

STEEL STEAMER or MOTORSHIP.

EB 24 1939

Received at London Office

State if Report has been sent on the Freeboard of the Vessel *Yes*State if Report is sent on the Machinery of the Vessel *Yes*

Date of completion of report

20th February 1939

Port of

Belfast.

No.

12,312

Survey held at

Belfast.

Date First Survey

3rd December 1937

Last Survey

10th February 1939

On the

(State if Machinery fitted Aft and if Single, Twin or Triple Screw)

Single Screw Motor Vessel

"RICHMOND CASTLE"

State Type

(Full Scantling, Complete Superstructure with or without Tonnage Openings)

Full Scantling

State Type of Erections Bridge & Forecastle.

TONNAGE under Tonnage Deck

3354.78

CLASS

State if with freeboard as condition of Class

No.

Built at

Belfast.

Do. of space or spaces between Tonnage Dk. and Upper Dk.

3608.58

Length from fore part of stem to after part of stern most on summer L.W.L. See Sec. 3 (1a)

L 450.0

Launched

Yard No.

Total

6963.36

Breadth (greatest moulded)

B 63.0

Builders

Gross Tonnage

4494.92

Depth, at middle of length from top of keel to top of beam at side of uppermost continuous deck. See Sec. 3 (1c)

D 37.0

Owners

Register Tonnage

4424.64

1st Longitudinal Number (L x D) = 16650

Managers

(Where necessary to be entered in Reg. Book.)

2nd Numeral L x (B + D) = 45000

Residence

REGISTERED DIMENSIONS.

FEET.

Length

454.4

Breadth

63.3

Depth

34.3

Framing Depth "d," at middle of length. See Sec. 3 (1d)

9.0

Proportions—Depth to Length—Uppermost continuous deck to top of keel

12.17

Port of Registry

If surveyed while building, afloat, or in dry dock

Draught Moulded

28' 11 3/4"

During construction & in dry dock.

FRAMES, DOUBLE BOTTOM AND BEAMS.

	INCHES IN SHIP.	Any Departure from Approved Plans to be Noted.		INCHES IN SHIP.	Any Departure from Approved Plans to be Noted.
FRAMES, Spacing amidships	3 1/2	✓	Bracket Floors, Frame	✓	
" " from 3/4 length amidships to Collision bulkhead	27	✓	" " Reversed Frame	✓	
" " in peaks	24	✓	" " Vertical Struts	✓	
SIDE FRAMING.			Centre Girder, depth and thickness amidships	47" x 56"	✓
Frame Amidships, Angle, [or F	8 x 3 1/2 x 3 1/2 x 48/52	✓	" " top Angles	47" x 51"	✓
" " Extends up to Upper Dk.	In way of Bridge 1/2 up. B. dks all. ✓	✓	" " bottom Angles	3 1/2 3 1/2 50	✓
Reversed Frame Amidships, Angle	4 x 3 1/2 x 40	✓	Side Girders, No. each side and thickness	Two 40"	✓
" " Extends up to	✓	✓	Margin Plate depth (excl. of flange) and thickness	38" x 56"	✓
Depth of Framing Girder	8"	✓	" " Vertical Angle to Tank side	3 1/2 3 1/2 48	✓
Frames in Uppermost Continuous 'tween Decks, Angle, [or F	8 x 3 1/2 x 3 1/2 x 48/52	✓	" " Bracket abaft 1/4 len. from stem	Inner bottom level to ship's side No brackets.	✓
" " Second 'tween Decks, Angle, [or F	"	✓	" " Vertical Angle to Tank side	Bracket from forward 1/4 len. from stem to Panting Area	✓
" " Third " " " "	"	✓	" " Gussets, spacing and scantling abaft 1/4 len. from stem	Inner bottom extended 1' 5" forming cont. gusset.	✓
" " from 1/4 len. for'd. to 15% len. from Stem	8 x 3 1/2 x 3 1/2 x 54/52	✓	" " Gussets, spacing and scantling from forward 1/4 len. from stem to Panting Area	✓	✓
" " in Peaks, Angle or [9 3 1/2 46	✓	Tank Side Brackets, height above base line at toe of Frame and thickness	45" x 44"	✓
Diameter and Spacing of Rivets through Frame and Shell Plating amidships	7/8 @ 5 3/4	✓	INNER BOTTOM PLATING.		
State if Frame Joggled	Yes.	✓	Breadth and thickness of Middle Line Strake	55" x 54"	✓
Are the scantlings and arrangements in the Panting Area in accordance with the Rules and/or as approved?	As approved	✓	Thickness of remainder in Holds	75 @ duct keel 46 to 42	✓
Are the scantlings and arrangements in way of the Bottom Forward in accordance with the Rules and/or as approved?	As approved	✓	Are Rule requirements complied with regarding increases of scantlings in way of double bottom in E. & B. space and framing in Bunkers and Boiler Room?	Yes.	✓
SINGLE BOTTOM.			BEAMS.		
Floors, Depth and thickness at mid-line in Holds			Uppermost Continuous Deck, amidships in Wells, Angle, [or F	8 x 3 1/2 x 3 1/2 x 36/52	✓
Height of Brackets at side above base line at toe of frame			" " in way of Bridge, Angle, [or F	9 x 3 1/2 x 3 1/2 x 48/52	✓
Middle Line Keelson, on Floors, Angles, [or [" " Spacing	3 1/2"	✓
" " Through Plate or Intercostal Plate			Second Deck, amidships, Angle, [or F	8 x 3 1/2 x 3 1/2 x 40/52	✓
" " Foundation Plate on Floors			" " Spacing	3 1/2"	✓
" " Flat Plate Keel Angles			Third Deck, amidships, Angle, [or F	8 x 3 1/2 x 3 1/2 x 40/52	✓
Side Keelsons, No. each side			" " Spacing	3 1/2"	✓
" " thickness of Intercostal Plate			Fourth Deck, amidships, Angle, [or F	8 x 3 1/2 x 3 1/2 x 40/52	✓
" " Angles			" " Spacing	3 1/2"	✓
DOUBLE BOTTOM.			Poop Deck, Angle, [or [✓	
Solid Floors, thickness and spacing	44 @ 3 1/2"	✓	" " Spacing	✓	
" " Are Frame and Reversed Frame joggled?	Frame only	✓	Bridge Deck, Angle, [or F	8 x 3 1/2 x 3 1/2 x 32/52	✓
Bracket Floors, breadth and thickness at middle line	✓	✓	" " Spacing	3 1/2"	✓
" " breadth and thickness at margin plate	✓	✓	Forecastle Deck, Angle, [or F	7 x 3 x 3 x 36-26/42	✓
			" " Spacing	27 x 24"	✓

PILLARS AND DECKS.

	INCHES IN SHIP.	Any Departure from Approved Plans to be Noted.		INCHES IN SHIP.	Any Departure from Approved Plans to be Noted.
PILLARS, No. of Rows.....	<i>Two</i>	✓	Stringer Plate, breadth and thickness in way of Bridge	<i>50 x 42 port 50 x 34 stb.</i>	✓
" in 'tween Decks, Size and Spacing.....	<i>Wide</i>		Thickness of Plating abreast Deck openings in way of Wells	<i>40 to 34</i>	✓
" " " " " "	<i>Spaced pillars & girders as approved.</i>	✓	Thickness of Plating abreast Deck openings in way of Bridge	<i>30 abt. hatch. 42 pt. abt. E.R. 32 stb.</i>	✓
" in Holds " " " "			Thickness of Plating within line of openings...	<i>34 to 32</i>	✓
" " " " " "			If Sheathed, material and thickness	✓	
Centre Line Bulkhead.			Third Deck.		
Stiffeners and Spacing.....	✓		Stringer Plate, breadth and thickness.....	<i>50 x 34 to 38 x 30</i>	✓
Plating, thickness of	✓		If Plated, state thickness.....	<i>30</i>	✓
STRINGERS AND DECKS.			Fourth Deck.		
Uppermost Continuous Deck.			Stringer Plate, breadth and thickness.....	<i>50 x 34 to 38 x 30</i>	✓
Stringer Plate, breadth and thickness in Wells	<i>64 x 89 to 41 x 44</i>	✓	If Plated, state thickness	<i>30</i>	✓
" " " " in way of Bridge	<i>64 x 44</i>	✓ <i>50 x 44</i>	Poop Deck.		
" Angle in Wells	<i>6 x 6 x 89</i>	✓	Stringer Plate, breadth and thickness	✓	
Thickness of Plating abreast Deck openings in way of Wells	<i>5 x 5 x 61 fwd. 3 1/2 x 3 1/2 x 44 aft. 61</i>	✓	Plating, Sheathing, material and thickness ...	✓	
Thickness of Plating abreast Deck openings in way of Bridge	<i>40 abreast hatch 42 E.R. casing</i>	✓	Bridge Deck.		
Thickness of Plating within line of openings...	<i>44, 34</i>	✓	Stringer Plate, breadth and thickness.....	<i>64 x 58</i>	✓
If Sheathed, material and thickness	<i>1/2" asphalt in wells</i>	✓	Plating, Sheathing, material and thickness ...	<i>42 Sheathed 2 1/2" OP</i>	✓
Second Deck.			Forecastle Deck.		
Stringer Plate, breadth and thickness in Wells...	<i>50 x 44 to 38 x 36</i>	✓	Stringer Plate, breadth and thickness.....	<i>36 x 38</i>	✓
			Plating, Sheathing, material and thickness ...	<i>36</i>	✓

SHELL PLATING.

SCANTLINGS.					RIVETING.							
STRAKES.	AS IN VESSEL.				ANY DEPARTURE FROM APPROVED PLANS TO BE NOTED.	EDGES. State if jogged? No.			BUTTS.			
	AMIDSHIPS.		FORWARD.	AFT.		SINGLE OR DOUBLE.	RIVETS.		No. OF ROWS OF RIVETS.	RIVETS.		STRAPPED OR LAPPED.
	Breadth.	Thickness.	Thickness.	Thickness.			Diam.	Spacing cr. to cr.		Diam.	Spacing cr. to cr.	
	Inches.	Inches.	Inches.	Inches.			Inches.	Inches.		Inches.	Inches.	
FLAT PLATE KEEL	60	90	✓ 81	✓ 81		Double	1	4	✓ Four	1	3 3/4	✓ Lapped
<i>In way deck keel 60 x 1.08</i>												
<i>Do. (if any)</i>						"	1 1/8	4	✓ "	1 1/8	4 1/4	✓ "
BOTTOM PLATING, No. of Strakes3.....		71	✓ 78	51	69 at stern/post.	"	7/8	3 1/2	✓ "	7/8	3 1/2	✓ "
BILGE PLATING, No. of Strakes2.....		71	51	51	79 at boss. ✓	"	"	"	✓ "	"	"	✓ "
SIDE PLATING, No. of Strakes4.....		69	48	48	5 fwd. plates in B shake and 4 fwd. plates in C + E strakes	"	"	"	✓ "	"	"	✓ "
UPPER DECK, Sheer-strake in Wells.....	69	88	✓ 48	✓ 48	increased 10" in thickness (.88") at Owners request. ✓	<i>See letter to Mr. Miller 28.2.45</i>	1	4	✓ Five	1	4	✓ "
UPPER DECK, Sheer-strake in Bridge ...	"	69	✓			"	7/8	3 1/2	✓ Four	7/8	3 1/2	✓ "
STRAKE BELOW Sheer-strake in Wells.....	"	77	✓ 48	✓ 48		"	1	4	✓ "	1	4	✓ "
STRAKE BELOW Sheer-strake in Bridge ...	"	69	✓			"	7/8	3 1/2	✓ "	7/8	3 1/2	✓ "
POOP SIDE PLATING												
BRIDGE SIDE PLATING ...		64	✓			One Strake	7/8	3 1/2	✓ Five	7/8	"	✓ "
FOREC'TLE SIDE PLATING			44	✓		Single	3/4	3	✓ One	3/4	2 5/8	✓ "

WATERTIGHT BULKHEADS.

Total No. of W.T. BULKHEADS in Vessel—	
Extending to Upper Deck (Sec. 3 c)	<i>4</i>
" Deck next below	<i>4</i>
As per Rule	✓

	Plating Thickness.	STIFFENERS.			
		VERTICAL.		HORIZONTAL.	
		Scantlings.	Spacing.	Scantlings.	Spacing.
MIDSHIP BULKHEAD, Upper tween decks	<i>26</i>	<i>4 1/2 x 3 x 34 L</i>	✓ <i>30</i>		
" " Second "	<i>30</i>	<i>5 1/2 x 3 x 36 BA</i>	✓ <i>30</i>		
" " Third "	<i>34</i>	<i>6 1/2 x 3 x 36 BA</i>	✓ <i>30</i>		
" " Holds	<i>43-38</i>	<i>8 x 3 1/2 x 44 BA</i>	✓ <i>30</i>		
COLLISION " (in Hold)	<i>54-40</i>	<i>8 x 3 1/2 x 44 BA</i>	<i>24</i>	<i>Semi box beam</i>	
AFTER PEAK " "	<i>43-33</i>			<i>6 x 3 x 40 BA</i>	<i>24</i>

FORGINGS and CASTINGS.

	Casting or Forging.	Scantlings.	Maker's Name.	Any Departure from Approved Plans to be Noted.
KEEL, Bar	<i>Flat plate</i>			✓
STEM	<i>Rolled MS</i>	<i>10 1/2 x 2 3/4</i>		✓
STERN FRAME { Propeller Post	<i>C.S.</i>		<i>As appd Beardmore & Co Ltd.</i>	
{ Rudder "	<i>C.S.</i>		<i>for sister vessel.</i>	
Speed of Vessel.....	<i>16 knots</i>			✓
RUDDER—Type.....	<i>Ordinary</i>			✓
" A x D ... <i>Area</i>	<i>193 sq. ft.</i>			✓
" Diam. of head	<i>15"</i>			✓
" Mainpiece at top pintle	<i>C.S.</i>		<i>As appd. Beardmore & Co Ltd.</i>	
" " heel ..	<i>Frame sister vessel.</i>			✓
" how constructed				
" double or single plate coupling, vertical or horizontal	<i>Double plate electrically welded</i>			✓

STEEL.	Manufacturer's Name or Trade Mark of the Steel used in the construction of the Vessel (state process of manufacture)	<i>Messrs Colville, Ltd., Dorman, Long & Co Steel Company of Scotland</i>	✓
	Has the Steel been tested as required by the Rules?	<i>Yes</i>	✓

EQUIPMENT No												LETTER	ANCHORS.			
Number of Certificate.	Anchors.	WEIGHT, EX. STOCK			WEIGHT OF STOCK			TEST, PER CERTIFICATE.				WEIGHT REQUIRED BY TABLE 53.	Description of Anchor.	Makers.	Where and when tested and Superintendent.	
		Cwts.	qrs.	lbs.	Cwts.	qrs.	lbs.	Tons.	cwts.	qrs.	lbs.	Cwts.				
94551	1st Bower ...	77	1	7	✓			57	8	3	0	✓	Byers Type (C.S. Head)	5 Taylor Sons	LPH.N. 5.7.38 JAR	
94553	2nd „ ...	77	3	7	✓			57	12	2	0	✓	Shank F.O.H. 1. Steel	(Brierley Hill)	„ „ „	
94554	3rd „ ...	77	2	14	✓			57	12	2	0	✓	Shkl U. WS	Ld.	„ 7.7.38 „	
	Collective weight.	232	3	0	✓							232				
94555	Stream	23	2	14	5	3	21	23	11	3	14	✓	23½	Rodgers 3 W. 1	„	„ 5.7.38 „

CHAIN CABLES.										HAWSERS AND WARPS.								
Number of Certificate.	Length and size supplied.		Test per Certificate.		WEIGHT OF CHAIN CABLE.			Length and Size per Table 53.		Description.	Makers of Cables.	Where and when tested, and Superintendent.	Material.	Length and Size supplied.		Breaking Test of Steel Wire.	Length and Size per Table 53.	
	Length.	Diam.	Statutory.	Break-ing.	Supplied.	Per Rule.	Length.	Diam.	Length.					Cir.	Length.		Cir.	
	Fathoms.	Ins.	Tons.	Tons.	Cwts.	qrs.	lbs.	Cwts.	Fathoms.	Ins.				Fathoms.	Ins.	Tons.	Fathoms.	Ins.
89247	300	2 3/16	120 1/2	168 1/2	758.0.8		717.5	300	2 1/2	Stud Link brdy.	5 Taylor Sons (Brierley Hill) Ltd.	LPH.N. 5.7.38 JAR.	TOWLINE...	130	5 1/2	84.4	130	5 1/2
			2 end Shkls 4 join?		2. 1.20		(equiv.)						HAWSERS & WARPS	4@100	2 3/4	15.2	4@100	2 3/4
					3. 0.22													
Iron Stream Chain or Steel Wire	120	4 3/4			64.6			120	4 3/4		Halls Barton Ropeny.	Makers Cert. ✓						

Steering Gear, Type (Power or hand) *Harland & Wolff Electric* Alternative Means of Steering ☒

Steering Chains (Size and Test) *Electric motor control* Windlass *Stothert & Pitt, Electric* Boats *Four life boats*

Ceiling in Holds, thickness and material *Holds insulated* Cargo Battens, thickness, material and spacing *Holds & tween decks insulated* ✓

Cargo Hatchways.—(Upper Deck) *Steel plates & rolled sections* Thickness of Hatches *2 1/2* ✓

Size of Hatchways No. 1 (Fwd.) *20'3" x 16'0"* No. 2 *26'3" x 16'0"* No. 3 *23'7 1/2" x 16'0"* No. 4 *21'0" x 16'0"* No. 5 *21'0" x 16'0"* No. 6 ✓

Number of Shifting Beams and for Fore and Afters } *Nº 1 3.4 & 5 Four. Nº 2 Five* For HARLAND AND WOLFF, LIMITED

Builder's Signature *Chas. Payne* DIRECTOR

GENERAL DECLARATION. It should be stated (a) whether the vessel (if not a motorship) is fitted for the carriage and burning of oil used as fuel *Motorships* ✓

(b) whether the vessel, not being an oil tanker, is fitted for carrying oil as cargo *No* ✓ The positions in which oil is carried as fuel or cargo should be indicated, together with the flash point (where required to be inserted in the Notation).

Oil Fuel (F.P. above 150°F.) is carried in double bottom in deep tanks at sides of tunnel space, and in Bunkers at after end of Motor Room. ✓

The vessel has been built in accordance with the approved plans, the Secretary's letters, and in general conformity with the Society's Rules for the class contemplated. ✓

The double bottom tanks, fore and after peak tanks, oil fuel bunkers, cofferdams and duct keel have been tested under water pressure to Rule requirements and found satisfactory. ✓

The weather decks, watertight bulkheads, tunnel flat, and sidelights have been hose tested with satisfactory results. ✓ The steering gear, windlass, anchors, bilge pumps and watertight door into tunnel space have been tried under working conditions and found in order. ✓ The Freeboards assigned to the vessel have been marked on the vessels sides, verified and cut in, and the Freeboard Certificate and copy issued. ✓

The amount of Entry Fee £ 10 : 0 : 0 Fees applied for, *23 Feb 1939* (Special notations, where part of class, to be stated.)

Special Survey Fee £ 394 : 19 : 0 Received by me, *11.3.39*

Freeboard I am of opinion the Vessel should be Classed *100A1* ✓

Travelling Expenses, if any £ 18 : 0 : 0

State whether the Vessel has been built under Special Survey *yes* Signature *J. B. Bochs* Surveyor to Lloyd's Register of Shipping.

Certificate to be sent to *Belfast* Date of issue *14/3/39*

Committee's Minute *TUE 28 FEB 1939*

Character assigned *+ 100A1*

Lloyd's arch *+ Lamb 2.39*

Writet *S.B.-100A1*

Oil Oil

Lloyd's Register Foundation

W175-00282/2

GENERAL REMARKS—(The Surveyor should state the Number of Report and Name of any Sister Vessel. Plans showing Vessel as built should be forwarded and a List of the Plans should be embodied.)

This vessel is sister to the M.V.'s "ROCHESTER CASTLE" & "ROXBURGH CASTLE" (Belfast Reports N^o 11940 & 11967)

The following Forging & Casting Reports are forwarded: Stem frame, Rudder frame, Rudder stock, Tiller. Also reports of tests on Mast and Derrick tubes.

A plan of midship section as built is forwarded herewith, and plans as per attached list.

With reference to the Secretary's letter of 22nd December 1937, relative to the corrosion of rivet points on the sister vessels, special attention has been given to the quality of the rivets used in the construction of this vessel, and frequent and regular sulphur prints have been taken, with uniformly good results.

Note: The Holds and Tween Decks and the forward part of Bridge space are insulated for the carriage of Refrigerated cargoes.

PARTICULARS OF ELECTRIC WELDING (if employed) Decks to shell (below upper deck). N^o 1 tank top to shell. O.F. bunkers in Motor Room and tunnel. Peak tank tops to shell.

SPECIAL NOTATIONS:—Either as part of the vessel's class or for record in the Register Book Oil Eng. Cruiser Stern. Ref. Mchry., D.F.

Particulars of Drop Test of Cast Steel Anchors, viz.:— Weight, Surveyor's Initials, Number of Certificate, Date of Test.	1st Bower	43.3.21	F.H. 20008	22.4.38	(Wt. including pins 48.2.0)
	2nd "	44.2.14	F.H. 20004	22.4.38	" " " 49.0.21
	3rd "	44.1.22	F.H. 20010	22.4.38	" " " 49.0.0

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop ft., R.Q.D. ft., Bridge 120.8 ft., Forecastle 47.8 ft. (in feet and tenths). When the Poop or Forecastle are joined to the B.D., this should be distinctly stated

Official No. 164169 Signal Letters Extreme Breadth over Belting No belting Over-all Length 474.2

No. and Material of Decks 4 Sts (Stl)

Parts of Bottom of Vessel coated with cement or approved composition N^o 1 DB tank (Water ballast) N^o 4 DB tank (Feed water). Elsewhere (in way of oil fuel) none.

Particulars of composition (if fitted) and of approval None

PARTICULARS OF WATER BALLAST:—(Comprising all tanks which may be used for Water Ballast. (Circ. 1284) Wells are not to be included in the lengths of the tanks, but Cofferdams and Dry Tanks (if tested) are to be included.)

Where Fitted.	Length.	Water Capacity.	Where Fitted.	Length.	Water Capacity.
	Feet.	Tons.		Feet.	Tons.
Double bottom, aft, Frames 52a to 23a.	76.1	232	Fore peak tank,		46
Double bottom, under Engines and Boilers, 23a to 17	60.4	322	After peak tank,		126
Double bottom, if under Engines only,			Deep tank, aft,		
Double bottom, if under Boilers only,			Deep tank, forward,	44.6	326
Double bottom, forward, Frames 27 to 82f.	198.0	560	Other tanks, if fitted, O.F. Bunkers	10.5	256
Total length (if continuous) and Capacity		1114	(If necessary, furnish further information by sketch.)	7.9	
	334.5				

Order for Special Survey No. 871

Date 8th December 1937

Dates of Surveys held while building

1937 1938
Dec. 3 Jan. 6, 13, 21, 28 Feb. 2, 9, 16, 22 Mar. 1, 4, 9, 14, 18, 23, 30 Apr. 4, 8, 14, 22, 25, 28 May 3, 4, 10
17, 18, 24, 26, 30 June 2, 6, 9, 28 July 1, 7, 8, 19, 20, 22, 25, 27, 28, 29 Aug. 2, 3, 5, 8, 11, 12, 15, 18, 22, 24
25, 26, 29 Sept. 5, 7, 8, 12, 16, 23, 26, 28 Oct. 5, 7, 11, 12, 25, 27 Nov. 1, 2, 7, 8, 15, 28 Dec. 13, 19, 20
12, 16, 18, 23, 24, 26, 27, 30, 31 Feb. 1, 10.

Lloyd's Register Foundation
Total No. of Visits 96