

State if Report has been sent

DATE

WEIGHT REQUIRED BY

TABLE 53

Description of Anch

State if Report is sent on the

DATE

WEIGHT REQUIRED BY

TABLE 53

Description of Anch

Date of completion of report 28th DECEMBER 1940

Survey held at PORT GLASGOW.

Date First Survey

DECEMBER 1939

Last Survey

No. 21218.

25th DECEMBER 1940

On the (State if Machinery fitted Aft and

SINGLE SCREW STEAMER "EMPIRE FROST"

MCHY AMIDSHIP.

State Type (Full Scantling, Complete Superstructure

COMPLETE SUPERSTRUCTURE WITHOUT TONNAGE OPENING.

State Type of Erections FORECASTLE

TONNAGE under

GLASS + 100 A.1.

State if with freeboard

YES.

Limit at PORT GLASGOW.

TONNAGE Deck...

GLASS + 100 A.1.

State if with freeboard

YES.

Limit at PORT GLASGOW.

Do. of space or spaces

Length from fore part of stem to after part of stern

L 425

Launched SEPT. 2nd 1940 Yard No. 939

Total

Breadth (greatest moulded)

B 56

Builders LITHGOWS LTD

Gross Tonnage 7004.60

Depth, at middle of length from top of keel to top

D 36.83

Owners MINISTRY OF SHIPPING.

Register Tonnage 5128.89

1st Longitudinal Number (L x D)

15193

Managers G HEYN & SONS LTD

REGISTERED DIMENSIONS.

FEET.

Length 432.2

Breadth 56.2

Depth 34.25

Framing Depth "d," at middle of length. See

Sec. 3 (1d)

23.9

Proportions—Depth to Length—Uppermost con-

tinuous deck to top of keel

11.55

Do. Long Bridge to top

of keel

✓

Draught Moulded

26-1/2"

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	31		Bracket Floors, Frame	6 3/2 7/16	
" " from 1/2 length amidships to Collision bulkhead	27		" " Reversed Frame	6 3/2 7/16	
" " in peaks	24		" " Vertical Struts	10 3/2 7/16	
SIDE FRAMING.			Centre Girder, depth and thickness amidships	43 1/2 x 54	
Frame Amidships, Angle [	12 3/2 x 6		" " top Angles	4 4 1/2	
" " Extends up to	SECOND DK		" " bottom Angles	4 4 7/16	
Reversed Frame Amidships, Angle	✓		Side Girders, No. each side and thickness	1 @ 38	
" " Extends up to	✓		Margin Plate depth (excl. of flange) and thickness	44 x 54	
Depth of Framing Girder	12"		" " Vertical Angle to Tank side	6 1/2 6 1/2 625 T	
Frames in Uppermost Continuous 'tween Decks, Angle [	6 3/2 7/16		" " Bracket abaft 1/2 len. from stem	6 1/2 6 1/2 625 T	
" " Second 'tween Decks, Angle [or [	✓		" " Vertical Angle to Tank side	6 1/2 6 1/2 625 T	
" " Third " " " "	12 3/2 x 9/16 B.A.		" " Bracket from forward 1/2 len. from stem to Panting Area	42 CONTINUOUS	
" " from 1/2 len. for'd. to 15% len. from Stem	12 3/2 x 9/16 B.A.		" " Gussets, spacing and scantling abaft 1/2 len. from stem	42 CONTINUOUS	
" " in Peaks, Angle [	8 3/2 35		" " Gussets, spacing and scantling from forward 1/2 len. from stem to Panting Area	6'-5"	
Diameter and Spacing of Rivets through Frame and Shell Plating amidships	7/8 @ 7 DIAS ON BOTTOM		Tank Side Brackets, height above base line at toe of Frame and thickness	6'-5"	
State if Frame Joggled	YES		INNER BOTTOM PLATING.		
Are the scantlings and arrangements in the Panting Area in accordance with the Rules and/or as approved?	YES		Breadth and thickness of Middle Line Strake	82 x 50	
Are the scantlings and arrangements in way of the Bottom Forward in accordance with the Rules and/or as approved?	YES		Thickness of remainder in Holds	44-40	
SINGLE BOTTOM.			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	
Floors, Depth and thickness at mid-line in Holds	✓		BEAMS.		
Height of Brackets at side above base line at toe of frame	✓		Uppermost Continuous Deck, amidships	10 3/2 437	
Middle Line Keelson, on Floors, Angles, [or [	✓		" " in Wells, Angle [or [✓	
" " Through Plate or Intercostal Plate	✓		" " in way of Bridge, Angle, [or [	31"	
" " Foundation Plate on Floors	✓		Spacing	31"	
" " Flat Plate Keel Angles	✓		Second Deck, amidships, Angle [	12 3/2 45	
Side Keelsons, No. each side	✓		Spacing	31"	
" " thickness of Intercostal Plate	✓		Third Deck, amidships, Angle, [or [✓	
" " Angles	✓		Spacing	✓	
DOUBLE BOTTOM.			Fourth Deck, amidships, Angle, [or [✓	
Solid Floors, thickness and spacing	42 EVERY 3RD FRAME.		Spacing	✓	
" " Are Frame and Reversed Frame joggled?	YES.		Poop Deck, Angle, [or [✓	
Bracket Floors, breadth and thickness at middle line	32 1/4 x 42		Spacing	✓	
" " breadth and thickness at margin plate	32 1/4 x 42		Bridge Deck, Angle, [or [✓	
			Spacing	✓	
			Forecastle Deck, Angle, [or [8 3/2 7/16	
			Spacing	27 1/2 24	

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Lloyd's Register Foundation

DECKS.

PILLARS, No. of Rows..... CENTRE LINE BULKHEAD
 in 'tween Decks, Size and Spacing..... REINFORCED HATCH SIDE GIRDS
 " " " " " HATCH END BEAMS

Centre Line Bulkhead.
 Stiffeners and Spacing..... 62' APART 12 x 3 1/2 x 45
 Plating, thickness of 30

STRINGERS AND DECKS.

Uppermost Continuous Deck.
 Stringer Plate, breadth and thickness in 'tween 66 x 66
 " " " " in way of Bridge

Angle in 'tween 6 6 5/8
 Thickness of Plating abreast Deck openings in way of Walls 63-45
 Thickness of Plating abreast Deck openings in way of Bridge

Thickness of Plating within line of openings... 40-36
 If Sheathed, material and thickness NAT. SHEATHED, COMPOSITION FITTED OVER ACCOMMODATION

Second Deck.

Stringer Plate, breadth and thickness in 'tween 72 x 40

Stringer Plate, breadth and thickness in way of Bridge

Thickness of Plating abreast Deck openings in way of Walls 36-32

Thickness of Plating abreast Deck openings in way of Bridge

Thickness of Plating within line of openings... 34-30

If Sheathed, material and thickness NOT SHEATHED

Third Deck.

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 35 x 36

Plating, Sheathing, material and thickness PLATING 32 NOT SHEATHED

SHELL PLATING.

SCANTLINGS.

STRAKES.

AS IN VESSEL.

ANY DEPARTURE FROM APPROVED PLANS TO BE NOTED.

EDGES.

RIVETING.

BUTTS.

FLAT PLATE KEEL 52' 78' 68' 68'
 " DBLG. (if any) 3 STRAKES OF BOTTOM PLATING P+S 69'
 BOTTOM PLATING, No. of Strakes FOUR 63' 50' 50'
 BIDGE PLATING, No. of Strakes ONE 63' 50' 50'
 SIDE PLATING, No. of Strakes FOUR 62' 46' 46'
 UPPER DECK, Sheer-strake in 'tween 58' 69' 50' 46'
 UPPER DECK, Sheer-strake in Bridge 58' 64' 46' 46'
 STRAKE BELOW Sheer-strake in 'tween
 STRAKE BELOW Sheer-strake in Bridge
 POOP SIDE PLATING
 BRIDGE SIDE PLATING
 FORECASTLE SIDE PLATING 40

DOUBLE 7/8 3 3/4 FOUR 1' 4' LAPPED.
 FROM FOR 1/2 LEN. TO RULE POSITION OF COLLISION B.P.
 " 7/8 3 3/4 FOUR 7/8 3 1/2
 " 7/8 3 3/4 FOUR 7/8 3 1/2
 " 7/8 3 3/4 THREE 7/8 3 1/8
 " 7/8 3 3/4 FOUR 7/8 3 1/2
 " 7/8 3 3/4 FOUR 7/8 3 1/2
 SIDE PLATING IN WAY OF PAINTING AREA 58' IN LIEU OF SIDE STRINGERS
 SINGLE 7/8 3 1/2 SINGLE 7/8 3 1/8

WATERTIGHT BULKHEADS.

Total No. of W.T. BULKHEADS in Vessel 7
 Extending to Upper Deck (Sec. 3 c) 6
 " Deck next below 1
 As per Rule 7

STIFFENERS.

VERTICAL.

HORIZONTAL.

BULKHEAD, Uppertween decks 26' 6 x 3 1/2 x 3/8 30"
 " Second " 30"
 " Third " 30"
 Holds 8.5 44-26 12 x 3 1/2 x 45 BA 30" To 27"
 (in Hold) 54-29 12 x 3 1/2 x 45 BA 24"
 46-30 7 x 3 x 35 BA 24"
 2 SEMI-BOX BEAMS
 4 W.T. FLAT
 2 SEMI-BOX BEAMS
 4 TUNNEL RECESS.

FORGINGS and CASTINGS.

KEEL, Bar FLAT PLATE KEEL
 STEM LOWER PORTION ROLLED 10 x 2 1/2 UPPER PORTION PLATES.
 STERN Propeller Post CASTING, SEE PLAN. BEARDMORE
 FRAME Rudder CASTING, STREAM LINED
 Speed of Vessel 10 1/2 KNOTS
 RUDDER Type DOUBLE PLATE STREAM LINED
 " A x D 570
 " Diam. of head Forging 11" net rule BEARDMORE
 " Mainpiece at top pintle CASTING 10 1/2 x 10 3/8
 " " heel " 6 x 10 3/8
 " how constructed COMPLETE CAST STEEL FRAME
 " double or single plate DOUBLE PLATE 49 THICK
 " coupling, vertical or horizontal VERTICAL

Manufacturer's Name or Trade Mark of the Steel used in the construction of the Vessel (state process of manufacture) COLVILLES, STEEL CO OF SCOTLAND, LANARKSHIRE. (OPEN HEARTH)

Has the Steel been tested as required by the Rules? YES.

Number of Certificate.	Anchors.	WEIGHT, EX. STOCK.	WEIGHT OF STOCK.	TEST, PER CERTIFICATE.	WEIGHT REQUIRED BY TABLE 53.	Description of Anchors.	Makers.	Where and when tested and Superintendent.
		Cwts. qrs. lbs.	Cwts. qrs. lbs.	Tons. cwt. qrs. lbs.	Cwts.			
39723	1st Bower ...	68 1 0	STOCKLESS	52 15 2 14	68	BYERS IMPROVED	PERN. L. BYERS & CO	SUNDERLAND 27 1/4/40 NORMAN
39769	2nd " ...	68 0 14	---	52 15 2 14	68	" "	" "	" 1 1/5/40 "
	3rd " ...				58 1/2			
	Collective weight.	136 1 14			194 1/2			
53412	Stream	19 1 6	4 3 20	20 1 3 14	19	ORDY FGD WROU IRON	NOT STATED	CRADLEY HEATH 19 1/2/40 PAUL

CHAIN CABLES.

HAWSERS AND WARPS.

[illegible]

Steering Gear, Type (Power or hand) **HASTIE'S STEAM. WILSON PIRRIE TYPE** Alternative Means of Steering **Blocks TACKLED TO AFTER WINCH.**

Steering Chains (Size and Test) **NONE. TELEMOTOR CONTROL** Windlass **STEAM BY CLARK CHAPMAN.** Boats **1-24' LIFEBOAT
1-26' " FITTED WITH MOTOR
2-17' DINGHYS.**

Ceiling in Holds, thickness and material **NONE TANK TOP PLATING INCREASED** Cargo Battens, thickness, material and spacing **NOT FITTED.**

Cargo Hatchways.—(Upper Deck) **30" STEEL COAMINGS STIFFENED.** Thickness of Hatches **2½" + 3" AT NO 3 HATCH.**

Size of Hatchways No. 1 (Fwd.) **31'-6" x 20'** No. 2 **31' x 20'** No. 3 **12'-11" x 20'** No. 4 **10'-4" x 20'** No. 5 **31' x 20'** No. 6 **31' x 20'**

Number of Shifting Beams **NO'S 1, 2, 5 & 6 = 5 : NO'S 3 & 4 = 1.**
and Fore and Afters

Builder's Signature

FOR LITHGOWS LIMITED

R Campbell

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 built in accordance with the approved plans & in general conformity with the Society's rules for the class contemplated.

The materials & workmanship are of good quality.

all the double bottom tanks, cofferdams, fore & after peak tanks & fresh water tanks have been tested as required by the rules & found satisfactory.

The weather decks, W.T bulkheads, tunnels & W.T doors were checked & found satisfactory.

The freeboard has been verified & the marks cut in on the vessel's sides

He pumps, steering gear, windlass, W.T. doors, auxiliary steering gear & bilge suction
were tried under working conditions & found satisfactory.

Emergency equipment has been supplied to this vessel & no sparring has been fitted

The scantlings are suitable for a draught 18" in excess of that corresponding to the freeboard which could be assigned to the vessel if a tonnage opening were fitted and the increased draught is 26'-1 $\frac{1}{2}$ " moulded.

The amount of Entry Fee £ 10 : 0 : 0 } Fees applied for,

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

Special Survey Fee.... £375: 2 . 6

28th DEC. 1940

FREEBOARD 18: 0: 0

Received by me,

Travelling Expenses, if any £

207. 194

SPECIFICATION FEE 93:15:6

I am of opinion the Vessel should be Classed **100 A1.**
WITH **FREEBOARD**

State whether the Vessel has been built under Special Survey YES

Signature

WITH FF
Kenneth Inglis

Surveyor to Lloyd's Register of Shipping

Certificate to be sent to GREENOCK OFFICE Date of issue

via Cassano

Committee's Minute

GLASGOW

31 DEC 1940

Character assigned

$\frac{1}{100}$ 100 A1

with preboard

Novas ASCD

12. 40

✓ June 12 40

Note Equ. Cgo litens.

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.)

This is the first vessel to be constructed by Messrs Lithyows Ltd for the Ministry of Shipping to the 'Y' type design. As there are a number of duplicate vessels the approved plans which are herewith forwarded should be returned to this office as soon as possible. The forging reports & plans of vessel as built are also forwarded.

As requested in the London letters dated 4th March 1940 & 17th May 1940 the plans & specifications have been supervised and a copy of the certificate issued is herewith enclosed.

Note. No cleats nor hatch covers have been fitted to the cargo hatches on the second deck.

X The depth of this vessel is 27'-9" moulded to second Deck & 36'-10" moulded to upper deck owing to the 12" tumble home at upper deck.

PARTICULARS OF ELECTRIC WELDING (if employed) Leads heels of solid pillars, cruiser stern, boss plating, corners of bulkheads, tank ends, butts of stinger bar, auxiliary engine seats, tunnel stools.

SPECIAL NOTATIONS:—Either as part of the vessel's class or for record in the Register Book LLOYDS A.C.P. CRUISER STERN : D.F.:

Particulars of Drop Test of Cast Steel Anchors, viz.:—
Weight, Surveyor's Initials, Number of Certificate, Date of Test.
1st Bower 43-1-0 : J.D. : 2677 : 14-3-40.
2nd " 43-3-0 : J.D. : 2595 : 27-1-40.
3rd "

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop ☒ ft., R.Q.D. ☒ ft., Bridge ☒ ft., Forecastle 39.4 ft.
(in feet and tenths). When the Poop or Forecastle are joined to the B.D., this should be distinctly stated
Official No. 166,992. Signal Letters
No. and Material of Decks 2 DKS Extreme Breadth over Belting (Circ. 1611)
Over-all Length 447.6 (Circ. 1703)
Parts of Bottom of Vessel coated with cement or approved composition TANKS CEMENT WASHED. EXCEPT BOILER ROOM TANK WHICH HAS CEMENT ON FLAT OF BOTTOM. CEMENT FITTED IN PEAKS.
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.
Double bottom, aft,	131.75	371	Fore peak tank,
Double bottom, under Engines and Boilers,	✓		After peak tank,
Double bottom, if under Engines only,	25.8	120	Deep tank, aft,
Double bottom, if under Boilers only, DRY TANK W.T. Comp.	15.5		Deep tank, forward,
Double bottom, forward,	193.9	724	Other tanks, if fitted,
Total length (if continuous) and Capacity	366.95 2.5 369.6	1215	(If necessary, furnish further information by sketch.)

Order for Special Survey No. 3463.

22ND DECEMBER 1939.

Dates of Surveys held while building

(1939) DEC. 18. (1940) JAN. 18. FEB. 28. MAR. 1. 4. 15. 22. 25. 29. APR. 1. 5. 9. 12. 22. 29. MAY 1. 3. 4. 9. 17. 30. JUNE 5. 17. 21. 24. 27. 28. JULY 3. 15. 18. 22. 23. 29. 31. AUG. 1. 12. 14. 16. 20. 21. 22. 23. 24. 26. 27. 30. SEPT. 2. 5. 13. 17. 26. 27. 30. OCT. 2. 8. 11. 15. 16. 18. 23. 24. 26. NOV. 5. 11. 13. 14. 27. DEC. 6. 10. 12. 13. 16. 19. 20. 23. 24. 25.

Total No. of Visits 78.