

STEEL STEAMER

Received at London Office 15 SEP 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.

Date of completion of report

1st SEPT 1942

Port of MIDDLESBROUGH

No. 17323

Survey held at HAVERTON HILL ON TEES Date First Survey 20th AUGUST, 1941.Last Survey 25th AUGUST, 1942.On the *(State if Machinery fitted Aft and if Single, ~~Double~~ Screw)* S/S "EMPIRE LYTTON" MACHINERY AFT SINGLE SCREW STEAM TANKER.State Type *(Full Scantling, ~~Partial~~ Scantling)* FULL SCANTLING.

State Type of Erections POOP & ECLE.

TONNAGE under Tonnage Deck 8899.17

CLASS 100A1 CARRYING *(State if with freeboard as condition of Class)* PETROLEUM IN BULK LONGITUDINAL FRAMING FITTED FOR OIL FUEL

No.

Built at HAVERTON HILL ON TEES.

Launched JUNE 16th 1942 Yard No. 343.

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

Total 8899.17

Gross Tonnage 9807.16

Register Tonnage 5778.11

Length from fore part of stem to after part of stern post on summer L.W.L. See Sec. 3 (1a) L 475'-0"

Breadth (greatest moulded) B 68'-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 36'-0"

1st Longitudinal Number (L x D) =

2nd Numeral L x (B + D) =

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

Proportions—Depth to Length—Uppermost continuous deck to top of keel Do. Long Bridge to top of keel

Draught Moulded 28'-3"

Builders FURNESS S.B. CO. LTD.

Owners MINISTRY OF WAR TRANSPORT.

Managers HARRIS & DICKSON

Residence LONDON

Port of Registry MIDDLESBROUGH.

If surveyed while building, afloat, or in dry dock

SURVEYED WHILE 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 ENGINE ROOM 30" DEEP TANK FORWARD from 3/4 length amidships to Collision bulkhead. in peaks AFTER PEAK 24 & 21 FORE P. 24	30 3/4" B.R. 27 1/2" 25"		Bracket Floors, Frame	✓	
SIDE FRAMING. LONGITUDINAL FRAMING SEE SEPARATE SHEET. Frame Amidships, Angle, [or] FRAMES IN DEEP TANK FORWARD 7 10 3/4" 43" Extends up to WITH BACK BAR AT BOTTOM 3 1/2" 3 1/2" 3/8"			" Reversed Frame	✓	
Reversed Frame Amidships, Angle			" Vertical Struts	✓	
Depth of Framing Girder. LONGITUDINAL FRAMING	5" 3" 3/8"		Centre Girder, depth and thickness amidships	ER 79" 30" 46" BR 12" 6" 45" 34"	
Frames in Uppermost Continuous 'tween POOP Decks, Angle, [or]			" top Angles	ER 3 1/2" 3 1/2" 3/8" BR 3 1/2" 3 1/2" 3/8"	
" Second 'tween Decks, Angle, [or]			" bottom Angles	ER 6" 6" 5/8" BR 6" 6" 5/8"	
" Third " " "			Side Girders, No. each side and thickness	2 44"	
" from 1/4 len. for'd. to 15% len. from Stem			Margin Plate depth (excl. of flange) and thickness	TANK TOP FLAT IN ENGINE 8 BULDER SPACE.	
" in Peaks, AFTER PEAK 7 7" 3 1/2" 3/8" FORE PEAK 7 9" 3 1/2" 3/8"			" Vertical Angle to Tank side Bracket abaft 1/4 len. from stem	✓	
Diameter and Spacing of Rivets through Frame and Shell Plating amidships	7/8" 5/4"		" Vertical Angle to Tank side Bracket from forward 1/4 len. from stem to Panting Area	✓	
State if Frame Joggled	No		" Gussets, spacing and scantling abaft 1/4 len. from stem	✓	
Are the scantlings and arrangements in the Panting Area in accordance with the Rules and/or as approved?	Yes		" Gussets, spacing and scantling from forward 1/4 len. from stem to Panting Area	✓	
Are the scantlings and arrangements in way of the Bottom Forward in accordance with the Rules and/or as approved?	Yes		Tank Side Brackets, height above base line at toe of Frame and thickness	OP	
SINGLE BOTTOM.			INNER BOTTOM PLATING.	ER BR 54" 62" 54" 62"	
Floors, Depth and thickness at mid-line in Holds	48" 46" CENTRE TANKS 36" 44" WING TANKS		Breadth and thickness of Middle Line Strake		
Height of Brackets at side above base line at toe of frame	5 1/2" 42"		Thickness of remainder in Holds		
Middle Line Keelson, INTERCOSTAL PLT. [or] TOP BAR 7 6" 3 1/2" 40"			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?	✓	
" Through Plate or Intercostal Plate			BEAMS. LONGITUDINAL SEE SEPARATE SHEET.		
" Foundation Plate on Floors			Uppermost Continuous Deck, amidships in Wells, Angle, [or]	✓	
" Flat Plate Keel Angles	5 6" 6" 60"		" in way of Bridge, Angle, [or]	✓	
Side Keelsons, No. each side			Spacing	8" 3 1/2" 35"	
thickness of Intercostal Plate			BEAMS IN DEEP TANK FORWARD Second Deck amidships, Angle, [or]	EVERY	
Angles			Spacing	6" 3 1/2" 5/16"	
DOUBLE BOTTOM. IN ENGINE ROOM			BEAMS ON UPPER DK. TO FORE & AFTER PEAK Third Deck amidships, Angle, [or]	EVERY	
Solid Floors, thickness and spacing	EVERY 52"		Spacing		
" Are Frame and Reversed Frame joggled?	YES		Fourth Deck, amidships, Angle, [or]	✓	
Bracket Floors, breadth and thickness at middle line			Spacing		
" breadth and thickness at margin plate			Poop Deck, Angle, [or] HALF BEAMS THROUGH BEAMS	7 7" 3" 3/8" 7 8" 3 1/2" 35"	
			Spacing	EVERY	
			Bridge Deck, Angle, [or]	✓	
			Spacing		
			Forecastle Deck, Angle, [or]	6" 3 1/2" 5/16"	
			Spacing	EVERY	

PILLARS AND DECKS.

[illegible]

SHELL PLATING.

SCANTLINGS.					RIVETING.							
STRAKES.	AS IN VESSEL.				ANY DEPARTURE FROM APPROVED PLANS TO BE NOTED.	EDGES.			BUTTS.			
	LANDSHIPS.		FORWARD.	AFT.		State if joggled?	RIVETS.		NO. OF ROWS OF RIVETS.	RIVETS.		STRAPPED OR LAPPED.
	Breadth.	Thickness.	Thickness.	Thickness.			DOUBLE.	Diam.		Spacing or. to or.	Diam.	
	Inches.	Inches.	Inches.	Inches.		Inches.	Inches.		Inches.	Inches.		
FLAT PLATE KEEL	54	1.00	1.00	.86		DOUBLE.	1 1/8	4	3	1 1/8	4 1/2	DOUBLE STRAPS
DBLG. (if any)												
BOTTOM PLATING, No. of Strakes		.76	.87	.56		.	1	3 1/2	5	1	4 1/2	LAPPED
BILGE PLATING, No. of Strakes		.76	.72	.76		.	7/8	3 1/16	5	1	4 1/2	"
SIDE PLATING, No. of Strakes		.64	.50	.48		"	7/8	3 1/16	3	7/8	3 3/8	"
UPPER DECK, Sheer-strake	72	1.00	.46	.46					3	1 1/8	4 1/2	DOUBLE STRAPS
		1.14	AT POOP BREAK									
UPPER DECK, Sheer-strake in Bridge												
STRAKE BELOW Sheer-strake	90	.77	.46	.46		DOUBLE.	1	4	4	1	4	LAPPED
		.3055	.76									
STRAKE BELOW Sheer-strake in Bridge												
POOP SIDE PLATING				.42		SINGLE	7/8	3 1/16	2	7/8	3 3/8	LAPPED
BRIDGE SIDE PLATING												
FOREC'TLE SIDE PLATING		.46	ONE PLATE IN WIDTH.						2	7/8	3 3/8	LAPPED

WATERTIGHT BULKHEADS.

FORGINGS and CASTINGS.

Total No. of W.T. BULKHEADS in Vessel—		13.		Casting or Forging.		Scantlings.		Maker's Name.		Any Depature from Approved Plans to be Noted.	
Extending to Upper Deck (Sec. 3 c)		13.		KEEL, W.T. FLAT PLATE							
Deck next below		ALL EXTENDED TO UPPER DECK		STEM		1 1/4" PLT. 11" S		Above		Boss	
As per Rule		AS APPROVED 13.		STERN FRAME		Propeller Post		11" S		1 1/2" PLT.	
		STIFFENERS.		Rudder		10" S		BUILT UP & EW.			
				Speed of Vessel		11 1/2					
				RUDDER—Type		STREAM LINED BUILT UP PLATES					
				A x D							
				Diam. of head		11"					
				Mainpiece at top pintle							
				heel							
				how constructed							
				double or single plate		3/4"					
				coupling, vertical							
				horizontal							

STEEL.

Manufacturer's Name or Trade Mark of the Steel used in the construction of the Vessel (state process of manufacture) **OPEN HEARTH PROCESS**

SECTIONS. CARBON STEEL RANGERS, SOUTH DURHAM S & L CO. LTD., DORMAN LONG & CO. LTD. BETHLEHEM STEEL CO.

Has the Steel been tested as required by the Rules?

YES.

grove, COLVILLES.

Rpt. 1*. FURNESS S.B. CO LTD N: 343.

"EMPIRE LYTTON" PARTICULARS OF LONGITUDINAL FRAMING.

[illegible]

e particulars of framing in peaks (if ordinary), Floors, Centre Girder, Side Girders and Margin Plate and their angle attachments, etc., to be entered in their respective places provided for on the Report Forms.

NOTE:—This slip to be pasted on the fourth page of the Report, and reference to same to be made under framing, etc., on the first page.

working conditions and found satisfactory. The Freeboard markings have been

EQUIPMENT No				LETTER e+				ANCHORS.			
Number of Certificate.	Anchor.	WEIGHT, EX. STOCK.			WEIGHT OF STOCK.			TEST, PER CERTIFICATE.			Where and when tested and Superintendent.
27005	1st Bower ...	Cwts.	qrs.	lbs.	Cwts.	qrs.	lbs.	Tons.	cwts.	qrs.	lbs.
27004	2nd " ...	85	3	14	61	10	0	0	85	2	0
	3rd " ...	85	2	7	61	10	0	0	85	2	0
	Collective weight.	171	1	21					171	0	0
55014	Stream	25	0	0	6	1	4	24	15	0	0

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.				
	Fathoms.	Ins.	Tons.	Cwts.	qrs.	lbs.	Cwts.	Fathoms.	Ins.				Fathoms.	Ins.	Tons.	Fathoms.	Ins.		
18356	240	2 9/16	116 1/2	163 3/4	804	2	14	989	0	0	300	2 9/16	LINK	✓	LOW WALKER. 30-6-42. AG.	130	5 1/4	77	5
																2	0	2 3/4	
																100	2 3/4	15	2
																2	0	2 3/4	
																100	2 3/4	15	2
Iron Stream Chain or Steel Wire	120	4 1/2	58	6	STEEL WIRE	120	4 1/2	STEEL WIRE.											

Steering Gear, Type (Power or hand) JOHN LYNN & CO. LTD. SUNDERLAND. Alternative Means of Steering BLOCKS & TACKLE LEO TO WINCH ON POOP DECK.

Steering Chains (Size and Test) NONE FITTED. Windlass CLARK CHAPMAN & CO. LTD. Boats 1. MOTOR BOAT 24-0-7-6-3-1

Ceiling in Holds, thickness and material NONE FITTED. Cargo Battens, thickness, material and spacing NONE FITTED.

Cargo Hatchways. (Upper Deck) STEEL COAMING 8' x 50", N° 1 2'-6" x 4-4" Thickness of Hatches W.T. 36" STEEL 6-3-9/16"

Size of Hatchways No. 1 (Fwd.) 12'-0" x 8'-0" No. 2 18' OFF TO CARGO TANKS 8'-5" x 4'-0" OULIGHT. No. 3 No. 4 No. 5 No. 6

Number of Shifting Beams and/or Fore and Afters ✓

Builder's Signature

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 YES.

(b) whether the vessel, not being an oil tanker, is fitted for carrying oil as 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). Fitted for Oil Fuel Flash point above 150°

Double bottom in boiler space & lower bunker.

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

The main cargo tanks, cofferdams, oil fuel tanks, double bottom tanks in engine and boiler space, forward deep ballast tanks, fore and after peak tanks, have been tested to rule requirements with satisfactory results.

The weather decks clear of the oil tanks, watertight doors etc, have been tested with water from a hose and found tight.

Steam and auxiliary steering gear, windlass and winches, have been tested under working conditions and found satisfactory. The Freeboard markings have been cut in and verified. The workmanship and materials are good.

The amount of Entry Fee £ 11 0 0 Fees applied for, 11/9/ 1942. (Special notations, where part of class to be stated.)

Special Survey Fee.... £ 667 15 3 Received by me, 19.

FREEBOARD 20 0 0

Travelling Expenses, if any £

SUPERVISION OF SPECIFICATION 166 18 9

State whether the Vessel has been built under Special Survey YES.

Signature Cyril B. Senior. H. C. Young.

Surveyor to Lloyd's Register of Shipping.

Certificate to be sent to MIDDLESBROUGH. Date of issue 7/10/42.

Committee's Minute

Character assigned

Carrying petroleum in bulk

Lloyd's ARCP.

note for S.H.I.

Fitted for oil fuel 8.42 flash point 150°

Lloyd's Reg Foundation

W1195-00473

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.)

REPORT.
N^o 17239. EMPIRE DICKENS. FURNESS S.B. C. LTD N^o 341
N^o 17276 EMPIRE NORSEMAN " " " " N^o 342.

Stern Post reinforced at top as per our letter to Mr Potts 15th April 1942.

PARTICULARS OF ELECTRIC WELDING (if employed).

STERN FRAME & RUDDER ELECTRICALLY WELDED.

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

Wireless, Direction finding apparatus, Echo sounding apparatus. (Provision made but not fitted)

Particulars of Drop Test of Cast Steel Anchors, viz.:— Weight, Surveyor's Initials, Number of Certificate, Date of Test.	1st Bower	50 cwt. - 2-0	J.D.	27005	27-10-41
	2nd "	50 cwt. - 1-21	J.D.	27004	27-10-41
	3rd "				

PARTICULARS FOR RECORD in the REGISTER BOOK. Length of Poop 108-54 ft., R.Q.D. ft., Bridge ft., Forecastle 38-90 ft.

(in feet and tenths). When the Poop or Forecastle are joined to the B.D., this should be distinctly stated

Official No. 164858. Signal Letters Extreme Breadth over Belting (Circ. 1611) Over-all Length 503-10" (Circ. 1705)

No. and Material of Decks 1 DECK: STEEL. In construction and dimensions etc.

Parts of Bottom of Vessel coated with cement or approved composition FORE & AFTER PEAKS CEMENT, CEMENT FILLETS IN FEED TANK, CARGO & OIL FUEL TANKS BARE, COFFERDAMS CEMENT WASHED, PUMP ROOM PAINTED.

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,			Fore peak tank,	28-7 ³ / ₄	335
Double bottom, under Engines and Boilers,			After peak tank,	17-3	201
Double bottom, if under Engines only,	55-3	104	Deep tank, aft,	31-1	647
Double bottom, if under Boilers only, D.F. BUNKER	27-6	416	Deep tank, forward,		
Double bottom, forward,	82-9	520	Other tanks, if fitted,		
Total length (if continuous) and Capacity.			(If necessary, furnish further information by sketch.)		

Order for Special Survey No. 1540.	Dates of Surveys held while building	1941. Aug. 29. Sept. 23. 30. Oct. 30. Nov. 10. 24. Dec. 15. 18. 22. 24. 29. 1942. Jan. 9. 21. 30. Feb. 4. 6. 10. 14. 26.
		March 11. 13. 19. April 14. 14. 21. May 2. 11. 13. 15. 24. June 2. 3. 5. 8. 10. 12. 15. 16. 22. 23. 26. 24. 29. July 4.
		10. 14. 20. 22. Aug. 6. 11. 12. 13. 14. 18. 21. 22. 24. 25.

Lloyd's Register Foundation

Total No. of Visits 58