

Rpt 1
DISCLOSED

SECTION

No. 775

STEEL STEAMER or MOTORSHIP

DISCLOSED

Section Office

1 DEC 1942

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

SECTION

No. 775

No. 18356

Date of completion of report

30th Sept 1942

Port of West Hartlepool.

Survey held at West Hartlepool.

Date First Survey 28th January 1942Last Survey 21st November 1942

19

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

Single Screw

"EMPIRE DRIVER"

Machinery amidships

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

Complete Superstructure without tonnage opening

State Type of Erections

Forecastle

TONNAGE under Tonnage Deck

6571.98

CLASS + 100 A.1.

State if with freeboard as condition of Class

Yes

Built at West Hartlepool.

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

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

L 425'-0"

Breadth (greatest moulded)

B 56'-0"

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'-8"

1st Longitudinal Number (L x D) = 15194

2nd Numeral L x (B + D) = 38994

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

23.3

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

11.27

Do. Long Bridge to top of keel

Draught Moulded 26'-7½"

Launched 24th Sept 1942 Yard No. 1137.

Builders William Gray & Co Ltd.

Owners Ministry of War Transport

Managers Watts, Watts & Co Ltd.

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

Residence

Port of Registry West Hartlepool.

If surveyed while building, afloat, or in dry dock

Building, afloat, & 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	31		Bracket Floors, Frame	✓	
" " from ⅓ length amidships to Collision bulkhead	27		" " Reversed Frame	✓	
" " in peaks	24		" " Vertical Struts	✓	
SIDE FRAMING.			Centre Girder, depth and thickness amidships	43½ x 54	
Frame Amidships, Angle, E or F	12 3½ 9/16		" " top Angles	3½ 3½ 48	
" " Extends up to 2 nd deck & upper deck alt.			" " bottom Angles	4 4 54	
Reversed Frame Amidships, Angle	✓		Side Girders, No. each side and thickness	2x 6x3x42 1x 6x3½x42	Photo girders in machy space & fwd of 3½-L
" " Extends up to	✓		Margin Plate depth (excl. of flange) and thickness	36 x 54	
Depth of Framing Girder	12		" " Vertical Angle to Tank side Bracket abaft 1 len. from stem	6 6 44	
Frames in Uppermost Continuous 'tween Decks, Angle, E or F	12 3½ 9/16 alt.		" " Vertical Angle to Tank side Bracket from forward 1 len. from stem to Panting Area	6 6 44 double	
" " Second 'tween Decks, Angle, E or F	✓		" " Gussets, spacing and scantling abaft 1 len. from stem	42 continuous	
" " Third " " " "	✓		" " Gussets, spacing and scantling from forward 1 len. from stem to Panting Area	42 continuous	
" " from 1 len. for'd. to 15% len. from Stem	12 3½ 9/16		Tank Side Brackets, height above base line at toe of Frame and thickness	94 7/8 x 44	
" " in Peaks, Angle or F	8 3½ 35 7/8 3½ 7 on bottom 35/62 x 6 1/2 on sides		INNER BOTTOM PLATING.		
Diameter and Spacing of Rivets through Frame and Shell Plating amidships			Breadth and thickness of Middle Line Strake	71 3/4 x 50	
State if Frame Joggled	Yes		Thickness of remainder in Holds	44 x 52 under hatches	
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.		
INGLE BOTTOM.			Uppermost Continuous Deck, amidships in Wells, Angle, E or F	8 3½ 42	
Floors, Depth and thickness at mid-line in Holds			" " in way of Bridge, Angle, E or F	✓	
Height of Brackets at side above base line at toe of frame			Spacing	31	
Middle Line Keelson, on Floors, Angles, E or F			Second Deck, amidships, Angle, E or F	9 3½ 38	
" " Through Plate or Intercoastal Plate			Spacing	31	
" " Foundation Plate on Floors			Third Deck, amidships, Angle, E or F	✓	
" " Flat Plate Keel Angles			Spacing	✓	
DOUBLE BOTTOM.			Fourth Deck, amidships, Angle, E or F	✓	
Solid Floors, thickness and spacing	42 way		Spacing	✓	
" " Are Frame and Reversed Frame joggled?	Yes		Poop Deck, Angle, E or F	✓	
Bracket Floors, breadth and thickness at middle line	✓		Spacing	✓	
" " breadth and thickness at margin plate	✓		Bridge Deck, Angle, E or F	✓	
			Spacing	✓	
			Forecastle Deck, Angle, E or F	9 3½ 42 6 6 3 44	
			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.....		✓			Stringer Plate, breadth and thickness in way of Bridge		✓		
„ in 'tween Decks, Size and Spacing.....		✓			Thickness of Plating abreast Deck openings in way of Wells	36	✓		
„ „ „ „ „		✓			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	none		✓	
Centre Line Bulkhead.					Third Deck.				
Stiffeners and Spacing..... 7	12 3 1/2 7/16	✓			Stringer Plate, breadth and thickness.....	✓			
Plating, thickness of	alternates 30	✓			If Plated, state thickness.....	✓			
STRINGERS AND DECKS.					Fourth Deck.				
Uppermost Continuous Deck.					Stringer Plate, breadth and thickness.....	✓			
Stringer Plate, breadth and thickness in Wells	65 5/8 x 65	✓			If Plated, state thickness	✓			
„ „ „ „ in way of Bridge	✓				Poop Deck.				
„ Angle in Wells	6 6 60	✓			Stringer Plate, breadth and thickness	✓			
Thickness of Plating abreast Deck openings in way of Wells	60 4 55	✓			Plating, Sheathing, material and thickness ...	✓			
Thickness of Plating abreast Deck openings in way of Bridge	✓				Bridge Deck.				
Thickness of Plating within line of openings...	40	✓			Stringer Plate, breadth and thickness.....	✓			
If Sheathed, material and thickness	none	✓			Plating, Sheathing, material and thickness ...	✓			
Second Deck.					Forecastle Deck.				
Stringer Plate, breadth and thickness in Wells...	82 3/4 x 38	✓			Stringer Plate, breadth and thickness.....	36			
					Plating, Sheathing, material and thickness ...	32 unsheathed			

SHELL PLATING.

SCANTLINGS.						RIVETING.							
STRAKES.	AS IN VESSEL.				ANY DEPARTURE FROM APPROVED PLANS TO BE NOTED.	EDGES.			BUTTS.				
	AMIDSHIPS.		FORWARD.	AFT.		State if jogged?	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.									
FLAT PLATE KEEL	54	80	70	70		Double	7/8	3 1/2	Double	7/8	4	Double straps throughout no welded bts	
„ DBLG. (if any)													
BOTTOM PLATING, No. of Strakes	A D	65 60 64 65	50 70 70 80	50		Double	7/8	3 1/2	Four	7/8	3 1/2	lapped	
BILGE PLATING, No. of Strakes	E	64	50	50		Double	7/8	3 1/2	Four	7/8	3 1/2	Inside straps	
SIDE PLATING, No. of Strakes	F G H	60 60 65	45	45		Double	7/8	3 1/2	Double	7/8	3 5/32	lapped	
UPPER DECK, Sheer- strake in Wells.....	7 1/2	73	46	46					Quad	1	4	lapped	
UPPER DECK, Sheer- strake in Bridge ...			✓						✓				
STRAKE BELOW Sheer- strake in Wells.....		65	46	46		Double	7/8	3 1/2	Double	7/8	3 5/32	lapped	
STRAKE BELOW Sheer- strake in Bridge ...			✓						✓				
POOP SIDE PLATING			✓						✓				
BRIDGE SIDE PLATING ...			✓						✓				
FOREC'TLE SIDE PLATING			40			Single	3/4	3	Single	3/4	2 7/8	lapped	

WATERTIGHT BULKHEADS.

FORGINGS and CASTINGS.

Total No. of W.T. BULKHEADS in Vessel—		Casting or Forging.	Scantlings.	Maker's Name.	Any Departure from Approved Plans to be Noted.
Extending to Upper Deck (Sec. 3 c)					
" Deck next below					
As per Rule					

	Plating Thickness.	STIFFENERS.			
		VERTICAL.		HORIZONTAL.	
		Scantlings.	Spacing.	Scantlings.	Spacing.
MIDSHIP BULKH'D, Upper tween decks	26	5x3x.42A	30"		
" " Second "					
" " Third "					
" " Holds	39-26	12x3½x.45J	30"		
COLLISION (in Hold)	53-29	10x3½x.44J5 6x3x.30A	24"		
AFTER PEAK	48-75-30	9x3½x.38J6 3½x3x.30A	24"		

KEEL, Bar		✓		
STEM		rolled bar		
STERN FRAME	Propeller Post	Forged Iron	10½x8	C.M.E.W.
	Rudder	"	10½x8	" see plan
Speed of Vessel		10½ knots		
RUDDER—Type		ordinary		
" A x D		604		
" Diam. of head		Forged Iron	11½	C.M.E.W.
" Mainpiece at top pintle		"	11½	" see plan
" " heel		"	8½	"
" how constructed		arms keyed to mainpiece		
" double or single plate		Single		
" coupling, vertical or horizontal		Vertical		

STEEL.

Manufacturer's Name or Trade Mark of the Steel used in the construction of the Vessel (state process of manufacture) *open hear*
Dorman Long & Co., Anglo Fleet Iron Co. Ltd., South Durham S & L Co. Ltd.
Skinner & Co. Ltd., Consett Iron Co. Ltd., American Steel.
 Has the Steel been tested as required by the Rules? *Yes* ✓

EQUIPMENT No 40053										LETTER a f.		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.			
42165	1st Bower ...	68	1	21	Stockless			52	18	3	0	68	Rogers Imp. Stockless	✓	Sld 21/7/42 R.J. Vogan
42166	2nd „ ...	68	0	21	Stockless			52	15	2	14	68	“ “ “		Sld 21/7/42 R.J. Vogan
	3rd „ ...														
	Collective weight.						✓								
55426	Stream	19	0	14	4	3	24	19	19	2	21	19	Rogers forged	✓	CH. 30/9/42 W.V. Norman

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.		Tons.	Fathoms.	Cir.
65783	Fathoms.	Ins.	Tons.	Tons.	Owts.	qrs.	lbs.	Cwts.	Fathoms.	Ins.	Shird	Kendrick & Mole Ltd.	C.H. 16/9/42 W.V.Norman	TOWLINE...	Fathoms.	Ins.	Tons.	Fathoms.	Ins.	
	225 ¹ / ₂	2 ⁵ / ₁₆	96 ¹ / ₄	134 ¹ / ₄	610-0-24	600 700			225	2 ⁵ / ₁₆					120	4 ³ / ₄	64.6	120	4 ³ / ₄	
						225 pmo														
														HAWSERS & WARPS	2-90	2 ³ / ₄	15.2	2-90	2 ³ / ₄	
														"	2-90	2 ¹ / ₂	13.2	2-90	2 ¹ / ₂	
														"						
Iron Stream Chain or Steel Wire	90	5							90	5										

Steering Gear, Type (Power or hand)	Donkin & Co.	Alternative Means of Steering	Blocks & tackle to which:			
	Steam & Telemotor control		1- 24x7.6x3.0			
Steering Chains (Size and Test)	✓	Windlass	Clarke Chapman			
	7.7. ply increased under hatchways i. beam of ceiling		Boats 1- 24.05x7.5x3.06			
Ceiling in Holds, thickness and material	2 1/2" over bilges	Cargo Battens, thickness, material and spacing	1- 24.15x8.1x3.26			
			2- 26.1x8.0x3.3 filled with motor			
Cargo Hatchways.—(Upper Deck)	Steel plates & angles	Thickness of Hatches (weather dk)	2 1/2" + 3" at cross beam			
Size of Hatchways No. 1 (Fwd.)	31'-6" x 20'-0"	No. 2	31'-0" x 20'-0"			
	No. 3	31'-0" x 20'-0"	No. 4	12'-11" x 20'-0"		
	No. 5	31'-0" x 20'-0"	No. 6	31'-0" x 20'-0"		
Number of Shifting Beams and/or Fore and Afters	5	5	5	1	5	5

Builder's Signature

✓ No hatch covers at 2nd deck at Nos 1 & 6 hatchways see fld. Rpt.

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 No

(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 constructed in accordance with the approved plans, the Surveyor's letters & specification (amended) and generally conforms with the Society's rules for the class contemplated. The materials & workmanship are good. All double bottom tanks, peak tanks & deep tanks have been tested as required by the Rules & found satisfactory. The weather decks, W.T. bulkheads, tunnel, & divisional W.T. bulkheads in twin decks have been satisfactorily tested. The assigned freeboards have been marked on the vessel's sides verified & cut in. The windlass & steering gears have been satisfactorily tried under working conditions.

The amount of Entry Fee	£ 10 : - : -	Fees applied for,	(Special notations, where part of class, to be stated.)
{ Super survey 9 spec		30/11/1942	
+ Special Survey Fee....	£ 470 : 1 : 3	Received by me,	
Freeboard	18 - -	19	
Travelling Expenses, if any	£ : : :		
State whether the Vessel has been built under Special Survey		Yes	I am of opinion the Vessel should be Classed +100 A.1. with freeboard

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

Certificate to be sent to W. H. P. Date of issue 6/1/43

Committee's Minute Glasgow TUE 8 DEC 1942

Character assigned +100 A.1. With freeboard

Lloyd's Arch. O.L.

note for S.R.D. memo White S.R.

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.)

Forging Reports enclosed.
This vessel is of the fabricated "B" type design similar to "Empire Clarion" (William Gray & Co N^o 1133) & previous vessels.
The vessel was wholly constructed by Messrs William Gray & Co, no pre-fabricated material being used.

Closing of openings in divisional W.T. Bulkheads in tween decks.
The access & tonnage openings in bulkheads 103, 109, 67 & 34 are closed by riveted Watertight plates.
The openings in bulkheads 14 & 87 are closed by hinged watertight steel doors operated from both sides.

PARTICULARS OF ELECTRIC WELDING (if employed)

SPECIAL NOTATIONS:—Either as part of the vessel's class or for record in the Register Book. Cruiser stern, Lloyd's A & C.P.
2 decks, D.F., Cargo battens not fitted, notation about equipment, E.S.D.
Collision Bulkhead to weather deck, 6 bulkheads to 2nd deck, 6 divisional W.T. bulkheads in tween decks. With freeboard.

		weight incl. fangs	Surveyors Initials	No of Cert.	Date of test
Particulars of Drop Test of Cast Steel Anchors, viz.:— Weight, Surveyor's Initials, Number of Certificate, Date of Test.	1st Bower.	44-3-21	K.L.	4558	28.1.42.
	2nd "	44-1-7	K.L.	4390	14.11.41
	3rd "				

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop ☒ ft., R.Q.D. ☒ ft., Bridge ☒ ft., Forecastle ^{39-5 ft.} on upper deck.
(in feet and tenths). When the Poop or Forecastle are joined to the B.D., this should be distinctly stated *No*.

Official No. 168947. Signal Letters ☒ Extreme Breadth over Belting ☒ Over-all Length 446' 4" (Circ. 1611) (Circ. 1703)

No. and Material of Decks 2 decks steel.

Parts of Bottom of Vessel coated with cement or approved composition. F & A peak tanks, D.B. tank under boilers cemented. Remainder of tanks cement fillers.

Particulars of composition (if fitted) and of approval

PARTICULARS OF WATER BALLAST:—(Comprising all tanks which may be used for Water Ballast. (Circ. 1284) *arrangmt of tanks similar to F.WEBSTER*
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, <i>N^o 7 D.B. tank only</i>	62.0	226	Fore peak tank,	21.5	119
Double bottom, under Engines and Boilers, <i>N^o 8 D.B. tank is included in dup tanks aft.</i>	46.5	217	After peak tank,	18.0	112
Double bottom, if under Engines only,			Deep tank, aft, <i>Tank in way of tunnel</i>	49' 1"	338
Double bottom, if under Boilers only,			Deep tank, forward, <i>in Engine Room</i>	23' 3"	398
Double bottom, forward,	209.7	821	Other tanks, if fitted, <i>dup tanks forward</i>	14' 0"	248
Total length (if continuous) and Capacity	318.2	1264	(If necessary, furnish further information by sketch.)		1215

Order for Special Survey No. 2453

Date 19/12/41

Dates of Surveys held while building

1942. January 28. February 4. 6. 9. 11. 19. March 2. 19. 26. April 1. 14. 16. 22. May 1. 13. 18. June 4. 9.
25. 29. July 1. 2. 3. 13. 21. 22. 27. 29. 31. August 1. 14. 17. 18. 21. 24. 26. 28. 31. September 2. 4. 7. 10. 13. 16. 16.
18. 20. 21. 24. October 5. 6. 8. 12. 14. 15. 16. 19. 20. 22. 23. 26. 27. 28. 29. 31. November 2. 3. 6. 6. 9. 10. 11. 13. 16.
17. 18. 19. 20. 21.

Total No. of Visits 78