

STEEL STEAMER ~~OR~~ MOTORSHIP

Received at London Office 12 1340

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 *7th September 1940.* Port of *Glasgow* No. *62783*
 Survey held at *Glasgow.* Date First Survey *1940 Jan'y 11th* Last Survey *2nd September 1940*
 On the *(State if Machinery fitted Aft and* *Single Screw Cargo Vessel* *"EMPIRE LIGHT."*
if Single, Twin or Triple Screw)

State Type *(Full Scantling, Complete Superstructure with or without Tonnage Openings)* *Intermediate* State Type of Erections *Roof, Bridge & Deck*

TONNAGE under 6147.10 CLASS *+100 A.1.* State if with freeboard *Yes.* Built at *Glasgow.*
 Tonnage Deck *Corresponding to a summer moulded draft of 25'5"* as condition of Class
 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 420
 Total Breadth (greatest moulded) B 57.3
 Depth, at middle of length from top of keel to top of beam at side of uppermost continuous deck. See Sec. 3 (1c) D 34.5
 Gross Tonnage 6827.85
 Register Tonnage 3976.74
 1st Longitudinal Number (L x D) = 14490
 2nd Numeral L x (B + D) = 38552
 Framing Depth "d," at middle of length. See Sec. 3 (1d) 20.87
 Proportions—Depth to Length—Uppermost continuous deck to top of keel 12.17
 Do. Long Bridge to top of keel 10.00
 Draught Moulded 25'5" *Yes.*
 Owners *Ministry of Shipping*
 Managers *British India Ship Nav. Co. Ltd.*
 (Where necessary to be entered in Reg. Book.)
 Residence *as recorded*
 Port of Registry *Glasgow*
 If surveyed while building, afloat, or 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	30	✓	Bracket Floors, Frame	✓	
" " from $\frac{1}{2}$ length amidships to Collision bulkhead.....	27	✓	" " Reversed Frame	✓	
" " in peaks.....	24	✓	" " Vertical Struts	✓	
SIDE FRAMING.			Centre Girder, depth and thickness amidships	43" x 53	
Frame Amidships, Angle, [or]	12 x 3 $\frac{1}{2}$ x 45		" " top Angles	3 $\frac{1}{2}$ x 3 $\frac{1}{2}$ x 47	
" " Extends up to	main deck		" " bottom Angles	4 x 4 x 53	
Reversed Frame Amidships, Angle	✓		Side Girders, No. each side and thickness	1 @ 37	
" " Extends up to	✓		Margin Plate depth (excl. of flange) and thickness	39 x 53	
Depth of Framing Girder	12"		" " Vertical Angle to Tank side Bracket abaft $\frac{1}{2}$ len. from stem	6 $\frac{1}{2}$ x 6 $\frac{1}{2}$ x 55	6 x 6 x 44
Frames in Uppermost Continuous 'tween Decks, Angle, [or]	8 x 3 $\frac{1}{2}$ x 39 8 x 3 $\frac{1}{2}$ x 49 midway of Bridge x 5 x 3 $\frac{1}{2}$ x 58 angle		" " Vertical Angle to Tank side Bracket from forward $\frac{1}{2}$ len. from stem to Panting Area	6 $\frac{1}{2}$ x 6 $\frac{1}{2}$ x 55	for 130-142
" " Second 'tween Decks, Angle, [or]	✓		" " Gussets, spacing and scantling abaft $\frac{1}{2}$ len. from stem.....	every frame 41 x 57 85	
" " Third " " " "	✓		" " Gussets, spacing and scantling from forward $\frac{1}{2}$ len. from stem to Panting Area.....	every frame 41 x 57 85	
" " from $\frac{1}{2}$ len. for'd. to 15% len. from Stem	12 x 3 $\frac{1}{2}$ x 54	✓	Tank Side Brackets, height above base line at toe of Frame and thickness	69 $\frac{1}{2}$ x 44	
" " in Peaks, Angle, [or]	8 x 3 $\frac{1}{2}$ x 49	✓	INNER BOTTOM PLATING.		
Diameter and Spacing of Rivets through Frame and Shell Plating amidships	7/8 - 5 $\frac{3}{4}$		Breadth and thickness of Middle Line Strake ...	69 x 51	69 x 49
State if Frame Joggled	Yes	✓	Thickness of remainder in Holds	43	57 under Hatchways
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.		
SINGLE BOTTOM.			Uppermost Continuous Deck, amidships in Wells, Angle, [or]	9 x 3 $\frac{1}{2}$ x 42-16	
Floors, Depth and thickness at mid-line in Holds	✓		" " in way of Bridge, Angle, [or]	10 x 3 $\frac{1}{2}$ x 40	
Height of Brackets at side above base line at toe of frame	✓		Spacing	30"	
Middle Line Keelson, on Floors, Angles, [or]	✓		Second Deck, amidships, Angle, [or]	9 x 3 x 38 as approved	
" " Through Plate or Intercostal Plate	✓		Spacing	30"	
" " Foundation Plate on Floors	✓		Third Deck, amidships, Angle, [or]	✓	
" " Flat Plate Keel Angles	✓		Spacing	✓	
Side Keelsons, No. each side	✓		Fourth Deck, amidships, Angle, [or]	✓	
" " thickness of Intercostal Plate	✓		Spacing	✓	
" " Angles	✓		Poop Deck, Angle, [or]	7 x 3 x 33 1/2 6 x 3 x 37	
DOUBLE BOTTOM.			Spacing	30" x 24"	
Solid Floors, thickness and spacing	41 @ 30"		Bridge Deck, Angle, [or]	8 x 3 x 41-39	
" " Are Frame and Reversed Frame joggled?	Yes		Spacing	30"	
Bracket Floors, breadth and thickness at middle line	✓		Forecastle Deck, Angle, [or]	9 x 3 $\frac{1}{2}$ x 36 8 x 3 x 35 7 x 3 x 33	
" " breadth and thickness at margin plate	✓		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..... <i>Two</i>			Stringer Plate, breadth and thickness in way of Bridge	<i>78 x .34</i>	
„ in 'tween Decks, Size and Spacing.....	} <i>wide spaced as approved.</i>		Thickness of Plating abreast Deck openings in way of Wells	<i>.36 - .32</i>	
„ „ „ „ „			Thickness of Plating abreast Deck openings in way of Bridge	<i>.36 + .30</i>	
„ in Holds „ „			Thickness of Plating within line of openings...	<i>.34 + .30</i>	
„ „ „ „ „			If Sheathed, material and thickness	<i>✓</i>	
Centre Line Bulkhead.			Third Deck.		
Stiffeners and Spacing.....	<i>✓</i>		Stringer Plate, breadth and thickness.....	<i>✓</i>	
Plating, thickness of	<i>✓</i>		If Plated, state thickness.....	<i>✓</i>	
STRINGERS AND DECKS.			Fourth Deck.		
Uppermost Continuous Deck.			Stringer Plate, breadth and thickness.....	<i>✓</i>	
Stringer Plate, breadth and thickness in Wells	<i>75 x .67</i>		If Plated, state thickness	<i>✓</i>	
„ „ „ „ in way of Bridge	<i>75 x .42 - .39.</i>		Poop Deck.		
„ „ „ „ „	<i>6 x 6 x .67 4"</i>		Stringer Plate, breadth and thickness	<i>37 x .36</i>	
„ Angle in Wells	<i>5 x 5 x .48.</i>		Plating, Sheathing, material and thickness ...	<i>.25 with wood deck } .30 unheated }</i>	
Thickness of Plating abreast Deck openings in way of Wells	<i>.63 4 .42</i>		Bridge Deck.		
Thickness of Plating abreast Deck openings in way of Bridge	<i>.41 4 .36.</i>		Stringer Plate, breadth and thickness.....	<i>74 x .48 Bare Steel</i>	
Thickness of Plating within line of openings...	<i>.42 4 .34</i>		Plating, Sheathing, material and thickness ...	<i>.42 with 1/2" Diastatic Compo.</i>	
If Sheathed, material and thickness	<i>✓</i>		Forecastle Deck.		
Second Deck.			Stringer Plate, breadth and thickness.....	<i>35 x .36</i>	
Stringer Plate, breadth and thickness in Wells...	<i>78 x .39.</i>		Plating, Sheathing, material and thickness ...	<i>.34 (unheated)</i>	

SHELL PLATING.

SCANTLINGS.					RIVETING.							
STRAKES.	AS IN VESSEL.				ANY DEPARTURE FROM APPROVED PLANS TO BE NOTED.	EDGES. State if jogged? <i>do.</i>			BUTTS.			
	AMIDSHIPS.		FORWARD.	AFT.		SINGLE OR DOUBLE.	RIVETS.		NO. OF ROWS OF RIVETS.	RIVETS.		STRAPPED OR LAPPED.
	Breadth. Inches.	Thickness. Inches.	Thickness. Inches.	Thickness. Inches.			Diam.	Spacing cr. to cr. Inches.		Diam.	Spacing cr. to cr. Inches.	
FLAT PLATE KEEL	57½	.83	.77	.77	.73 at ends approved	Double	1"	3¾	Four	1	"	Lapped.
„ DELG. (if any)	✓											
BOTTOM PLATING, No. of Strakes4.....}		.64 ✓	.49 ✓	.52 ✓		Double	7/8	3/3	Four	7/8	3½	"
BILGE PLATING, No. of Strakes1.....}		.64 ✓	.49	.52		"	"	"	"	"	"	"
SIDE PLATING, No. of Strakes3.....}		.63	.46	.46 ✓		"	"	"	Three	7/8	3/8	"
UPPER DECK, Sheer-strake in Wells.....)	78	1.04 at breaks 78	.46	.46		"	1 1/8"	4 2/9	Five	1 1/8	4½	"
UPPER DECK, Sheer-strake in Bridge ...)	78	.63	✓	✓		"	1"	3¾	Four	1	"	"
STRAKE BELOW Sheer-strake in Wells.....)	76	.69	.46	.46		"	7/8	3½	Three	7/8	3/8	"
STRAKE BELOW Sheer-strake in Bridge ...)	76	.63	✓	✓		"	"	"	Four	7/8	3½	"
POOF SIDE PLATING40		1 plate in depth.	✓	✓	Three	7/8	3/8	"
BRIDGE SIDE PLATING57 ✓				do			Four	7/8	3/2	"
FOREC'TLE SIDE PLATING			.42			Single	¾	3.	one	¾	25/8.	"

WATERTIGHT BULKHEADS.

FORGINGS and CASTINGS.

Total No. of W.T. BULKHEADS in Vessel—		Seven ✓	
Extending to Upper Deck (Sec. 3 c)		Seven ✓	
,, Deck next below		✓	
As per Rule		approved.	

	Plating Thickness.	STIFFENERS.			
		VERTICAL.		HORIZONTAL.	
		Scantlings.	Spacing.	Scantlings.	Spacing.
MIDSHIP BULKH'D, Upper tween decks	10/13. 27	3 3/4 x .34	29 1/4" 30"	✓	✓
" " Second "	✓				
" " Third "	✓				
" " Holds	10/13. 43-29	12 x 3 1/2 x .51	29 1/2" 30"	✓	
" " COLLISION (in Hold)	53-30	8 x 3 x .40 L 6 x 3 x .30	24" 20"	4 Semi box beams	as approved.
" " AFTER PEAK	10/11 x 13. 50-30	10 x 3 1/2 x .46 L 5 x 3 x .40 L	20" approved	1 Semi box beam + Tunnel Top	"

Casting or Forging.	Scantlings.	Maker's Name.	Any Departure from Approved Plans to be Noted.
KEEL, Bar		Hot plate	Keel ✓
STEM	mild Steel Rolled Bar	10 x 2 7/8	✓
STERN FRAME	Propeller Post	Cash Steel	Steel Coy. of ✓
	Rudder	as approved	Scotlands Ltd. ✓
Speed of Vessel	12 knots		
RUDDER—Type	or in any.		
" A x D	631	✓	
" Diam. of head	Forging	12"	} Design/own forge.
" Mainpiece at top pintle		11 1/2"	
" " heel		8 3/4"	
" how constructed		Arms Shroud on 4 Keyed L Post	
" double or single plate		Single 1-17	
" coupling, vertical or horizontal		Horizontal	

STEEL.	Manufacturer's Name or Trade Mark of the Steel used in the construction of the Vessel (state process of manufacture)	Open Hearth.
	Colvilles Ltd. - Steel Coy of Scotlands - Connell Iron Co.	
	Has the Steel been tested as required by the Rules?	Yes. ✓

Lloyd's Reg Foundation

EQUIPMENT No 40342-57												LETTER at	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.	cwts.	qrs.	lbs.	Cwts.			
25066	1st Bower ...	68	1	0	Stockless			52	15	2	14	68	Byers Stockless	not static	Low Walker 15/3/40 A. Green
25070	2nd " ...	68	1	0	"			52	15	2	14	68	"	"	Low Walker 18/3/40 A. Green.
	3rd " ...	not supplied (modified equipment for duration of Hostilities)													
	Collective weight.	1944													
99020	Stream	19	1	14	4	3	14	20	4	0	7	19	Rogers Forge W.I.	S. Taylor & Sons	Letherton 13/6/40 J.S. Relf.

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.		Length.	Cir.		
	Fathoms.	Ins.	Tons.	Tons.	Cwts.	qrs.	lbs.	Cwts.	Fathoms.	Ins.			Fathoms.	Ins.	Tons.	Fathoms.	Ins.		
112534	* 22 1/2	2"	100 9/10	14 1/10	489.	3.	2		270	2"	5 1/2" Link "Tayco"	S. Taylor & Sons	Letherton 20/6/40 J.S. Relf.	TOWLINE...	120	4 3/4	64 5/10	120	4 3/4
	* modified equipment for duration of hostilities																		
													HAWSERS & WARPS	2090	2 3/4	15 1/2	2090	2 3/4	
													"	2090	8" Hemp	2090	8"		
													"						
Iron Stream Chain or Steel Wire	90	5"		52 8/10					90	5"									

Steering Gear, Type (Power or hand) Steam Hydraulic by Hasler Alternative Means of Steering Blocks & Tackle
Cycle 6" x 6" Steam by Clark Chapman 20 27' 45 persons each
Steering Chains (Size and Test) ✓ Windlass Cycle 11" x 14" Boats 20 18' 16

Ceiling in Holds, thickness and material ✓ Cargo Battens, thickness, material and spacing no Cargo Battens but provision made for fitting same.

Cargo Hatchways. (Upper Deck) Steel plate angles. Thickness of Hatches 2 3/8 with 1/8 Sheet Steel

Size of Hatchways No. 1 (Fwd.) 27' x 22' No. 2 32' 6" x 22' No. 3 14' 3" x 18' No. 4 32' 6" x 22' No. 5 32' 6" x 22' No. 6 ✓

Number of Shifting Beams and/or Fore and Afters 4 5 2 5

Builder's Signature H. J. Cully

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, the Secretary's letters of various dates & in general conformity with the approved plans & Ministry of Shipping specification.

The workmanship & materials are good - The double bottom Tanks & Peak Tanks have been tested with satisfactory results.

The keelboard has been verified & the markings cut in on vessels sides.

The windlass, Steering Gear & Emergency Steering Gear have been tried with satisfactory results.

W.T Bldg Hostilities & W.T Doors & Bilge Suctions tried with satisfactory results.

The amount of Entry Fee £ 10 : 0 : 0	Fees applied for, 10 SEP 1940	(Special notations, where part of class, to be stated.)
Special Survey Fee.... £ 370 : 14 : 0	Received by me, 30-9-1940	I am of opinion the Vessel should be Classed + 100 A.I. with Freeboard.
(Supervision for M.O.S.) + 25% = 92 13 6		"Cargo Battens not fitted"
Freeboard		Subject to the replacement of the permitted deficiency of equipment at the end of the war
Travelling Expenses, if any £ 17 : 0 : 0	Yes	Signature T.R. McIlvenna
State whether the Vessel has been built under Special Survey	Yes	Surveyor to Lloyd's Register of Shipping.
Certificate to be sent to Glasgow	Date of issue 25/9/40	
Committee's Minute GLASGOW 10 SEP 1940		
Character assigned -1- 100 A1	9.40	(subject)
	with pld.	
Lloyd's accd	-1- Linc 9.40	2.D
	Cargo battens not fitted	

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.)

List of approved Plans.

- 1 Midship Section as built forwarded in advance. - Midship Section - Profile & Decks -
3 Pillars & Girders - 4 Fore end framing - 5 After end framing - 6 Aux Steering Gear -
7 Doors & Vent Coamings etc. - 8 Forged Steel Filler - 9 Belge & Ballast and - 10 Rudder & Steamers.
11 Outline of erections for equipment.
2 Forging & 2 Casting Certificates attached.

(with slight modifications)

This vessel is a Disti vessel, in the S.S. "ITRIA" Messrs Barclay Curie & Co No 675
Glasgow Rpt No 62382.

PARTICULARS OF ELECTRIC WELDING (if employed)

Minor Stems.

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

with Keelboard - 2000 -

Cruiser Stern - Lloyd A.C.P. - wireless. Direction Finder.

Particulars of Drop Test of Cast Steel Anchors, viz.:— Weight, Surveyor's Initials, Number of Certificate, Date of Test.	1st Bower	Cwt.	Gr.	Lb.	J. D.	2536	5th Jan. 1940
	2nd "	43	3	7	J. D.	2485	16th Dec. 1939.
	3rd "						

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop 37.5 ft., R.Q.D. ✓ ft., Bridge 136 ft., Forecastle 34.5 ft.
(in feet and tenths). When the Poop or Forecastle are joined to the B.D., this should be distinctly stated

Official No. 165985 Signal Letters G.M.S.R. Extreme Breadth over Belting ✓ Over-all Length 442.50'

No. and Material of Decks 2 decks (Steel)

Parts of Bottom of Vessel coated with cement or approved composition Cement in Peak Tanks & S.B. Tanks
Bitumastic in 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,	137.5	383.0	Fore peak tank,	21.0	139
Double bottom, under Engines and Boilers,	65.0	327.0	After peak tank,	22.0	118
Double bottom, if under Engines only,	✓		Deep tank, aft,		
Double bottom, if under Boilers only,	✓		Deep tank, forward,		
Double bottom, forward,	167.5	650.0	Other tanks, if fitted,		
Total length (if continuous) and Capacity	370.0	1360.0	(If necessary, furnish further information by sketch.)		

Order for Special Survey No. 6473

Date 30.9.39

Dates of Surveys held while building

1940 Jan. 11, 12, 24, 30. Feb. 7, 13, 15, 20, 26. Mar. 4, 5, 11, 13, 18, 26, 29.
Apr. 2, 3, 15, 9, 11, 16, 18, 22, 30. May 6, 8, 13, 15, 20, 22, 27, 29, 30 June 3,
4, 5, 6, 11, 14, 17, 18, 20, 25, 26, 28, July 4, 5, 12, 16, 25, 30, Aug. 3,
6, 13, 16, 19, 26, 30 Sept. 1, 2.

Total No. of Visits 61