

8 FEB 1932

Index. No. 27582
(For London Office only.)

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

No. 99804.

Computation of Freeboard for Steamer, Sailing Ship, Tanker
having Toncastle R. Q. Deck + Poop

(Type of Superstructures.)

Ship's Name MOUNTSTEWART
SOMERSET COAST

Nationality and Port of Registry British
Liverpool

Official Number 143620

Gross Tonnage 1353

Date of Build 1920-3 mo

Moulded Dimensions: Length 239' 8" Breadth 36' 0" Depth 18' 5"

Moulded displacement at moulded draught = 85 per cent. of moulded depth 2920 (SEE LETTER 15-2-32) tons

Coefficient of fineness for use with Tables 753

Port of Survey Birkenhead

Date of Survey Jan 1st 1932 & subsequently

Name of Surveyor H.B. Murray

Particulars of Classification +100 A1

Depth for Freeboard (D)

Moulded depth 18.50

Stringer plate 0.04

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

Depth for Freeboard (D) = 18.54

Depth correction

(a) Where D is greater than Table depth
(D - Table depth) R = (18.54 - 15.99) × 1.845 = +4.70

(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) 36.0

Standard Round of Beam = $\frac{B \times 12}{50} = \frac{36 \times 12}{50} = 8.64$

Ship's Round of Beam 9" = 9.00

Difference .36

Restricted to

Correction = $\frac{\text{Diff}^2}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.36^2}{4} \times \left(1 - \frac{7252}{2748} \right) = -.02$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...	79.08	79.08	7'-0"	✓	79.08
" overhang ...					
R.Q.D. enclosed ...	67.08	67.08	4'-0"	✓	67.08
" overhang ...	2'-0"	1.00	4'-0"	✓	1.00
Bridge enclosed ...					
" overhang aft ...					
" overhang forward ...	25.14	25.14	7'-0"	✓	25.14
F'cle enclosed <u>HOUSE</u> ...	28.37	1.61	7'-0"	✓	1.61
" overhang ...	5.9				
Trunk aft ...	3.23				
" forward ...					
Tonnage opening aft ...					
" forward ...					
Total ...	176.53	173.91			173.91

Standard Height of Superstructure 6.0

" " R.Q.D. 3.93

Deduction for complete superstructure 29.98

Percentage covered $\frac{S}{L} = 73.62$

" " $\frac{S_1}{L} = 72.52$

" " $\frac{E}{L} = 72.52$

Percentage from Table, Line A. 66.10
(corrected for absence of forecastle (if required))

Percentage from Table, Line B. 66.1
(corrected for absence of forecastle (if required))

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

Deduction = 29.98 × .661 = -19.82

ALLOWED SHEER IN GREEN

SHEER CORRECTION.

Station	Standard Ordinate	S	Product	Actual Ordinate	Effective Ordinate	S	Product
A.P. ...	33.98	1	33.98	45.00	33.98	1	33.98
1/4 L from A.P. ...	15.12	4	60.48	12.85	15.12	4	60.48
2/4 L " ...	3.74	2	7.48	3.21	3.74	2	7.48
Amidships ...	-	4	-	-	-	4	-
3/4 L from F.P. ...	7.47	2	14.94	7.35	7.35	2	14.70
1/4 L " ...	30.24	4	120.96	29.42	29.42	4	117.68
F.P. ...	67.96	1	67.96	66.00	66.00	1	66.00
Total ...			305.80				300.32

Mean actual sheer aft = EXCESS

Mean standard sheer aft

Mean actual sheer forward = DEFICIENT

Mean standard sheer forward

Length of enclosed superstructure forward of amidships = .11L

" " aft of " = .5L

NOTE. SHEER AFT INCREASED BY VIRTUE OF INTACT POOP & R.Q.D. HAVING A HEIGHT IN EXCESS OF THE STANDARD. ✓

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{5.48}{18} \left(.75 - \frac{3681}{3819} \right) = +.12$

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 = 18.54

Summer freeboard = 5.39

Moulded draught (d) = 17.15

Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 4.29 = 4 1/4

Addition for Winter North Atlantic Freeboard (if required) = 2.0

Deduction for Fresh Water.

Displacement in salt water at summer load water line

Tons per inch immersion at summer load water line

Deduction = $\frac{\Delta}{40T}$ inches = 4.65 = 4 3/4

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient $\frac{753 + .68}{1.36} = 1.433$

Depth Correction 4.70

Deduction for superstructures -19.82

Sheer correction12

Round of Beam correction02

Correction for Thickness of Deck amidships -

Other corrections, scantlings, etc. 48.00

30.26

31.89

52.82 19.84 +32.98

Summer Freeboard = 64.87

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

Tropical Fresh Water Line above Centre of Disc 9 1/4

Fresh Water Line " " 4 3/4

Tropical Line " " 4 3/4

Winter Line below " " 4 3/4

Winter North Atlantic Line " " 6 1/4

Tropical Fresh Water Freeboard 4' 7 3/4"

Fresh Water " " 5' 0"

Tropical " " 5' 0 1/2"

Winter " " 5' 9"

Winter North Atlantic " " 5' 11"

5' 5"

5' 0 1/2"

5' 7 1/2"

SOMERSET. COAST

Particulars of Scuppers and Sanitary Discharge Pipes
 Sanitary discharge pipes fitted with brass storm valves 1'-6" below freeboard deck.
 Pipe scuppers fitted with storm valves. Stronger scuppers 9"x4".
 The aft scupper on the R.P.D. is a 7"x4" collinson scupper. 9.

Particulars of Guard Rails:— Guard rails are fitted around the Forecastle deck 3'-4" high, 2 rails, 8 stanchions spaced 4'-0" apart. On the upper deck 12'-0" rails each side, 4'-8" high, 3 rails, stanchions 6'-0" apart. On the RQ Deck 12'-0" rails each side, 3'-9" high, 2 rails, stanchions 6'-0" apart. Around the poop except in way of boats, Guard rails are fitted 3'-4" high, 3 rails, stanchions 4'-4" apart.

The Crew are all housed in the poop.
There are no life lines or gangways fitted

Suitable provision made for ^{rozzing} lifelines which are available for use in any part of the ship which might have to be used by the crew in the regular working of the ship.

Particulars of fiddley, funnel and ventilator coamings:— Stokehold gratings covered with strong steel hinged doors. Fiddley Funnel & Ventilators in efficient condition. 2 Stokehold Vents, 21" dia 2'-6" x 1/4" coamings - 2 E.R. Vents 15", 14" x 7/16" coamings. E & A Galley Skylights strongly constructed of steel with steel hinged flap. Bunker Hatch 11'-6" x 5'-10". Coaming 2'-0" x 7/16". WP Hatch Covers fitted F + A. 3" thick, bearing 2 1/2" Cleats spaced 20". 2 Starpanals fitted.


Particulars of Flush Bunker Scuttles:—

Particulars of Companionways :—

Particulars of Companionways:—
 1/Steel Companion 7'-9" x 3'-1" x 6'-9" high on Forward end of Poop deck leading to Officers Quarters in Poop
 Strong hinged wood door 4'-10" x 2'-0" operated from both sides, sill 13" This door is protected by a steel shield.
 3'-0" x 3'-0" with steel top (See sketch overleaf).
 1/Steel Companion 8'-2" x 3'-1" x 6'-9" high on Poop Deck, aft of E.R. Casing, leading to Gross Quarters in Poop
 Strong hinged wood door 4'-10" x 2'-0" operated from both sides, sill 13" ✓

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

Forecastle Deck. 3. Swan neck 8'x4" Coaming 20" x 6". Canvas covers - for closing.
Upper deck R.D. 3-16" Vents, Coaming 3'-0" high 3/8" thick, 1-16" Vent, Coaming 9'-2" high 3/8" thick (Starboard side forward) Fitted with wood plugs or canvas covers.
On foot deck all leading to Crews Accommodation:-
13'-0" Vents 2'-9" x 1/4" Coaming
1-7'x4" Goose neck 2'-2" x 3/8" Coaming to life } Not fitted with wood
2-7 1/2' x 4" " " 2'-11" x 1/4" " " } Plugs or Canvas
1-6'2" x 4" " " 10" x 3/8" " " } Covers
1 MV. 10" Dia " 2'-8" x 3/8" Coaming
1-4" Goose neck 2'-3" x 5/8" Coaming to life
Efficient means of securing provided.


Height to top of Coaming.

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

Particulars of Air Pipes exposed to view of Deck or of raised quarter, or of bulwarks, according to class.					
1	Air pipe on Forecastle deck,	2' 0"	high	x 3"	dia from Fore Peak Tank
1	" " "	2' 6"	"	x 2"	dia from Double bottom tank
4	" " Upper deck	3' 0"	"	x 1 1/2"	" " " "
2	" " "	3' 0"	"	x 2"	" " " "
4	" " ROD	3' 0"	"	x 1 1/2"	" " " "
6	" " ROD	3' 0"	"	x 3"	" " " "
2	" " Poop	2' 0"	"	x 2 1/4"	" " aft Peak Tank

Particulars of Gangway Cargo and Coaling Ports:—

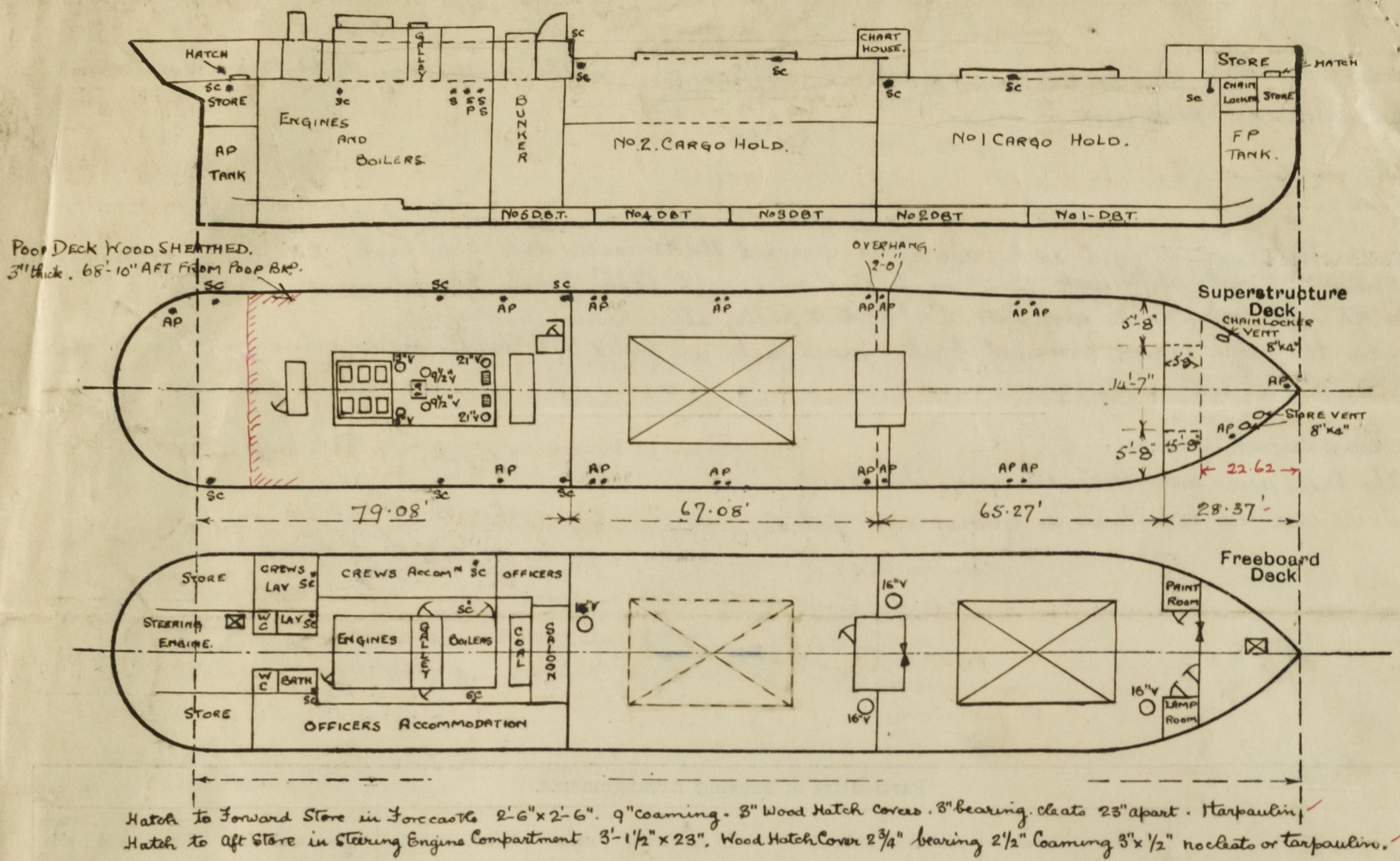
Particulars of Superstructures, Trunks, Casings, Deckhouses.								
	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Poop Bulkhead	✓	.32	6x3x.40 Ls	2'4"	Bkls Top & bottom 43 webs 15" x .32	None	✓	7'0"
Raised Quarter Deck Bulkhead ...	✓	.32	9x3x.48 BA	2'6"	Brackets at top 42 webs 2'6" x .32	None	✓	4'0"
Bridge, After Bulkhead42				4'11" x 2'2"	15"	7'3"
Bridge, Forward Bulkhead42				3'0" x 2'6"	6"	11'3"
Forecastle Bulkhead32	flanged plates	3'0"	✓	3'0" x 4'10 1/2" 2'9" x 4'10 1/2"	16"	7'0"
Trunk, Aft	✓							
Trunk, Forward	✓							
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...	✓							
Exposed Machinery Casings on Super-structure Decks	✓							
Machinery Casings within Superstructures not fitted with Class I Closing Appliances36	.25	3 1/2 x 3 1/2 x .32	2'6"	alternate ones brackets at top only	ER 2'10" x 2'0" GALLEY 4'8" x 2'0" FIDOLEY 4'8" x 1'8"	17"	7'0"
Deckhouses on Flush Deck Ships ...								

[illegible]

Location	Condition	Notes
Poop Bulkhead	✓	No openings
Raised Quarter Deck Bulkhead	✓	No openings
Bridge, After Bulkhead	✓	Strong wood hinged door, manipulated from both sides
Bridge, Forward Bulkhead	✓	3/8" steel door bolted with W.T. joint 3/4" tap bolts spaced 3" top & bottom & 5 1/2" at sides one shifting boards in riveted channels full height one strong wood hinged door, padlocked outside.
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	✓	Strong hinged steel doors, manipulated from both sides, all in two pieces except Port Gallery Door
Deckhouses on Flush Deck Ships	✓	

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

Rpt. C.1



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

Forecastle.

Enclosed = 22.62 ✓

Houses $\frac{5.75 \times 5.67}{12.96} = 7.52$ ✓

$\frac{1}{2}$ Overhang = 1.61 ✓

Builder's name and yard number.

Names of sister ships.

Owners.

Fee £ 8. : 10. : 0.

Received by me,