

STEEL ~~STEAMER~~ MOTORSHIP.

Received at London Office

4 - DEC 1944

16 NOV 1944

State if Report has been sent on the Freeboard of the Vessel YESState if Report is sent on the Machinery of the Vessel YESDate of completion of report 10th NOVEMBER 1944 Port of GREENOCKNo. 22820Survey held at PORT GLASGOW Date First Survey 11th NOVEMBER 1942 Last Survey 6th NOVEMBER 1944On the (State if Machinery fitted Aft and if Single, Twin or Triple Screw) SINGLE SCREW MOTORSHIP "EMPIRE RAWLINSON" MCHY AMIDSHIPSState Type (Full Scantling, Complete Superstructure with or without Tonnage Openings) COMPLETE SUPERSTRUCTURE WITHOUT TONNAGE OPENING State Type of Erections POOPY FORECASTLETONNAGE under } 8810.41
Tonnage Deck ... }CLASS +100A1State if with freeboard } YES
as condition of Class }Built at PORT GLASGOWLaunched JUNE 22nd 1944 Yard No. 994Builders LITHGOWS LIMITEDOwners MINISTRY OF WAR TRANSPORTManagers A. HOLTY & Co

(Where necessary to be entered in Reg. Book)

Residence WATER STREET, LIVERPOOLPort of Registry GREENOCK

If surveyed while building, afloat, or in dry dock

BUILDING AFLOAT IN DRY DOCKNo. of space or spaces } ✓
between Tonnage Dk. }
and Upper Dk. }Total ✓Gross Tonnage 9912.16Registered Tonnage 7002.75

REGISTERED DIMENSIONS.

FEET

Length 476Breadth 64.35Depth 40.05Length from fore part of stem to after part of stern } 465.0
post on summer L.W.L. See Sec. 3 (1a) }Breadth (greatest moulded) B 64.0Depth, at middle of length from top of keel to top } 40.12
of beam at side of uppermost continuous }
deck. See Sec. 3 (1c) Moulded Depth 42.661st Longitudinal Number (L x D) 186552nd Numeral L x (B + D) 48415Framing Depth "d," at middle of length. See } 17.3
Sec. 3 (1d) } WITH LEVEL BECKTS 18.5Proportions—Depth to Length—Uppermost con- } 10.9
tinuous deck to top of keel }Do. Long Bridge to }
top of keel }Draught Moulded 29-7 $\frac{3}{4}$

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.....	33 ✓		Bracket Floors, Frame	✓	
" " from $\frac{3}{4}$ length amidships to Collision bulkhead.....	27 ✓		" " Reversed Frame.....	✓	
" " in peaks	24 ✓		" " Vertical Struts	✓	
SIDE FRAMING.			Centre Girder, depth and thickness amidships	47 x 58 x 50 ✓	
Frame Amidships, Angle <u>E or C</u>	12 3 $\frac{1}{2}$ 44 ✓		" " top Angles	3 $\frac{1}{2}$ 3 $\frac{1}{2}$ 50 ✓	
" " Extends up to.....	2 nd & 3 rd DECK ALTERNATELY ✓		" " bottom Angles.....	5 5 56 ✓	42 in coll 20.11.44
Reversed Frame Amidships, Angle	✓		Side Girders, No. each side and thickness.....	8 x 3 $\frac{1}{2}$ x 40 5A At Top, Bottom Or FLOORS. INTERCOSTAL PLATE CONTINUOUS W.T. GIRDER PLS IN WAY OF NO. 2 HOLD.	
" " Extends up to	✓		Margin Plate depth (excl. of flange) and thickness	39 x 58 ✓	
Depth of Framing Girder.....	12 ✓		" " Vertical Angle to Tank side Bracket abaft $\frac{1}{4}$ len. from stem	6 $\frac{1}{2}$ 6 $\frac{1}{2}$ 55 TEE ✓	
Frames in Uppermost Continuous 'tween Decks, Angle, <u>E or C</u>	9 3 $\frac{1}{2}$ 42 AFT ✓ 8 3 $\frac{1}{2}$ 40 AMID ✓ 10 3 $\frac{1}{2}$ 42 FORA ✓		" " Vertical Angle to Tank side Bracket from forward $\frac{1}{4}$ len. from stem to Panting Area	6 $\frac{1}{2}$ 6 $\frac{1}{2}$ 55 TEE ✓	
" " Second 'tween Decks, Angle, <u>E or C</u>	As For UPPERMOST		" " Gussets, spacing and scantling abaft $\frac{1}{4}$ len. from stem.....	CONTINUOUS 45 ✓	
" " Third	✓		" " Gussets, spacing and scantling from forward $\frac{1}{4}$ len. from stem to Panting Area	CONTINUOUS 45 ✓	
" " 1 st No. 1. Hold			Tank Side Brackets, height above base line at toe of Frame and thickness	LEVEL WITH TANK TOP IN HOLDS x 48 64 x 48 ✓	IN E. R. 40. F. BUNKERS ✓
" " from $\frac{1}{4}$ len. for'd to 15% len. from Stem	15 x 4 x 4 x 54 62 CHAN. ✓		INNER BOTTOM PLATING.		
" " in Peaks, Angle <u>E or C</u>	9 3 $\frac{1}{2}$ 48		Breadth and thickness of Middle Line Strake...	64 x 62 ✓	
Diameter and Spacing of Rivets through Frame and Shell Plating amidships	7/8 @ 5 1/4 SIDES ✓		Thickness of remainder in Holds	48 x 42 ✓	
State if Frame Joggled.....	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 the Panting Area in accordance with the Rules and/or as approved?	YES ✓		BEAMS.		
Are the scantlings and arrangements in way of the Bottom Forward in accordance with the Rules and/or as approved?.....	YES ✓		Uppermost Continuous Deck, amidships in } 9 3 $\frac{1}{2}$ 44 ✓ Walls, Angle, <u>E or C</u> }		
SINGLE BOTTOM.			" " in way of Bridge, Angle, } ✓ C or C }		
Floors, Depth and thickness at mid-line in Holds.....	✓		Spacing	33 ✓	
Height of Brackets at side above base line at toe of frame.....	✓		Second Deck, amidships, Angle, <u>E or C</u>	11 3 $\frac{1}{2}$ 44 ✓	AS PER PROFILE ✓
Middle Line Keelson, on Floors, Angles, C or C	✓		Spacing	33 ✓	
" " Through Plate or Inter-costal Plate	✓		Third Deck, amidships, Angle, <u>E or C</u>	11 3 $\frac{1}{2}$ 46 ✓	
" " Foundation Plate on Floors	✓		Spacing	33 ✓	
" " Flat Plate Keel Angles	✓		Fourth Deck, amidships, Angle, C or C	✓	
Side Keelsons, No. each side.....	✓		Spacing	✓	
" " thickness of Intercostal Plate.....	✓		Poop Deck, Angle, <u>E or C</u>	9 x 3 $\frac{1}{2}$ x 37 54 ✓ 8 x 3 $\frac{1}{2}$ x 40 ✓	
" " Angles	✓		Spacing	30 x 24 ✓	
DOUBLE BOTTOM.			Bridge Deck, Angle, C or C	✓	
Solid Floors, thickness and spacing	45 SPACED 33 ✓		Spacing	✓	
" " Are Frame and Reversed Frame joggled?	YES ✓		Forecastle Deck, Angle, <u>E or C</u>	7 3 42 ✓	
Bracket Floors, breadth and thickness at middle line	✓		Spacing	27 x 24 ✓	
" " breadth and thickness at margin plate.....	✓				

PILLARS AND DECKS.			
	INCHES IN SHIP.	Any Departure from Approved Plans to be Noted.	
PILLARS, No. of Rows	TWO ROWS OF		
" in 'tween Decks, Size and Spacing	WIDELY SPACED PILLARS		
" " " " "	4 GIRDERS IN		
" in Holds	HOLDS 4 TWIN DECKS		
" " " " "	EXTRA GIRDER FITTED PAS FROM FRAME 79 TO 124 UNDER UPPER DECK.		
Centre Line Bulkhead. Stiffeners and Spacing	NONE		
Plating, thickness of			
STRINGERS AND DECKS.			
Uppermost Continuous Deck.			
Stringer Plate, breadth and thickness in Wells	72 x 72		
" " " " in way of Bridge			
" Angle in Wells	6 6 72		
Thickness of Plating abreast Deck openings in way of Walls	61		
Thickness of Plating abreast Deck openings in way of Bridge			
Thickness of Plating within line of openings	43		
If Sheathed, material and thickness	NOT SHEATHED		
Second Deck.			
Stringer Plate, breadth and thickness in Wells	72 x 44		

SHELL PLATING.			
SCANTLINGS.			
STRAKES.	AS IN VESSEL.		ANY DEPARTURE FROM APPROVED PLANS TO BE NOTED.
	AMIDSHIPS.	APR.	
	Breadth.	Thickness.	
	Inches.	Inches.	
Flat Plate Keel	55	90	80
" Dblg. (if any)			
Bottom Plating, No. of Strakes	FOUR	71	52
Bilge Plating, No. of Strakes	ONE	71	52
Side Plating, No. of Strakes	FOUR	68	50
Upper Deck, Sheer-strake in Wells	83 3/4	81	50
Upper Deck, Sheer-strake in Bridge			
Strake below Sheer-strake in Wells	85	72	50
Strake below Sheer-strake in Bridge			
Poop Side Plating			42
Bridge Side Plating			FLAT OF BOTTOM FORWARD 78
Forecastle Side Plating			44

WATERTIGHT BULKHEADS.			
Total No. of W.T. BULKHEADS in Vessel	Extending to Upper Deck (Sec. 3 c)	Deck next below	As per Rule
8	1	7	7
DIVISIONAL W.T. BULKHEADS IN TWEEN DECKS			
STIFFENERS.			
MIDSHIP BULKHEAD, Upper 'tween decks	VERTICAL.		HORIZONTAL.
	Scantlings.	Spacing.	
" " Second	26	7 x 3 x 33 BA	3 1/2
" " Third	27	26 x 3 x 33 BA	3 1/2
" " Holds	(24)	34	10 x 3 1/2 x 48 BA
COLLISION (in Hold)	51	39	7 x 3 x 36 BA
AFTER PEAK	45	36	7 x 3 x 33 BA
MANUFACTURER'S NAME OR TRADE MARK OF THE STEEL USED IN THE CONSTRUCTION OF THE VESSEL (state process of manufacture)			
COLVILLE, STEEL CO OF SCOTLAND, LANARKSHIRE			
Has the Steel been tested as required by the Rules?			
YES			

EQUIPMENT No. 50644				LETTER 21				ANCHORS.				
Number of Certificate.	Anchors.	WEIGHT, EX. STOCK.		WEIGHT OF STOCK.		TEST, PER CERTIFICATE.		WEIGHT REQUIRED BY TABLE 63.	Description of Anchor.	Makers.	Where and when tested, and Superintendent.	
		Cwts.	qrs.	lbs.	Cwts.	qrs.	lbs.					Tons.
44914	1st Bower	86	1	21	Stockless	61	17	2	0	8 5/2	BYERS IMPROVED	PERH. L. BYERS & CO. S. 2/12/43
44915	2nd "	86	1	0		61	17	2	0	8 5/2	"	S. 2/12/43
	3rd "									73 1/2	"	
	Collective weight	172	2	21						244 1/2		
56450	Stream	25	0	16	6	1	10	24	17	0	25	DRURY & G. WROTH. NOT STATED

CHAIN CABLES.				HAWERS AND WARPS.							
Number of Certificate.	Length and size supplied.	Test per Certificate.	WEIGHT OF CHAIN CABLE.	Length and size supplied.	Description.	Makers of Cables.	Where and when tested, and Superintendent.	Material.	Length and size supplied.	Breaking Test of Steel Wire.	Length and size supplied.
3648	210	2 1/2	116 7/8	793	3	21	989	300	2 1/2	STUD LINK	NOT STATED
19450	205	"	"	36	2	4	"	"	"	L.W. 25/44	VOGAN
2693	30	"	"	130	1	25	SEE P. 4	"	"	N 3/44	REL.
Stream	120	4 3/4	64	6	"	"	"	"	"	120	4 3/4

Steering Gear, Type (Power or hand) ELECTRO-HYDRAULIC (GRAMS) By DONKIN, NEWCASTLE. Alternative Means of Steering NOT PROVIDED

Steering Chains (Size and Test) NONE. Windlass ELECTRIC By CLARKE, CHAPMAN. Boats 2-29 LIFEBOATS WITH MOTOR

Ceiling in Holds, thickness and material STEEL CEILING OVER BILGES ONLY. Cargo Battens, thickness, material and spacing NONE: SEE P. 4

Cargo Hatchways. (Upper Deck) 30 COAMING FOR 42 APT FITTED THUS 1/4 Thickness of Hatches 3"

Size of Hatchways No. 1 (Fwd.) 20'3" x 16'0" No. 2 23'9" x 21' No. 3 52'3" x 21' No. 4 10'3" x 21' No. 5 35'9" x 21' No. 6 27'6" x 21'

Number of Shifting Beams } NO. 1 = 3 : NO. 2 = 6 : NO. 3 = 9 : NO. 4 = 1 : NO. 5 = 6 : NO. 6 = 4

Builder's Signature FOR LITHGOWS LIMITED

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 MOTORSHIP

(b) whether the vessel, not being an oil tanker, is fitted for carrying oil as cargo OIL FUEL IN DEEP TANK 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 conformity with the British Rules Regulations & the Secretary of State, the scantlings & arrangements are in accordance with or equivalent to those shown on the approved plans. The materials and workmanship are of good quality. All the double bottom tanks, fore & aft peaks, deep tanks, oil fuel bunkers & water ballast tanks at sides of tunnel were tested as required by the rules & found satisfactory. The weather decks & W.T. bulkheads & tunnel were tested & found satisfactory. The fuel tank has been verified & the marks cut in the vessel's sides. The pumps, steering gear, windlass & bilge suction were tried & found efficient. Emergency equipment has been supplied & no sparring has been fitted in the holds & tween decks (see) The deep tank has been arranged to carry oil as cargo in the deep tank. F.P. above 150°F. Sec 20 of the rules having been complied with. 6 oil fuel F.P. above 150°F is carried in No. 2, 3 & 4 double bottom tanks & the oil fuel bunkers. Sec 20 of the rules has been complied with.

The amount of Entry Fee		Fees applied for,		(Special notations, where part of class, to be stated.)	
£ 11	0	21	0	19	44
Special Survey Fee	£ 47	16	0	Received by me,	
SPECIFICATION FEE	£ 11	19	0	I am of opinion the Vessel should be Classed	+100 AI
FREEBOARD	£ 20	0	0	WITH FREEBOARD	
State whether the Vessel has been built under Special Survey		YES		Signature Kenneth J. Paterson	
Certificate to be sent to GREENOCK OFFICE		Date of issue 30/1/45		Surveyor Lloyd's Register of Shipping.	
Committee's Minute		GLASGOW 14 NOV 1944		William D. Johnston	
Character assigned		1-100 AI		11.44	
which freeboard		11.44		11.44	
Note: Co. Ltd. & Equ.		11.44		11.44	

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 constructed for the Ministry of War Transport to the Cargo Luer type & is similar to the Empire Chief constructed by the Furness Shipbuilding Co.

The plans of midships section & transverse & decks as built, the approved plans & forging reports are forwarded.

The plans & specifications have been supervised on behalf of the D. M. B. & a copy of the completion certificate & fitting certificate issued is enclosed herewith.

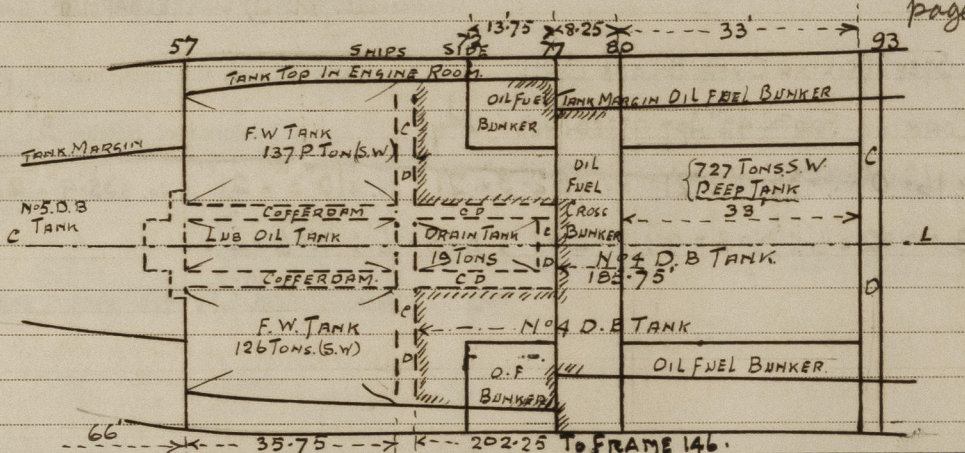
All the tween deck bulkheads are completely closed & made watertight & a hinged W. T. door P & S is fitted at bulkhead No 77.

HATCH COVERS ARE FITTED AT ALL TWEEN DECK HATCHES.

SPARRING WILL BE FITTED AT FIRST CONVENIENT OPPORTUNITY, CLEATS HAVE BEEN SUPPLIED.

After the loaded trial it was found necessary to dock the vessel for examination of tail shaft & the bottom & rudder were examined & repaired. Later it was reported that a number of studs were missing or damaged from two lengths of cable. These two lengths were replaced by two lengths from a sister vessel now building. The certificates have been forwarded for division, see page 3 for particulars of tests.

SKETCH OF DOUBLE BOTTOM & OIL FUEL TANKS IN ENGINE ROOM.



PARTICULARS OF ELECTRIC WELDING (if employed) BUTTS OF TANK TOP; GUSSET TO TANK TOP; PILLARS: CRUISER STERN; CORNERS OF TANK ENDS & B.H.S.: OIL FUEL BUNKERS: BUTTS OF BILGE STRAKE: BUTTS OF STRINGER ANGLE: STERN FRAMES RUDDER, FABRICATED BY ELECTRIC WELDING: BOSS PLATING: VENTILATORS: CORNERS OF HATCH COAMING DECK BARS. BULKHEAD STIFFENER BRACKETS:

SPECIAL NOTATIONS:—Either as part of the vessel's class or for record in the Register Book BOWER ANCHOR & 60 FATHOMS OF CABLE TO SUPPLY. SPARRING TO FIT IN HOLDS AT FIRST CONVENIENT OPPORTUNITY: COLLISION B.H.S. TO WEATHER DECK, 7 B.H.S. TO 2ND DECK, 7 DIVISIONAL W.T. B.H.S. IN UPPER TWEEN DECKS; D.F.: E.S.D.: GYC: CARRYING CARGO OIL FUEL ABOVE 150°F IN MIDSHIP DEEP TANK. CRUISER STERN. LLOYDS A.C.P.: OIL ENGINE.

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

1st Bower 56.0.21.1 A.E.G.: 5330: 12.11.43.
2nd „ 55.3.21.1 A.E.G.: 5331: 12.11.43.
3rd „

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop 33 ft., R.Q.D. ft., Bridge ft., Forecastle 40.25 ft.

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

Official No. 169,515 Signal Letters Extreme Breadth over Belting Over-all Length 497.37.

No. and Material of Decks 2. DKS, 3RD DECK EXCEPT IN NO 1 HOLD.

Parts of Bottom of Vessel coated with cement or approved composition CEMENT IN PEAKS, IN DOUBLE BOTTOM CLEAR OF OIL FUEL CEMENT OVER RIVET HEADS

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.	SW Water Capacity.	Where Fitted.	Length.	SW Water Capacity.
Double bottom aft.	33-54	66	Fore peak tanks	✓	134
Double bottom, sides of tunnel	59.5	211	After peak tanks	✓	189
Double bottom, if under Engines only, F.W. AT SIDES	35.75	263	Deep tank, amidships	33	727
Double bottom, if under Boilers only,			Deep tank forward, FRAMES 146 TO 169	52	218
Double bottom, forward, including for deep tanks	202.25	1021	Other tanks, if fitted,		
Total length (if continuous) and Capacity	185.75	1624	(If necessary furnish further information by sketch.)		
Total length of double bottom (including common wing tanks etc)	366.75	366.75	Total length for record	306.75	

Order for Special Survey No. 3509

Date 31st MARCH 1943.

Dates of Surveys held while building

(1942) NOV. 11. 13. (1943) JAN. 4. FEB. 23. MAR. 24. APRIL 27. JUNE 7. 10. 21. 24. 30. JULY 13. 21. 28. 29. SEPT. 1. 2. 9. 14. 23. 29. OCT. 8. 12. 14. 19. 20. 27. NOV. 1. 2. 9. 12. 17. 23. 25. 30. DEC. 6. 9. 14. 21. 23. 27. 28. 30. (1944) JAN. 4. 5. 7. 10. 13. 14. 18. 19. 20. 24. 26. 27. FEB. 1. 3. 4. 7. 10. 11. 15. 21. 22. 24. 25. 28. MAR. 1. 3. 4. 7. 9. 10. 14. 15. 17. 20. 21. 24. 29. 31. APRIL 4. 5. 7. 10. 11. 12. 13. 14. 18. 19. 20. 21. 24. 26. 27. 28. MAY 3. 4. 5. 10. 11. 12. 15. 16. 17. 18. 19. 22. 23. 24. 25. 30. JUNE 1. 2. 5. 6. 7. 9. 12. 13. 14. 15. 16. 17. 19. 20. 21. 22. JULY 1. 4. 20. 24. 27. 28. AUG. 1. 2. 4. 9. 14. 15. 17. 18. 24. 29. 31. SEPT. 5. 11. 13. 14. 15. 20. 21. 22. 25. 27. 28. 29. OCT. 2. 6. 18. 25. NOV. 3. 6. Total No. of Visits 168