

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

10935

Computation of Freeboard for Steamer, ~~Sailing Ship, Tanker~~
 having R.Q. Deck, Bridge + Forecastle
 (Type of Superstructures.)
 Port of Survey Belfast
 Date of Survey 5th - 8th Sept. 1932
 Name of Surveyor L.R. Edgar
 Particulars of Classification + 100 A1
S.S. Reg. No. 2-30

Ship's Name	Nationality and Port of Registry	Official Number	Gross Tonnage	Date of Build
KERRYMORE	British Trallee	135630	509	1921-2.

Moulded Dimensions: Length 164.75 Breadth 25.16 Depth 11.75
 Moulded displacement at moulded draught = 85 per cent. of moulded depth 286 tons
 Coefficient of fineness for use with Tables .749

Depth for Freeboard (D)	Depth correction	Round of Beam correction
Moulded depth 11.75	(a) Where D is greater than Table depth (D - Table depth) R = (11.75 - 10.98) 1.267 = + 1.01"	Moulded Breadth (B) <u>25.16</u> Standard Round of Beam = $\frac{B \times 12}{50} = 6.04$ " Ship's Round of Beam = <u>6.4</u> " Difference = <u>.21</u> " Restricted to Correction = $\frac{\text{Diff}^o}{4} \times (1 - \frac{S_1}{L}) = \frac{.21}{4} \times .7227 = -.037$
Stringer plate40 .03	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =	
Sheathing on exposed deck $T \cdot \left(\frac{L-S}{L} \right) =$	If restricted by superstructures	
Depth for Freeboard (D) = <u>11.78</u>		

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	
Poop enclosed ...	✓					Standard Height of Superstructure <u>6.00</u>
" overhang ...	✓					" " R.Q.D. <u>3.432</u>
R.Q.D. enclosed ...	95.25	95.25	3.58	-	95.25	Deduction for complete superstructure <u>22.48</u>
" overhang ...	✓					Percentage covered $\frac{S}{L} = 78.61\%$
Bridge enclosed ...	10.75	10.75	7.2	-	10.75	" " $\frac{S_1}{L} = 77.73\%$
" overhang aft <u>nil</u>						" " $\frac{E}{L} = 77.73\%$
" overhang forward	.25	.12			.12	Percentage from Table, Line A. <u>72.51%</u> (corrected for absence of forecastle (if required))
F'cle enclosed ...	20.62	20.62	7.2	-	20.62	Percentage from Table, Line B. (corrected for absence of forecastle (if required))
" overhang ...	2.63	1.32			1.32	Interpolation for bridge less than .2L (if required)
Trunk aft ...	✓					Deduction = <u>22.48</u> × .7251 = <u>16.30</u>
" forward ...	✓					
Tonnage opening aft ...	✓					
" " forward	✓					
Total ...	129.50	128.06			128.06	

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product	
A.P. ...	26.48	1		26.48	42	42.00	1		42.00	Mean actual sheer aft = <u>Excess</u>
$\frac{1}{2}$ L from A.P. ...	11.79	4		47.16	19	18.96	4		75.84	Mean actual sheer forward = <u>Excess</u>
$\frac{2}{3}$ L " ...	2.91	2		5.82	4	4.74	2		9.48	Mean standard sheer aft
Amidships ...	✓	4		✓	0	✓	4		✓	Mean standard sheer forward
$\frac{2}{3}$ L from F.P. ...	5.83	2		11.66	7	7.11	2		14.22	Length of enclosed superstructure forward of amidships = <u>.143</u>
$\frac{1}{2}$ L " ...	23.57	4		94.28	28	28.44	4		113.76	" " aft of " = <u>.500</u>
F.P. ...	52.96	1		52.96	66	66.00	1		66.00	
Total ...				238.36					325.44	

$$\text{Correction} = \frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{87.08}{18} \left(.75 - .393 \right) = - 1.73"$$

If limited on account of midship superstructure.

If limited to maximum allowance of $1\frac{1}{2}$ ins. per 100 ft.

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck =	15.36
Summer freeboard =	3.75
Moulded draught (d) =	11.61

Deduction for Tropical freeboard and addition for

$$\text{Winter freeboard} = \frac{d}{4} \text{ inches} = 2.90 = 3"$$

Addition for Winter North Atlantic Freeboard (if required) = 2

Deduction for Fresh Water.

Displacement in salt water at summer load water line

Tons per inch immersion at summer load water line

$$\text{Deduction} = \frac{\Delta}{40T} \text{ inches} = 3"$$

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

	+	-
Depth Correction ...	1.01	-
Deduction for superstructures ...	-	16.30
Sheer correction ...	-	1.73
Round of Beam correction ...	-	.01
Correction for Thickness of Deck amidships	-	-
Other corrections, scantlings, etc. ...	43.00	-
	44.01	18.04

$$\text{Summer Freeboard} = 44.42 + .58 = 45"$$

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

Tropical Fresh Water Line above Centre of Disc ...	3"	Tropical Fresh Water Freeboard ...	3' 9" (limited)
Fresh Water Line " " ...	3"	Fresh Water " " ...	3' 6"
Tropical Line " " ...	4.1L (limited)	Tropical " " ...	3' 9" (limited)
Winter Line below " " ...	3"	Winter " " ...	4' 0"
Winter North Atlantic Line " " ...	5"	Winter North Atlantic " " ...	4' 2"

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS									
Description of Hatchway	No. 1. For Deck	No. 2. on R.Q. Sk.	Bunker Hatch on Coaling Trip	Access Hatch to space above after peak	Access Hatch to space below forepeak	Access Hatch to space below after peak	Access Hatch to space below forepeak	Access Hatch to space below after peak	Access Hatch to space below forepeak
Dimensions of Hatchway	26' 7" x 14' 0"	26' 7" x 14' 0"	5' 1 1/2" x 13' 6"	2' x 2'	2' x 2'	2' x 2'	2' x 2'	2' x 2'	2' x 2'
COAMINGS	Height above Deck ... 30 1/2" Thickness Sides ... 1/2" Stiffeners ... 40 Brackets, Stays ... 4 mds.	As No. 1	7' 9" x 4' 0" B.A.	10' 40" 40"	10' 40" 40"	10' 40" 40"	10' 40" 40"	10' 40" 40"	10' 40" 40"
HATCH BEAMS	Number ... 4 Spacing ... 5' 4 1/2" max. Scantling and Sketch ... 5' 3" x 12' 2" 14' x 30' 2 1/2" x 30' 2 1/2" x 30'	As No. 1	2 Nos. 1. + 2 hatchways; after end coaming of No. 1 hatchway is connected by horizontal plate to bridge front.	None	None	None	None	None	None
FORE AND AFTERS	Number ... Spacing ... Unsupported Lengths ... Scantling* and Sketch ...	None	None	None	None	None	None	None	None
Bearing Surface	3" - see back of report.								
HATCH COVERS	Material ... Wood Thickness ... 2 1/2" How fitted ... 7' x 4' 3' 1/2" x 5'	As No. 1	Wood 2 1/2" 7' x 4' 3' 1/2" x 5'	Wood 2 1/2" One piece 2 1/2"	Wood 2 1/2" One piece 2 1/2"	Wood 2 1/2" One piece 2 1/2"	Wood 2 1/2" One piece 2 1/2"	Wood 2 1/2" One piece 2 1/2"	Wood 2 1/2" One piece 2 1/2"
Spacing of Cleats	22' x 23'	22' x 23'	22' x 23'	12' x 14'	12' x 14'	12' x 14'	12' x 14'	12' x 14'	12' x 14'
Number of Tarpaulins	3	2	1	1	1	1	1	1	1

*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? ☒ *None provided*

Particulars of fiddly, funnel and ventilator coamings:—
 Fiddly opening has gasket with hinged steel cover on top of casing.
 Funnel coaming on top of casing 6" in height, well protected by cape on funnel.
 Ventilators to boiler casing are situated on top of casings 7 ft in height. Coamings 2' 9" x 20" dia x 3/8" thick riveted to casing.
 Gen. Rm. skylight of wood on engine casing top, satisfactory.

Particulars of Flush Bunker Scuttles:— *None*

Particulars of Companionways:— Formed by steel chest house on bridge deck giving access through stairway opening to bridge space. Downways into chest house 4' 6 1/2" x 1' 11 1/2". Sill 14". Doors back 1/4" panelled 3/4". Securing opening both sides.

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

On Forecastle deck to below forepeak deck.
 1 to hold. Coaming 35" x 13" dia x 1/4".
 1 to hold. 38" x 12" dia x 1/4".
 1 - backwash store 7' x 6" dia x 1/4" - mushroom top.
 On Bridge deck to bridge space.
 2 goodenocks 13 1/2" high to bend. 5" dia x 1/4".
 1 mushroom 7' x 6" dia x 1/4" - mushroom top.

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

On Forecastle deck to fore peak tank.
 1 27" high protected by low clock under knighthead plate.
 On Foreboard deck fore.
 1 10" high to double bottom. Below forepeak dk. at forecastle front.
 On R.Q. Sk.
 2 13" high to double bottom. Close to bridge end bulkhead.
 1 17" high after peak. At casing into port.

Particulars of Gangway Cargo and Coaling Ports:—

None.

Particulars of Scuppers and Sanitary Discharge Pipes:—

1 discharge from W.C. on foreboard dk. below forecastle dk. port. Thru' shell approx 3' 6" below fld. dk. steam valve fitted.
 1 port } from wash basin in bridge. Discharge thru' bridge side approx 12" above freeboard deck. Stormvalves fitted.
 1 starboard }

Particulars of Side Scuttles:—

To crew accommodation in forecastle. Permanently attached hinged deadlights fitted.
 To accommodation in bridge. Permanently attached hinged deadlights fitted.

Particulars of Guard Rails:—

Official belwalks fitted round R.Q. Sk., also foreboard deck in forward well.
 do do fitted to sides and ends of bridge deck.
 do rails fitted to forecastle deck sides across end. Height 37". 2 rails. Stanchions approx. 3' 9" pitch.

Particulars of Gangways, Lifelines, etc.:—

No lifeline is provided in forward well.
 4 sockets for portable attachment are fitted to port hatch side coaming No. 1 hatchway & wooden gang plank at fore end of hatch to deck and provision for lifelines provided

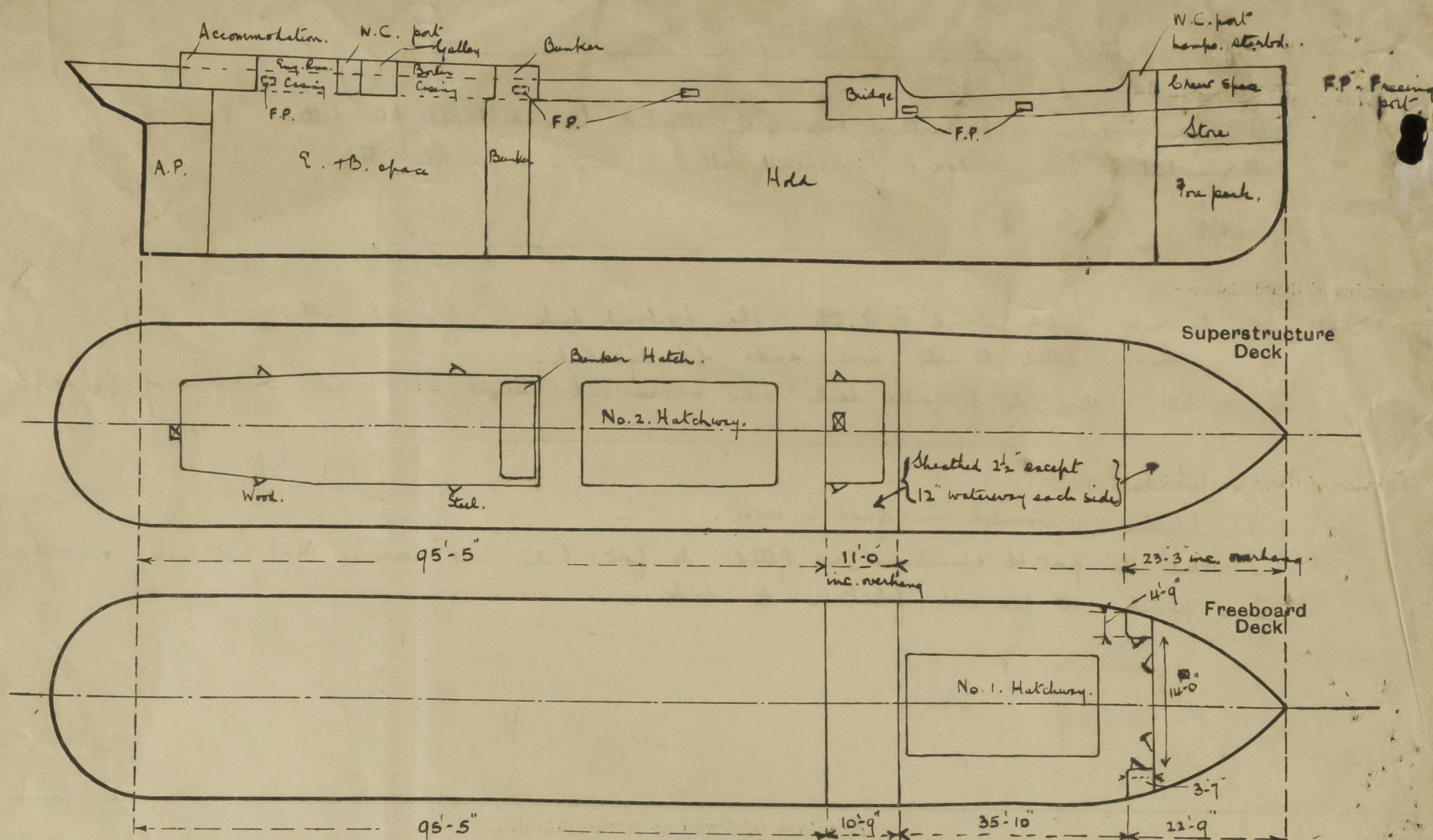
Particulars of Freeing Arrangements.						
	Length of Bulwark	Height of Bulwark	Size of Freeing Ports	Number each side	Area each side	Rule area each side
After Well	95' 5"	3' 3"	27" x 18" 2' 9 3/4" x 1' 6 1/2" 2' 9 3/4" x 1' 6 1/2" 2' 9 3/4" x 1' 6 1/2"	3	127.8 sq ft	19 sq ft
Forward Well	35' 10"	4' 0"	3' x 1' 9"	2	10.5 sq ft	10.08 sq ft

State position of each freeing port. After Well:— } see sketch.
 (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	see Bridge. After Bulkhead							
Bridge, After Bulkhead	24	24	L 6 x 3 x 30 alt. L 4 x 3 x 1/4	30"	BA's bracketed top section, 12 taking boundary line.	2' 11" x 1' 11" none	✓	✓
Bridge, Forward Bulkhead	24 + 30	24	L 6 x 3 x 30	30"	Bracketed top + bottom.	2' 11" x 1' 11" none	✓	✓
Forecastle Bulkhead	36	24	L 4 x 3 x 1/4 + steel partitions	29" approx.	Top nil bottom taking boundary angle.	4' 4" x 1' 11"	18"	✓
Trunk, Aft	✓							
Trunk, Forward	✓							
Exposed Machinery Casings on Deck	28	24	L 2 1/2 x 2 1/2 x 26 steel partitions.	28" + 21"	Bracketed to beams at top. Nil at bottom.	4' 5" x 1' 11" 1P. 15.	18 1/2"	7' 0"
Exposed Machinery Casings on Superstructure Decks	✓					4' 3" x 1' 10" 1P. 15.		
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	✓ no openings
Bridge, After Bulkhead	✓
Bridge, Forward Bulkhead	✓ no openings
Forecastle Bulkhead	✓ steel bars to W.C. slop room. 20".
Exposed Machinery Casings on Deck	✓ Tack - forecastle 1 1/8. Panelled 3/8 } Manipulated from both sides
Exposed Machinery Casings on Superstructure Decks	✓ Tack - engine casing 1 1/4. Panelled 3/4 } Manipulated from both sides.
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:—



This survey was carried out afloat. No other survey was done at this time.

$$\text{Forecastle} = 19.17 + \frac{358 \times 4.75}{11.75} = 20.62$$

$$\text{Overhang} = 23.25 - 20.62 = 2.63$$
 allowed 3.2

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

- Note.
- ① Hatch slides brackets inside hatchway require repair.
 - ② Means for manipulation of doors in fore-castle front machinery stokehold casing need overhaul this is being done.
 - ③ Fitting plate $2 \frac{3}{8} \times 1 \frac{1}{2}$ are being fitted in R.Q. side bulwarks 2 each side.
 - ④ It is requested that freeboard assignment be sent not to R. Mc. Bowen & Sons Ltd. but to
 Marine Superintendent's Dept.
 John. Kelly Ltd
 Belfast.
 who own this firm.

Builder's name and yard number. Larne S.B. Co. Ltd. Larne.

Names of sister ships

Owners R. Mc Bowen & Sons. Ltd.

Fee £ 6 : 16 : -

Received by me



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