

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

 Index. No. **28796**
 (For London Office only.)

 Computation of Freeboard for Steamer, ~~Sailing Ship, Tug~~
CASTLE, BRIDGE & POOP.
Port of Survey **Queenstown.**Date of Survey **8th, 10th, 11th & 12th November 1932.**Name of Surveyor **W. J. R. Lewis**Particulars of Classification **100-A1.****S.S. Shl. No. 2-28.**
 (Type of Superstructures.)
EVAC
 Nationality and Port of Registry **British London.**
 Official Number **144511**
 Gross Tonnage **4943.**
 Date of Build **1920-4 mo**
 Moulded Dimensions: Length **385'** Breadth **53.29'** Depth **29-8'**
 Moulded Displacement at moulded draught = 85 per cent. of moulded depth **11570** tons
 Coefficient of Fineness for use with Tables **.783**
Depth for Freeboard (D)
 Moulded depth **29-8'**
 Stringer plate **29.67**
 Sheathing on exposed deck
 $T \left(\frac{L-S}{L} \right) =$
Depth correction
 (a) Where D is greater than Table depth
 (D-Table depth) R =
 $(29.71 - 25.47) 2.962 = + 11.94$
 (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) **53.29**
 Standard Round of Beam = $\frac{B \times 12}{50} = 12.79$
 Ship's Round of Beam = **12³/₄**
 Difference **.04**
 Restricted to
 Correction = $\frac{\text{Diff}^*}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.04}{4} (1 - .5063) = \frac{.04}{4} \times .4937 = .009878$
NIL
DEDUCTION FOR SUPERSTRUCTURES.

Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
36.40	36.40	8.21	✓	36.40
9.00	119.00	8'	✓	119.00
5.96	35.96	8.21	✓	35.96
1.54	3.54			
194.90	194.90			194.90

 Standard Height of Superstructure **7.35**
 " " R.Q.D. ✓
 Deduction for complete superstructure **41.00**
 Percentage covered $\frac{S}{L} = 50.88$
 " " $\frac{S_1}{L} = 50.63$
 " " $\frac{E}{L} = 50.63$
 Percentage from Table, Line A. ✓
 (corrected for absence of forecastle (if required))
 Percentage from Table, Line B. **36.63**
 (corrected for absence of forecastle (if required))
 Interpolation for bridge less than 2L (if required)
 Deduction = $41 \times .3663 = - 15.02$
SHEER CORRECTION.

Station	Stations	Product	Actual Ordinate	Effective Ordinate	S M	Product
48.50		48.50	65	65.00	1	65.00
86.32		86.32	26.86	26.86	4	107.44
10.66	2	10.66	6.698	6.70	2	13.40
Amidships	4	—	0	—	4	—
$\frac{3}{8}$ L from F.P.	2	21.32	13.248	13.25	2	26.50
$\frac{1}{8}$ L	4	172.64	53.1275	53.13	4	212.52
F.P.	1	97.00	120	120	1	120.00
Total		436.44				544.86

 Mean actual sheer aft = **Excess**
 Mean standard sheer aft
 Mean actual sheer forward = **Excess**
 Mean standard sheer forward
 Length of enclosed superstructure forward of amidships = **1.14**
 " " aft of " = **7.14**

 Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{.75 - S}{2L} \right) = \frac{108.42}{18} \left(\frac{.75 - .2544}{2} \right) = -2.98$

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.**
 Depth to Freeboard Deck = **29.71**
 Summer freeboard = **5.50**
 Moulded draught (d) = **24.21**

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = **6.05 = 6"**

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 = $\frac{\Delta}{40T}$ inches $=$ **TABULAR FREEBOARD corrected for Flush Deck (if required)**Correction for coefficient $\frac{783 + .680}{1.36} = \frac{1.463}{1.36}$

	+	-
Depth Correction	11.97	-
Deduction for superstructures	-	15.02
Sheer correction	-	2.98
Round of Beam correction	-	-
Correction for Thickness of Deck amidships	-	-
Other corrections, scantlings, etc.	-	-
	11.97	18.00

Summer Freeboard = **65.93****SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck:-**

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

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Ronda.

Particulars of fiddle, funnel and ventilator coamings:—

- Stairhold gratings covered by strong steel covers.
- Fiddle and funnel ventilators in efficient condition.
- Engine skylight of steel strongly constructed.

none.

none

Particulars of Air Pipes in exposed positions on freeboard, raised quarter, or superstructure decks: — 1. W.S. air pipe on Ro-rockette decks, 22" high x 2½" dia from F.P. TANK.
1. W.S. air pipe on Ro-rockette decks, 11" high x 2½" dia from double bottom tank.
2. " " " pipes in forward & after holds, 2½" dia, from double bottom tanks, flush with deck and fitted with screwed brass caps.
6. " " " in hold, 9" x 20" high x 2½" dia, from double bottom tanks, fitted with screwed brass cap plugs.
1. " " " pipe on roof deck, 20" high x 3½" dia from after peak tank.
all air pipes are closed (or the screwed brass cap over) with wood plugs and canvas covers, but no snifting hole is drilled in top of bands.

None.

Two plain band deck scupper pipes, $3\frac{1}{4}$ " bore, in forward corner of after well deck, and two $3\frac{1}{2}$ " bore pipes in after corner of fore well deck; sills 14" and 13" respectively below freeboard deck. ✓
One plain band drain pipe from Crews forecabin washhouse on Port side only, $1\frac{1}{2}$ " bore; sill $1'4\frac{1}{2}"$ below freeboard deck.
No other sanitary discharges below freeboard deck.

no scuttles below foreboard deck.

like scuttles to crew spaces in forecabin and poop fitted with hinged deadlights.
all scuttles of substantial construction.

Guard rails on forecastle, bridge and poop decks 3'-0" high, having three rods with rods 3'-6" to 4'-0" apart, efficiently supported.

Steel bulwarks on foreboard deck, in wells, 3'-6" high, efficiently supported and constructed.

felines, etc. :- no gangways or fittings for same fitted on fore well deck.

On after well decks, steel ladders are fitted from bridge and poop decks down to ~~mes~~ 4x5 hatchways; the forward ladder landing on a wood platform 22" wide x 3" thick at hatch coaming stiffener level and the after ladder landing on top of stiffener; between these hatchways, on the starboard side, a wood platform is built, 22" wide x 3" thick x 19" high above well deck plating and stanchions are fitted to same, but no lifeline is presently fitted or known to be on board.

Provision made for lifelines in both
molds on each side of ship

& added at hpt. 16/10/42

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	98'-4"	3'-6"	3'-0" x 12 1/4" 5'-0" x 9' "	336	20.4 ft. 9.18 sq	19.66 sq
Forward Well	91'-7"	3'-6"	3'-0" x 12 1/4" 4'-3" x 9' "	336	18.7 ft. 9.18 sq	18.31 sq

State position of each freeing port } After Well: — Centre of ports 24'-0", 55'-9" and 88'-5" forward of poop front.
(F. and A. position and height above deck edge) } Forward Well: — " " " 17'-1", 35'-10" and 65'-0" forward of bridge front.

State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such: — Single 3/4" dia rail bar fitted fore & aft across each port.

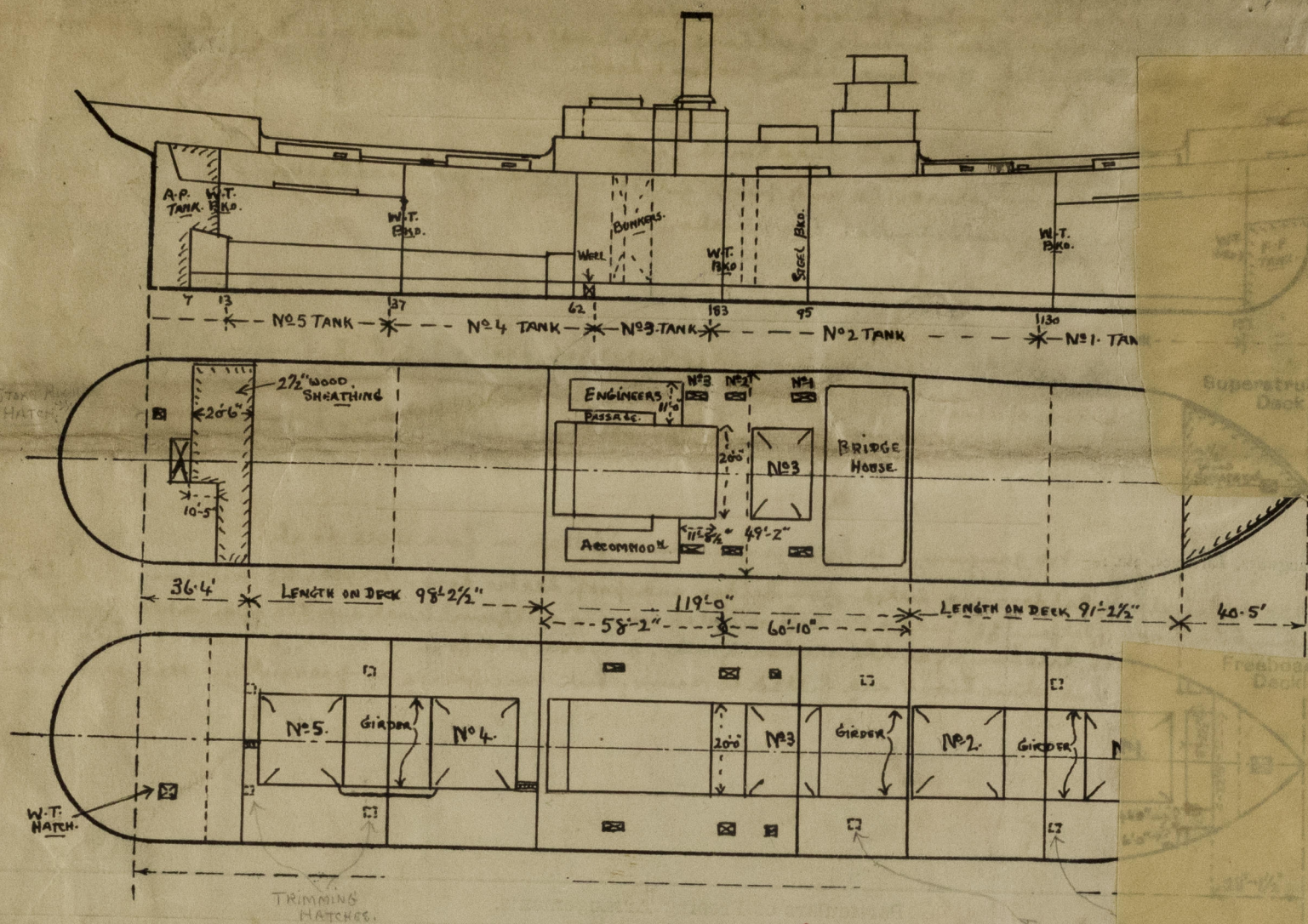
Additional area where sheer is less than standard.

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	Coaming Angle only, 7' x 3 1/2" x 60	VERTICAL .5	6 x 3 1/2 x .37 ANGLE	27" To 30"	none	(Two) 4' 9 1/2" x 36"	18 1/2"	8' 0"	
Raised Quarter Deck Bulkhead ...									
Bridge, After Bulkhead	Coaming Angle only, 3 1/2 x 3 1/2 x 38	VERTICAL .38	6 x 3 x .38 ANGLE.	27" To 42" CENTRE 33 1/2" WINGS.	none	WINGS, TWO, 4' 5 1/4" x 45" CENTRE, 3' 5" x 23"	19"	8' 0"	
Bridge, Forward Bulkhead	Ditto 4 x 3 1/2 x .5	VERTICAL .46	8 1/2 x 3 1/2 x .75 B. ANGLE.	30"	BRACKETS TOP AND BOTTOM.	none		8' 0"	
Forecastle Bulkhead	Ditto 3 1/2 x 3 1/2 x 40	VERTICAL .32	4 x 3 x .34 ANGLE.	4' 7" FOR B. BKHD. 49" TO 58" AFTER END OF CENTRE PORTION.	none	AT FORE END OF PASSAGES, FOR B. BKHD. 4' 4" x 24"	18 1/2"	8' 0"	
Trunk, Aft									
Trunk, Forward									
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...	after part of casing covered by side houses.								
Exposed Machinery Casings on Super-structure Decks	HORIZONTAL .5	HORIZONTAL .38	FORE END, 4' x 3 x .34 SIZES, DITTO -- 2 1/4"	-- ONE ONLY.	none	(Two) 4' 6" x 24"	18"	8' 0"	1 1/2" ABOVE BRIDGE DECK PLATING.
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	HORIZONTAL .5	SIDES .32	5 1/2 x 8 x 5 SIDES.	-- 54" --	LAPPED TO BEAMS.	(Two) 3' 0" x 23"	16"	8' 0"	
Deckhouses on Flush Deck Ships ...			4 x 3 x .38 FORE END.	-- 55" TO 59" --	none.				

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

Poop Bulkhead	Two steel doors (1P x 15) hinged to plating, fitted with lock and locking cleat manipulated from both sides.
Raised Quarter Deck Bulkhead	Door to ^{Open} boards full length channel to full height (1P x 15) 2 1/4" top x bottom
Bridge, After Bulkhead	Impermeable steel plates (1P x 15) secured to plating with 8 bolts & plate washers inside; bolts spaced 11 1/4" to 15" inside.
Bridge, Forward Bulkhead	One steel door hinged to plating, fitted with lock manipulated from both sides, also 5 strongback cleats; TO E Room.
Forecastle Bulkhead	^{none} Two steel doors hinged to plating (1P x 15) at fore end of passage ways to Crews forecastle, fitted with lock manipulated from both sides. Side houses doors ditto.
Exposed Machinery Casings on Freeboard or Raised Quarter Decks ...	
Exposed Machinery Casings on Superstructure Decks	Two steel doors hinged to plating (1P x 15) to stowage hold, fitted with lock manipulated from both sides.
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	Two sliding, fore & aft, steel doors to stowage hold; no fittings for locking purposes on same.
Deckhouses of 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 shown on the following sketches:—



Equip for BAS
 $40.5 - \frac{99.00 + 93.50}{(4 \times 12.375 \times 2) + (23.42 \times 4.17)}$
 $\frac{192.5}{4.54} = 35.96$

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

Vessel examined while lying afloat in Haul Line Basin, and the survey confined to an examination of the means of closing the openings in the decks and sides of vessel and condition of same.

It is understood that a girder built along the tween deck plating of the bridge tween deck, between No. 3 hatchway and bridge front, Port & starboard sides, has been built since vessel was built. No other material alteration is known of.

As recorded in Greenstow Report No. 3909, dated 24th August 1932, this vessel has a cracked shell plate, No. 6 from Bow in fourth stake below main sheer stake, starboard side, which has not up to the present time been dealt with.

for Mr Ward to note

See current report.

Builder's name and yard number J. Readhead & Sons, Ltd.

Names of sister ships

Owners Bowring S.S. Co., Ltd. (C.T. Bowring & Co., Ltd. managers).

Fee £ 12 : 15 : 0
 Expenses. — 16 — 9.

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