

STEEL STEAMER or MOTORSHIP.

30 OCT 1941

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 *29 October, 1941* Port of *Sunderland* No. *33234*Survey held at *Sunderland* Date First Survey *20 Dec. 1940* Last Survey *24 October 1941*On the (State if Machinery fitted Aft and if Single, Twin or Triple Screw) *Single screw "M.V. Empire Raleigh"* Machinery *Amidships*State Type (Full, Scantling, Complete Superstructure with or without Tonnage Openings) *Intermediate between F.S. and C.S.S.* State Type of Erections *Flush Deck*TONNAGE under Tonnage Deck... *6786.72*CLASS *+100 A.1.*State if with freeboard as condition of Class *yes*Built at *Sunderland*Do. of space or spaces between Tonnage Dk. and Upper Dk. *✓*Length from fore part of stem to after part of stern post on summer L.W.L. See Sec. 3 (1a) *L 421.87*Launched *12-6-41*Yard No. *677*Total *✓*Breadth (greatest moulded) *B 56.21*Builders *Wm Donford & Sons Ltd.*Gross Tonnage *7240.20*Depth, at middle of length from top of keel to top of beam at side of uppermost continuous deck. See Sec. 3 (1c) *D 38.07*Owners *Ministry of War Transport.*Register Tonnage *5047.63*1st Longitudinal Number (L x D) *= 15569*Managers *West Hartlepool Steam Co.*
(Where necessary to be entered in Reg. Book.)2nd Numeral L x (B + D) *= 39222*

Residence

REGISTERED DIMENSIONS.
FEET.Length *428.8*Framing Depth "d," at middle of length. See Sec. 3 (1d) *25.35*Breadth *56.5*Proportions—Depth to Length—Uppermost continuous deck to top of keel *11.08*Depth *35.5*Do. Long Bridge to top of keel *✓*Draught Moulded *27'-2"*Port of Registry *Sunderland.*

If surveyed while building, afloat, or in dry dock

During Construction

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	<i>31½</i>		Bracket Floors, Frame	<i>6 3½ .40</i>	
" " from ¾ length amidships to Collision bulkhead.....	<i>27</i>		" " Reversed Frame	<i>6 3½ .34</i>	
" " in peaks.....	<i>24</i>		" " Vertical Struts	<i>10 3½ .40</i>	
SIDE FRAMING.			Centre Girder, depth and thickness amidships	<i>44¼ x .54</i>	
Frame Amidships, Angle <i>E</i> or <i>F</i>	<i>13½ 4 .54</i>		" " top Angles <i>DOUBLE</i>	<i>3½ 3½ .48</i>	
" " Extends up to	<i>✓</i>		" " bottom Angles <i>DOUBLE</i>	<i>5 5 .50</i>	
Reversed Frame Amidships, Angle	<i>✓</i>		Side Girders, No. each side and thickness	<i>ONE .38</i>	
" " Extends up to	<i>✓</i>		Margin Plate depth (excl. of flange) and thickness	<i>40¾ x .54</i>	
Depth of Framing Girder.....	<i>✓</i>		" " Vertical Angle to Tank side Bracket abaft ¼ len. from stem	<i>6 6 .45</i>	
Frames in Uppermost Continuous 'tween Decks, Angle <i>E</i> or <i>F</i>	<i>6 3½ .35</i>		" " Vertical Angle to Tank side Bracket from forward ¼ len. from stem to Panting Area	<i>6 6 .45</i>	
" " Second 'tween Decks, Angle, <i>E</i> or <i>F</i>	<i>✓</i>		" " Gussets, spacing and scantling abaft ¼ len. from stem	<i>13½ x .42 Continuous</i>	
" " Third " " " " " "	<i>✓</i>		" " Gussets, spacing and scantling from forward ¼ len. from stem to Panting Area	<i>20 x .42 D°</i>	
" " from 1 len. for'd. to 15% len. from Stem.....	<i>13½ 4 .60</i>		Tank Side Brackets, height above base line at toe of Frame and thickness	<i>70 x .46</i>	
" " in Peaks, Angle <i>E</i> or <i>F</i>	<i>8 3½ .38</i>		INNER BOTTOM PLATING.		
Diameter and Spacing of Rivets through Frame and Shell Plating amidships	<i>7/8 @ 5¼</i>		Breadth and thickness of Middle Line Strake ...	<i>78 x .50</i>	
State if Frame Joggled	<i>yes</i>		Thickness of remainder in Holds	<i>.44</i>	
Are the scantlings and arrangements in the Panting Area in accordance with the Rules and/or as approved?	<i>yes</i>		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?	<i>yes.</i>	
Are the scantlings and arrangements in way of the Bottom Forward in accordance with the Rules and/or as approved?	<i>yes.</i>		BEAMS.		
SINGLE BOTTOM.			Uppermost Continuous Deck, amidships in Wells, Angle, <i>E</i> or <i>F</i>	<i>8 3½ .35</i>	
Floors, Depth and thickness at mid-line in Holds			" " in way of Bridge, Angle, <i>E</i> or <i>F</i>		
Height of Brackets at side above base line at toe of frame			Spacing	<i>31½</i>	
Middle Line Keelson, on Floors, Angles, <i>E</i> or <i>F</i>			Second Deck, amidships, Angle, <i>E</i> or <i>F</i>	<i>9 x 3½ x .38</i>	<i>see letter 5.12.41 attached</i>
" " Through Plate or Intercoastal Plate			Spacing	<i>31½</i>	
" " Foundation Plate on Floors			Third Deck, amidships, Angle, <i>E</i> or <i>F</i>		
" " Flat Plate Keel Angles			Spacing		
DOUBLE BOTTOM.			Fourth Deck, amidships, Angle, <i>E</i> or <i>F</i>		
Solid Floors, thickness and spacing	<i>.42 @ 94½</i>		Spacing		
" " Are Frame and Reversed Frame joggled?	<i>yes.</i>		Poop Deck, Angle, <i>E</i> or <i>F</i>		
Bracket Floors, breadth and thickness at middle line.....	<i>33 x .42</i>		Spacing		
" " breadth and thickness at margin plate.....	<i>33 x .42</i>		Bridge Deck, Angle, <i>E</i> or <i>F</i>		
			Spacing		
			Forecastle Deck, Angle, <i>E</i> or <i>F</i>		
			Spacing		

PILLARS AND DECKS.					
	INCHES IN SHIP.			Any Departure from Approved Plans to be Noted.	
PILLARS, No. of Rows.....					
" in 'tween Decks, Size and Spacing....					
" " " " "					
" in Holds " "					
" " " " "					
Centre Line Bulkhead. T.O.	3½	3½	.40	31½	
Stiffeners and Spacing... Hold	9	3½	.44		
Plating, thickness of T.O. Hold		.36	.30		
STRINGERS AND DECKS.					
Uppermost Continuous Deck.					
Stringer Plate, breadth and thickness	70	x	.69		
" " " " in way of Bridge		✓			
" Angle in Wells	6	6	¾		
Thickness of Plating abreast Deck openings in way of Wells		.67			
Thickness of Plating abreast Deck openings in way of Bridge		✓			
Thickness of Plating within line of openings...		.40			
If Sheathed, material and thickness		✓			
Second Deck.					
Stringer Plate, breadth and thickness	70	x	.40		
Stringer Plate, breadth and thickness.....					
If Plated, state thickness.....					
Fourth Deck.					
Stringer Plate, breadth and thickness.....					
If Plated, state thickness					
Poop Deck.					
Stringer Plate, breadth and thickness					
Plating, Sheathing, material and thickness ...					
Bridge Deck.					
Stringer Plate, breadth and thickness.....					
Plating, Sheathing, material and thickness ...					
Forecastle Deck.					
Stringer Plate, breadth and thickness.....					
Plating, Sheathing, material and thickness ...					

[illegible]

WATERTIGHT BULKHEADS.						FORGINGS AND CASTINGS.			
Total No. of W.T. BULKHEADS in Vessel—									
Extending to Upper Deck (Sec. 8 c)									
" Deck next below									
As per Rule									
		Plating Thickness.	STIFFENERS.						
			VERTICAL.		HORIZONTAL.				
			Scantlings.	Spacing.	Scantlings.	Spacing.			
Nos. 63, 81, 92.		.26	5x3x30 L	30"	✓	✓			
BULKHD BULKHD, Upper tween decks		.26	5x3x30 L	30"	✓	✓			
Nos. 14 & 134		.28	6x3x30 L	30"	✓	✓			
" " "		.27	5x3x34 L	30"	✓	✓			
" " "		Nº 63	50-.26	12x3½x45 L	28"	✓	✓		
COLLISION " (in Hold) Nº 19B		48-32 L	9x3½x38	24"					
AFTER PEAK " "		70-.26	8x3x32	24"					
		71-42-30	8x3½x42	24"					
Manufacturer's Name or Trade Mark of the Steel used in the construction of the Vessel (state process of manufacture)						Keel, Bar			
						STEM			
STEEL.						STEERN FRAME { Propeller Post			
						Rudder "			
						Speed of Vessel			
						RUDDER—Type			
						" A x D			
						" Diam. of head			
						" Mainpiece at top pintle			
						" " heel ...			
						" how constructed			
						" double or single plate			
						" coupling, vertical or horizontal			

EQUIPMENT No 40109				LETTER <i>at</i>		ANCHORS.		
Number of Certificate.	Anchor.	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. cwt. qrs. lbs.	Cwts.			
26631	1st Bower	68 1 0	✓ / ✓	52 15 2 14	68	Byers Stockless	Byers & Co.	Two Walkers 7-2-41 A.C.W.
26634	2nd "	68 0 0	✓ / ✓	52 12 2 0	68	" "	" "	Two Walkers. 8-2-41 A.C.W.
54232	3rd "	19 2 14	5 0 0	20 8 1 21	19 585	Forged Wrought Iron		made at Hesse 30-6-41 L.C.D.
	Collective weight.				1944			
	Stream							

CHAIN CABLES.										HAWSERS AND WARPS.							
Number of Certificate.	Length and size supplied.		Test per Certificate.		WEIGHT OF CHAIN CABLE.		Length and Size per Table 33.	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 33.		
	Length.	Diam.	Statu- tory.	Break- ing.	Supplied.	Per Rule.	Length.					Diam.	Length.		Cr.	Length.	Cr.
112984	225	2	100-16	141-2	409.	2. 6	120-75	270 2 3/4	TAYCO	S. Taylor & Sons	hetherston 24.2-H1 J.A.R.	TOWLINE...	Fathoms. 120	Ins. 4 3/4	Tons. 6A 6	Fathoms. 120	Ins. 4 3/4
116260	15	2	100-16	141-2	32.	0. 7		ordway	"	" "	hetherston 22.5-H1 J.A.R.	HAWSEWS & WARPS	20 90	2 3/4	15.2	20 90	2 3/4
116259	15	2	100-16	141-2	32.	0. 0			"	" "	hetherston 22.5-H1 J.A.R.	"	20 90	2 1/2	13.2	20 90	2 1/2
116258	15	2	100-16	141-2	31.	3. 14		Or.	"	" "	hetherston 22.5-H1 J.A.R.	"					
Stream Steel Wire	90	5"	52-8	-	-	-	-	90	5"	S.W. 6/12 British Rope Co.							

Three
extra
lengths

Steering Gear, Type (Power ~~_____~~) *Donkin's 7 1/2 x 7 (Steam) Motor* Alternative Means of Steering *Block & tackle to after wheel*
 Steering Chains (Size and Test) *✓* Windlass *Emerson Walker 10" x 12 1/2"* Boats *Lifeboat 25.8 x 13.05 x 3.3 = 40 Pers.
 " " 16.0 x 5.8 x 2.3 = 12 "
 " " 16.0 x 5.8 x 2.3 = 12 "
 " Motor Boat 28.8 x 8.35 x 3.4 = 40 "*
 Ceiling in Holds, thickness and material *{ T.T. + 0.8 under Hatchways
 Ceiling over timbers only }* Cargo Battens, thickness, material and spacing *Not fitted. Cleats fitted*
 Cargo Hatchways. — (Upper Deck) *Reith Patent* Thickness of Hatches *2 3/8*
 Size of Hatchways No. 1 (Fwd.) *31'-6" x 22'-0"* No. 2 *31'-6" x 22'-0"* No. 3 *31'-6" x 22'-0"* No. 4 *31'-6" x 22'-0"* No. 5 *31'-6" x 22'-0"* No. 6 *—*
 Number of Shifting Beams *{ 5 5 5 5 5 }*
 Builder's Signature *William Doxford & Sons, Limited,*
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 *Motor Ship.*
 (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).

This vessel has been built in accordance with the approved plans, and in general conformity with the requirements of the Rules. The materials and workmanship are good. Oil fuel F.P. not lower than 150°F, is carried in Nos 2, 3, 5, 6 & 7 Double bottom tanks, and the requirements of Sect 20 of the Rules, so far as applicable have been complied with. The double bottom tanks, Coffer dams, Deep and Peak tanks have been tested under water pressure, and the Upper and Second decks, W.T. Bds. Juncal and Tween ~~dk~~ decks, have been hose tested, as required by the Rules and proved satisfactory. The Steering gear, Secondary means of steering, Windlass and pumps have been tried under working conditions, whilst moored in the river. The vessel is fitted with "Wireless" and "Directional Wireless". Scupper pipes from Cargo Tween decks, led to bulges with self closing cocks in Engine Room. The freeboards have been marked on the vessels sides, verified and cut in. No Hatch covers fitted on Second deck. Cargo battens not fitted, but cleats fitted in holds and tween decks. Lashing bars fitted to all Hatches. Openings in tween deck bds closed. The equipment of Anchors and ^{h. 42} cables have been reduced as per Secretary's letters.

The amount of Entry Fee £ 10. Fees applied for, 23 Oct 1941

Special Survey Fee... £ 38/ Received by me, 35 Oct 1941 *from*

Specialization Travelling Expenses, if any £ 95 5 18

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

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

Signature *W. H. Duncan*
Surveyor to Lloyd's Register of Shipping.

Certificate to be sent to *Sunderland*. Date of issue *1/12/41*

Committee's Minute **FRI. 7 NOV 1941**

Character assigned *+100A1*
With freeboard
Lloyd's arch. 02- *+ Limb. 10. H1*
2 str. - 120 H
oil rig *Cl.*

Note for S.R.L. (Horn)
Write 9/11
17/11

The Surety is not to be written on or below the Committee's Minute.

Lloyd's Register Foundation

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.)

Sister vessel to same Builders as 676 "Empire Lugard"

Plans

Midship Section
Profile and Decks.

PARTICULARS OF ELECTRIC WELDING (if employed) Fleet weld and quasi-arc overhead electrodes

Parts welded:—

Second deck stringer to shell; Deep and Peak tank girders; Rudder plates.
Bulkheads stiffener brackets to tank top. Hatch web mountings
Ventilator coamings to deck. Tank side gussets.

SPECIAL NOTATIONS:—Either as part of the vessel's class or for record in the Register Book Lloyds A.C.P. Cruiser Stern.

Six divisional W.T. Bldgs in tween decks.

Oil Engines; D.F. Cargo battens not fitted

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

1st Bower	39 Cwt	2 gms	H lbs.	J.T.	3582	25.11.40
2nd "	39 "	3 "	20 "	J.T.	3598	30.11.40
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. 168925 Signal Letters B.C.P.F. Extreme Breadth over Belting ☒ Over-all Length 442'-11 1/4"
(Circ. 1611) (Circ. 1703)

No. and Material of Decks Two decks (Steel)

Parts of Bottom of Vessel coated with cement or approved composition has 144 Double bottom tanks, Cofferdams & bilges.

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.	Water Capacity.	Where Fitted.	Length.	Water Capacity.
	Feet.	Tons.		Feet.	Tons.
Double bottom, aft,	128.4	355	Fore peak tank,	24	134
Double bottom, under Engines 1 Bottom , <u>feed water</u>	10.5	50	After peak tank,	18	155
Double bottom, if under Engines only,	23.6	84	Deep tank, aft,	—	—
Double bottom, if under Boilers only, <u>Cofferdams.</u>	5.2	—	Deep tank, forward , <u>amidships</u>	28.8	1205
Double bottom, forward,	193.5	693	Other tanks, if fitted,		
Total length (if continuous) and Capacity	356.2	1182	(If necessary, furnish further information by sketch.)		

Order for Special Survey No. 5959

Date 13.9.40

Dates of Surveys
held while building

1940. Dec. 30 1941. Jan. 8, Feb. 11, 12, 26, 28. Mar. 4, 11, 12, 13, 15, 18, 28, 31. Apr. 9, 16, 18, 22, 28
May 2, 4, 8, 13, 15, 19, 21, 23, 26, 27, 29, 30. June 1, 4, 5, 6, 9, 12, 20, 24, 29. Aug. 18, 26, 27. Sep. 3, 4, 5,
9, 15, 16, 17, 19, 23, 23, 24, 25, 26, 29. Oct. 2, 3, 6, 7, 8, 9, 10, 14, 15, 16, 17, 20, 22, 24.

Lloyd's Register
Foundation
Total No. of Visits 70

For 5.50 F see 80 Report No. 39214
"Empire Lugard"