

Rpt. 1.

WRECK
DISSECTION
SECTION

STEEL STEAMER or MOTORSHIP

State if Report has been sent on the Freeboard of the Vessel

State if Report is sent on the Machinery of the Vessel

WRECK

SECTION

SECTION

No.

Date of completion of report

20/1/41

Port of

NEWCASTLE-ON-TYNE

No.

99127

Survey held at

South Shields

Date First Survey

15 Dec 1939

Last Survey

31 Dec

1940

On the

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

Single Screw Steamer

"EMPIRE RAIN"

State Type

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

Complete Superstructure, without tonnage opening

State Type of Erections

Complete Superstructure

TONNAGE under
Tonnage Deck...

6912.25

CLASS 100A1

State if with freeboard
as condition of Class

Yes

Built at

South Shields

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

Total

Gross Tonnage

7290.13

Register Tonnage

5122.82

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

L 425.00

Breadth (greatest moulded)

B 56.50

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

D 37.83

1st Longitudinal Number (L x D)

= 15760

2nd Numeral L x (B + D)

= 39771

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

11.23

Proportions—Depth to Length—Uppermost con-
tinuous deck to top of keel

11.23

Do. Long Bridge to top
of keel

27-0 3/4

Draught Moulded

27-0 3/4

Launched 30 Oct. 1940

Yard No 590

Builders John Readhead & Sons Ltd.

Owners Ministry of Shipping

Managers Thompson & S. S. Co. Ltd.

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

Residence

London

Port of Registry South Shields

If surveyed while building, afloat, or in dry dock

Building & afloat.

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	30 ✓		Bracket Floors, Frame	6 3 1/2 7/16 ✓	
" " from 1/2 length amidships to Collision bulkhead	27 ✓		" " Reversed Frame	6 3 1/2 7/16 ✓	
" " in peaks	24 ✓		" " Vertical Struts	10 3 1/2 7/16	
SIDE FRAMING.			Centre Girder, depth and thickness amidships	50 48 ✓	
Frame Amidships, Angle, [or]	12 4 x 4 x 1/2 ✓		" " top Angles	4 4 1/2 ✓	
" " Extends up to	2nd dk. ✓		" " bottom Angles	4 4 7/16 ✓	
Reversed Frame Amidships, Angle	-		Side Girders, No. each side and thickness	One 36 ✓	
" " Extends up to	-		Margin Plate depth (excl. of flange) and thickness	43 3/4 54 ✓	
Depth of Framing Girder	12 ✓		" " Vertical Angle to Tank side Bracket abaft 1/2 len. from stem	6 6 1/2 ✓	
Frames in Uppermost Continuous 'tween Decks, Angle, [or]	6 3 1/2 7/16 every fr. ✓ 8 3 1/2 7/16 in bulkhead ✓		" " Vertical Angle to Tank side Bracket from forward 1/2 len. from stem to Panting Area	6 6 1/2 ✓	
" " Second 'tween Decks, Angle, [or]	-		" " Gussets, spacing and scantling abaft 1/2 len. from stem	4 4 1/2 every frame ✓	
" " Third " " " "	12 3 1/2 45 ✓		" " Gussets, spacing and scantling from forward 1/2 len. from stem to Panting Area	Continuous in d'ol hold. ✓	
" " from 1/2 len. for'd. to 15% len. from Stem	4 4 1/2 rev. L ✓		Tank Side Brackets, height above base line at toe of Frame and thickness	95 46 ✓	
" " in Peaks, Angle or [8 3 1/2 35 ✓		INNER BOTTOM PLATING.		
Diameter and Spacing of Rivets through Frame and Shell Plating amid- ships	7/8 5 3/4 ✓		Breadth and thickness of Middle Line Strake	89 50 42 ✓ 58 58 E. SPACE ✓ 44 44 B. " ✓	
State if Frame Joggled	Yes ✓		Thickness of remainder in Holds	Yes ✓	
Are the scantlings and arrangements in the Panting Area in accordance with the Rules and/or as approved?	Yes ✓		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 ✓	
Are the scantlings and arrangements in way of the Bottom Forward in accordance with the Rules and/or as approved?	Yes ✓		BEAMS.		
SINGLE BOTTOM.			Uppermost Continuous Deck, amidships in Wells, Angle, [or]	10 3 1/2 1/2 ✓	
Floors, Depth and thickness at mid-line in Holds	-		" " in way of Bridge, Angle, [or]	30 ✓	
Height of Brackets at side above base line at toe of frame	-		Spacing	30 ✓	
Middle Line Keelson, on Floors, Angles, [or]	-		Second Deck, amidships, Angle, [or]	12 3 1/2 45 ✓	
" " Through Plate or Intercoastal Plate	-		Spacing	30 ✓	
" " Foundation Plate on Floors	-		Third Deck, amidships, Angle, [or]	-	
" " Flat Plate Keel Angles	-		Spacing	-	
Side Keelsons, No. each side	-		Fourth Deck, amidships, Angle, [or]	-	
" " thickness of Intercoastal Plate	-		Spacing	-	
" " Angles	-		Poop Deck, Angle, [or]	-	
DOUBLE BOTTOM.			Spacing	-	
Solid Floors, thickness and spacing	41 every floor ✓		Bridge Deck, Angle, [or]	-	
" " Are Frame and Reversed Frame joggled?	Yes ✓		Spacing	-	
Bracket Floors, breadth and thickness at middle line	33 41 ✓		Forecastle Deck, Angle, [or]	-	
" " breadth and thickness at margin plate	18 41 ✓		Spacing	-	

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.....				See Profile	Stringer Plate, breadth and thickness in way of Bridge	-			
" in 'tween Decks, Size and Spacing.....	3'	one row at centre	✓		Thickness of Plating abreast Deck openings in way of Wells40	✓		
" " " " "	-				Thickness of Plating abreast Deck openings in way of Bridge	=			
" in Holds " "	-				Thickness of Plating within line of openings...	.34	✓		
" " " " "	-				If Sheathed, material and thickness	as per	✓		
Centre Line Bulkhead.					Third Deck.				
Stiffeners and Spacing.....	12	3 1/2	.45	all. for ✓	Stringer Plate, breadth and thickness.....	-			
Plating, thickness of30	✓		If Plated, state thickness.....	-			
STRINGERS AND DECKS.					Fourth Deck.				
Uppermost Continuous Deck.					Stringer Plate, breadth and thickness.....	-			
Stringer Plate, breadth and thickness in Wells	60	.65	✓		If Plated, state thickness				
" " " " in way of Bridge					Poop Deck.				
Angle in Wells	6	6	5/8	✓	Stringer Plate, breadth and thickness	-			
Thickness of Plating abreast Deck openings in way of Wells	6	3 1/2	5 1/2	7/16 ends ✓	Plating, Sheathing, material and thickness ...	-			
Thickness of Plating abreast Deck openings in way of Bridge65	✓		Bridge Deck.				
Thickness of Plating within line of openings...		.40	✓		Stringer Plate, breadth and thickness.....	-			
If Sheathed, material and thickness		-			Plating, Sheathing, material and thickness ...				
Second Deck.					Forecastle Deck.				
Stringer Plate, breadth and thickness in Wells...	48 1/2	.41	✓		Stringer Plate, breadth and thickness.....	-			
					Plating, Sheathing, material and thickness ...	-			

SHELL PLATING.

[illegible]

WATERTIGHT BULKHEADS.

Total No. of W.T. BULKHEADS in Vessel—

Extending to Upper Deck (Sec. 3 c)	6	1
„ Deck next below	1	6
As per Rule		

Hold Bldgs not permitted to take lower deck height.

FORGINGS and CASTINGS.

	Casting or Forging.	Scantlings.	Maker's Name.	Any Departure from Approved Plans to be Noted.
KEEL, Bar		Flat plate	✓	
STEM		rolled bar $9\frac{3}{4} \times 2\frac{5}{8}$	✓	
STERN FRAME {	Propeller Post	Casting	$\Delta \frac{1}{16} \times 1\frac{1}{2}$ ✓	Darlington Forge ✓
	Rudder "	Casting		
Speed of Vessel		Under 12 knots	✓	
RUDDER—Type		Duplex single plate		
" A x D		319	✓	
" Diam. of head		9"	✓	Darlington Forge
" Mainpiece at top pintle		cb approved		
" " heel }		plan	✓	
" how constructed		Shear line casting of plates	✓	
" double or single plate		Single	✓	
" coupling, vertical or		Horizontal	✓	
" horizontal			✓	

		Plating Thickness.	STIFFENERS.			
			VERTICAL.		HORIZONTAL.	
			Scantlings.	Spacing.	Scantlings.	Spacing.
MIDSHIP BULKH'D,	Upper tween decks	✓ .26	✓ 5.3 x 3/8	✓ 30"	-	-
"	Second "	-				
"	Third "	-				
"	Holds 102	✓ .48 - .27	✓ 12.3 1/2 x 7/16	✓ 32 1/2"		
COLLISION	(in Hold)	✓ .48 - .30	✓ 6 x 3 1/2 x 5/16	✓ 24"	✓ 2 com' 2 x beam	✓
AFTER PEAK	"	✓ .52 - .30	✓ 7 x 3 x 3/8	✓ 24"	✓ 1 ditto	✓

STEEL.

Manufacturer's Name or Trade Mark of the Steel used in the construction of the Vessel (state process of manufacture) *Yes. Open Hearth. ✓*
Bonsett Iron Co. Bangs Fleet Iron Co. South Durham S. & F. Co. Offlooby Trading Co. S. Co.
Shinningrove Iron Co. Lenardshire Steel Co. Dorman Long & Co.
Has the Steel been tested as required by the Rules? *Yes. ✓*

EQUIPMENT No 40437												LETTER 67 ✓		ANCHORS. 2 B, 19 as approved.	
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.			
39766	1st Bower ...	72	3	0	✓			55	5	0	0	72½	Byers Improved		Sunderland 14/5/40 H. Holman
39767	2nd " ...	72	2	0	✓			55	0	0	0	as approved.	ditto		ditto
	3rd " ...	omitted as of EMERGENCY										62			
	Collective weight.				✓							20 ¼			
53401	Stream	20	3	16	✓	5	0	26	21	10	1	20½	One very forged steel anchor	Kendrick & Co	Spalding Heath 28/6/40 L. B. Paul

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.	Statu- tory.	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.				
61343	120½	2¾	✓ 10¼	✓ 142⅞	340.	2.	8	etc approved	300	2⅝	Shad lead	Kendrick & Co.	Bradley Head	20/6/40	L. B. Paul	TOWLINE...	130	5	✓ 40.9	✓	
61344	119	2¾	✓ 10¼	✓ 142⅞	337.	1.	19	during "Emergency"			"	"	- do -			HAWSELS & WARPS	2 @ 100	2¾	✓ 15.2	✓	
	239½				60 fms omitted on a/c 'EMERGENCY'													2 @ 100	2¾	✓ 15.2	✓
		Cir.								Cir.						"					
Iron Steam Chain or Steel Wire	120	5	✓	✓	52.8	-	-				Good Haggis	Newcastle	20/11/40			"					

Steering Gear, Type (Power or hand) *Steam controlled by Telemotor gear.* Alternative Means of Steering *Blocks & tackle leading to wind*

Steering Chains (Size and Test) *3" 100,000* ✓ Windlass *Steam, Blake Chapman* ✓ Boats *1 lifeboat 27'*
1 dinghy 18'

Ceiling in Holds, thickness and material *2 1/2 NW. over bilges only* Cargo Battens, thickness, material and spacing *all frames punched for batten*

Cargo Hatchways.—(Upper Deck) *Steel coverings and angles* **Thickness of Hatches** *3 W. W. (old wood covers fitted to 2nd deck)*

Size of Hatchways No. 1 (Fwd.) 29' 3" x 22' 0" No. 2 32' 6" x 22' 0" No. 3 12' 6" x 22' 0" No. 4 14' 6" x 22' 0" No. 5 32' 6" x 22' 0" No. 6 32' 6" x 22' 0"

Number of **Shifting Beams** *Shifting beams, 4 to Pcs 1, 2, 5, 6, 1 1/2 Pcs 3, 2 1/2 Pcs 4 Lashway*
and/or **Fore and Afters** *For JOHN REDHEAD & SONS LIMITED.*

For, JOHN READHEAD & SONS, LIMITED.

Builder's Signature

MANAGING 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 *Not fitted for carrying or burning oil fuel.*
(b) whether the vessel, not being an oil tanker, is fitted for carrying oil as cargo *Not fitted for oil cargo.* 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).

The vessel has been constructed in accordance with the approved plans, the Secretary's letter and generally conforms with the Society's Rules for the class contemplated.

The workmanship and materials are good.

The weather decks, tunnel and watertight bulkheads have been tested and found satisfactory. All double bottom tanks, the peak tanks and ash shoot have been tested as required by the Rules and found satisfactory. ✓

The freeboards assigned have been marked on the vessels' sides, verified and cut in.

The windlass steering gear and watertight doors have been tested with good results.

The amount of Entry Fee £ 10 : 0 : 0

Fees applied for,

(Special notations, where part of class, to be stated.)

Special Survey Fee.... £ 477: 16 : 0

Received by me,

I am of opinion the Vessel should be Classed *7100A1 with Proband*

Freeboard £ 18. 0. 0

19

I am of opinion the Vessel should be Classed ~~100A~~ *100A1 with foreboard*
Tonnage opening not fitted.

State whether the Vessel has been built under Special Survey *Yes*

Signature

A. McShackan. J. Roberts.
Surveyor to Lloyd's Register of Shipping.

Certificate to be sent to

Date of issue

Committee's Minute

Character assigned

TUE. 28 JAN 1941

+ 100 Rs

With freeboard

Lloyd's and Co.

note for S.R.L.

Write Apr 18

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.)

The approved plans 13 in number & the forging and casting reports are forwarded herewith. A profile and midship section of the vessel as built will be forwarded later.

6 Divisional W.T. BHs in 'ween dks on frames: 140, 102, 90/92, 40, 44 & 19

Depth to 2nd dk = 29.08'

D for scantlings = 3 1/4" 08

Depth moulded to top deck as per Midship Sect = Freeboard Rekt 3 1/4" 83'

On a/c of tumble home the difference in depth would be + .04'

PARTICULARS OF ELECTRIC WELDING (if employed)

No parts of primary importance have been welded. ✓

The hatch beams, ventilator coamings, derrick posts and numerous brackets and fittings have been welded. ✓

SPECIAL NOTATIONS:—Either as part of the vessel's class or for record in the Register Book

5 divisional W.T. BHs in 'ween dks

Wireless D.F.

Bruner stern

Particulars of Drop Test of Cast Steel Anchors, viz.:—
Weight, Surveyor's Initials,
Number of Certificate, Date
of Test.

1st Bower	(39766)	2624	43.2.8	J.D.	17.2.40
2nd "	(39767)	2661	43.3.10	"	7.3.40
3rd "					

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

Official No. 168,647

Signal Letters GNTQ

Extreme Breadth over Belting (Circ. 1611)

No belting

Over-all Length 449 feet. (Circ. 1703)

No. and Material of Decks 1 dk (S&L) & 1 shell dk (S&L)

Parts of Bottom of Vessel coated with cement or approved composition Bottom cemented in peaks and boiler room tank ✓
Belges and Remainder of double bottom cement washed.

Particulars of composition (if fitted) and of approval

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. Feet.	Water Capacity. Tons.	Where Fitted.	Length. Feet.	Water Capacity. Tons.
Double bottom, aft,	137.5	445	Fore peak tank,		
Double bottom, under Engines and Boilers,			After peak tank,	22.0	150 ✓
Double bottom, if under Engines only,	25.0	135	Deep tank, aft,	24.0	225 ✓
Double bottom, if under Boilers only,	20.0	110	Deep tank, forward,		
Double bottom, forward,	188.25	865	Other tanks, if fitted,		
Total length (if continuous) and Capacity	370.75	1555	(If necessary, furnish further information by sketch.)		

Order for Special Survey No. 5593

Date 20.10.39

Dates of Surveys held while building

1939 Dec. 15, 27, 28. 1940 Jan. 10, 24. Feb. 13, 15, 23. Mar. 5, 6, 8, 15, 26. Apr. 1, 16, 25, 26. May 1, 3, 8, 20. June 5, 17, 19, 25, 28. July 2, 3, 4, 12, 15, 19, 22, 25. Aug. 5, 12, 16. Sep. 5, 10, 11, 17, 19, 20. Oct. 3, 10, 11, 14, 16, 25, 30. Nov. 6, 13. Dec. 3, 9, 10, 11, 12, 13, 16, 17, 18, 23, 26, 27, 30, 31.

Total No. of Visits 75