister ships _____

Owners _____

Fee £ _____ : _____ : _____   Received by me _____