

STEEL STEAMER or MOTORSHIP.

21 OCT 1936

Received at London Office

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 *19. 10. 36*Port of *Glasgow*No. *57571*Survey held at *Glasgow*Date First Survey *26th Sept 1935*Last Survey *16th October**1936*On the (State if Machinery fitted Aft and if Single, Twin or Triple Screw) *Single Screw Turbine Steamer**CITY OF BENARES*

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... *6897.48*CLASS *+100A1*State if with freeboard *Yes*Built at *Glasgow*

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 469.1*

FEET.

Launched *5th August 1936* Yard No. *656*

Total

Breadth (greatest moulded) *B 62.33*Builders *Bailey Cuthbert & Co Ltd*Gross Tonnage *11080.97*Depth, at middle of length from top of keel to top of beam at side of uppermost continuous deck. See Sec. 3 (1c) *D 41.25*Owners *The Ellerman Line Ltd*Register Tonnage *6719.66*1st Longitudinal Number (L x D) *= 19350.4*

Managers

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

2nd Numeral L x (B + D) *= 48590.0*

REGISTERED DIMENSIONS. FEET.

Framing Depth "d." at middle of length. See Sec. 3 (1d) *19.53*

Residence

Length *486.1*Proportions—Depth to Length—Uppermost continuous deck to top of keel *10.93*Port of Registry *Glasgow*Breadth *62.7*

Do. Long Bridge to top of keel

If surveyed while building, afloat, *Yes* in dry dockDepth *30.85*Draught Moulded *28' 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	<i>30</i>			<i>✓</i>	Bracket Floors, Frame	<i>1</i>	<i>6 3/4</i>	<i>34</i>	<i>✓</i>
" " from $\frac{3}{8}$ length to Collision bulkhead	<i>27</i>			<i>✓</i>	" " Reversed Frame	<i>1</i>	<i>6 3</i>	<i>34</i>	<i>✓</i>
" " in peaks	<i>24</i>			<i>✓</i>	" " Vertical Struts	<i>1</i>	<i>8 x 3 1/2 x 3 1/2</i>	<i>42</i>	<i>✓</i>
SIDE FRAMING.					Centre Girder, depth and thickness amidships		<i>46 1/2</i>	<i>x .58</i>	<i>✓</i>
Frame Amidships, Angle <i>E or C</i>	<i>12 3 1/2</i>	<i>.44</i>		<i>✓</i>	" " top Angles		<i>3 1/2 3 1/2</i>	<i>.52</i>	<i>✓</i>
" " Extends up to <i>2nd + 3rd Decks Alternately</i>				<i>✓</i>	" " bottom Angles		<i>5 5</i>	<i>.58</i>	<i>✓</i>
<i>Intermediate</i> Reversed Frame Amidships, Angle <i>J</i>	<i>6 3 1/2</i>	<i>.36</i>		<i>✓</i>	Side Girders, No. each side and thickness		<i>Two @</i>	<i>.40</i>	<i>✓</i>
" " Extends up to <i>Upper Dk.</i>				<i>✓</i>	Margin Plate depth (excl. of flange) and thickness		<i>41</i>	<i>x .58</i>	<i>✓</i>
Depth of Framing Girder	<i>12</i>			<i>✓</i>	" " Vertical Angle to Tank side Bracket abaft $\frac{3}{8}$ len. from stem		<i>6 6</i>	<i>.48</i>	<i>✓</i>
Frames in Uppermost Continuous 'tween Decks, Angle <i>E or C</i>	<i>6 3 1/2</i>	<i>.36</i>		<i>✓</i>	" " Vertical Angle to Tank side Bracket forward $\frac{3}{8}$ len. from stem		<i>6 6</i>	<i>.48</i>	<i>✓</i>
" " Second 'tween Decks, Angle <i>E or C</i>	<i>12 3 1/2</i>	<i>.44</i>		<i>✓</i>	" " Gussets, spacing and scantling abaft $\frac{1}{2}$ len. from stem		<i>46</i>	<i>Continuous .45</i>	<i>✓</i>
" " Third " " "	<i>9 3 1/2</i>	<i>.46</i>	<i>9 x 3 1/2 x .36</i>	<i>✓</i>	" " Gussets, spacing and scantling forward $\frac{1}{2}$ len. from stem		<i>46</i>	<i>Do nil</i>	<i>✓</i>
Framing in Peaks, Angle <i>E or C</i>	<i>9 3 1/2</i>	<i>.36</i>		<i>✓</i>	Tank Side Brackets, height above base line at toe of Frame and thickness		<i>7 1/8 x</i>	<i>.46</i>	<i>✓</i>
Diameter and Spacing of Rivets through Frame and Shell Plating amidships	<i>7/8" @ 5" 4 x 6 1/2</i>			<i>✓</i>	INNER BOTTOM PLATING.				
State if Frame Joggled	<i>Yes</i>			<i>✓</i>	Breadth and thickness of Middle Line Strake		<i>72 x</i>	<i>.56</i>	<i>✓</i>
PANTING ARRANGEMENTS (Sec. 7), state system and particulars	<i>As per approved plan</i>			<i>✓</i>	Thickness of remainder in Holds		<i>.48 to .42</i>	<i>.44</i>	<i>✓</i>
STRENGTHENING OF BOTTOM FORWARD. State Particulars	<i>Intermediate increased thickness as per approved plan</i>			<i>✓</i>	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?		<i>Yes</i>		<i>✓</i>
SINGLE BOTTOM.					BEAMS.				
Floors, Depth and thickness at mid-line in Holds	<i>✓</i>			<i>✓</i>	Uppermost Continuous Deck, amidships in Walls, Angle <i>E or C</i>		<i>9 3 1/2</i>	<i>.36</i>	<i>✓</i>
Height of Brackets at side above base line at toe of frame	<i>✓</i>			<i>✓</i>	" " in way of Bridge, Angle, <i>E or C</i>		<i>9 3 1/2</i>	<i>.40</i>	<i>✓</i>
Middle Line Keelson, on Floors, Angles, <i>E or C</i>	<i>✓</i>			<i>✓</i>	Spacing		<i>30</i>		<i>✓</i>
" " Through Plate or Intercoastal Plate	<i>✓</i>			<i>✓</i>	Second Deck, amidships, Angle, <i>E or C</i>		<i>9 3</i>	<i>.40</i>	<i>✓</i>
" " Foundation Plate on Floors	<i>✓</i>			<i>✓</i>	Spacing		<i>30</i>		<i>✓</i>
" " Flat Plate Keel Angles	<i>✓</i>			<i>✓</i>	Third Deck, amidships, Angle, <i>E or C</i>		<i>11 3 1/2</i>	<i>.44</i>	<i>✓</i>
Side Keelsons, No. each side	<i>✓</i>			<i>✓</i>	Spacing		<i>30</i>		<i>✓</i>
" " thickness of Intercoastal Plate	<i>✓</i>			<i>✓</i>	Fourth Deck, amidships, Angle, <i>E or C</i>		<i>✓</i>		<i>✓</i>
" " Angles	<i>✓</i>			<i>✓</i>	Spacing		<i>✓</i>		<i>✓</i>
DOUBLE BOTTOM.					Poop Deck, Angle, <i>E or C</i>		<i>✓</i>		<i>✓</i>
Solid Floors, thickness and spacing	<i>.44 @ 60</i>			<i>✓</i>	Spacing		<i>✓</i>		<i>✓</i>
" " Are Frame and Reversed Frame joggled?	<i>Yes</i>			<i>✓</i>	Bridge Deck, Angle, <i>E or C</i>		<i>✓</i>		<i>✓</i>
Bracket Floors, breadth and thickness at middle line	<i>35 1/4 x .44</i>			<i>✓</i>	Spacing		<i>✓</i>		<i>✓</i>
" " breadth and thickness at margin plate	<i>55 x .44</i>	<i>35 1/4 x .44</i>		<i>✓</i>	Forecastle Deck, Angle, <i>E or C</i>		<i>8 x 3 1/2 x 3 1/2</i>	<i>.38</i>	<i>✓</i>
					Spacing		<i>27</i>	<i>x 24</i>	<i>✓</i>

[illegible]

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.		STRAIPPED OR LAPPED.			
	Breadth.	Thickness.	Thickness.	Thickness.				Diam.	Spacing cr. to cr.		Diam.	Spacing cr. to cr.				
	Inches.	Inches.	Inches.	Inches.										Inches.	Inches.	Inches.
FLAT PLATE KEEL	55 ³ / ₄	.89	.79	.79	/		Double	1	3 ³ / ₄	Four	✓	1	4	Lapped		
" DBLG. (if any)	-	✓	✓	✓												
BOTTOM PLATING, No. of Strakes <i>same</i> ...	76 ¹ / ₂	.66	.53	.53	/		Double	✓	7/8	3/3		Four	✓	7/8	3 ¹ / ₂	Lapped
BILGE PLATING, No. of Strakes <i>One</i> ...	76 1270	.66	.54	.53	✓		"	"	"	"	✓	"	"	3 ¹ / ₂	"	
SIDE PLATING, No. of Strakes <i>Two</i> ...	40 ¹ / ₂	.64	.50	.50	/		"	"	"	Three		"	"	3 ¹ / ₈	"	
UPPER DECK, Sheer-strake <i>in Wells</i> ...	75	.89	.50	.50	75 x .75	/	"	1"	3 ¹ / ₄	Four	✓	1	4	"		
UPPER DECK, Sheer-strake in Bridge ...		✓														
STRAKE BELOW Sheer-strake <i>in Wells</i> ...	75	.72	.50	.52	75 x .68 - .50		Double	7/8	3/3	Four	✓	7/8	3 ¹ / ₂	Lapped		
STRAKE BELOW Sheer-strake in Bridge ...																
POOP SIDE PLATING																
BRIDGE SIDE PLATING ...																
FORECASTLE SIDE PLATING			.42				Single	3/4	3	One		3/4	25/8	Lapped		

An additional pair of ribs have been fitted in each frame space - between at about 15 degrees to 15 degs each double the rest

Total No. of W.T. BULKHEADS in Vessel— Extending to Upper Deck (Sec. 3 c) " Deck next below As per Rule					Casting or Forging. Scantlings. Maker's Name. Any departure from approved plans to be noted.				
MIDSHIP BULKH'D, Upper tween decks " Second " " Third " " Holds COLLISION " (in Hold) AFTER PEAK " "					STIFFENERS. PLATING THICKNESS. VERTICAL. HORIZONTAL. Scantlings. Spacing. Scantlings. Spacing.				
STEEL.					Manufacturer's Name or Trade Mark of the Steel used in the construction of the Vessel (state process of manufacture) Has the Steel been tested as required by the Rules?				

EQUIPMENT No 52737										LETTER		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 Superintended.	
		Cwts.	qrs.	lbs.	Cwts.	qrs.	lbs.	Tons.	cwts.	qrs.	lbs.	Cwts.			
36014	1st Bower ...	91	0	0	✓	✓		63	12	2	0	90	Spec. Improved Stock An.	✓	Sundaland 24 July '36. H. Butler.
36013	2nd " ...	90	3	0	✓	✓		63	12	2	0	90	Do	✓	Do Do Do
35938	3rd " ...	77	2	7	✓	✓		57	12	2	0	77 3/4	Do	✓	Do 31 May '36 Do
	Collective weight.	259	1	7	✓	✓						257 3/4			
95239	Stream	36	3	21	✓	0	7	26	7	2	0	26 3/4 Stock	Rotary Forge IS.	S. Taylor Sons	Wickham 27 May '36. Reef.

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.	Statur.	Break- ing.	Supplied.	Per Rule.						Length.	Diam.		Length.	Cir.	
	Fathoms.	Ins.	Tons.	$\frac{1}{2}$ Tons.	Owts.	qrs. lbs.	Owts.	Fathoms.	Ins.				Fathoms.	Ins.	Tons.	Fathoms.	Ins.
880/3	300	2 $\frac{1}{4}$	127 $\frac{3}{4}$	178 $\frac{1}{2}$	828	- 14				"Jayco" J. Taylor, Esq. to the Hon. Secy. of the Navy, 10 June 36		TOWLINE...	130	5 $\frac{1}{2}$	84 4 $\frac{3}{4}$	130	5 $\frac{3}{4}$
880/31	47 $\frac{3}{4}$	2 $\frac{1}{4}$	127 $\frac{3}{4}$	178 $\frac{1}{2}$	13	- 3-24			Do	Do	Do Shelf.	HAWKERS & WARPS	22100	27 $\frac{1}{4}$	15 2 $\frac{1}{2}$	22100	27 $\frac{1}{4}$
					842	1-10		300	2 $\frac{1}{4}$	27 $\frac{1}{2}$		"	22100	8"		22100	8
						</											

Steering Gear, Steam $10" \times 12"$ by *Hastie* Steering Gear, Hand *Block and Tackle*
 Boats $30" \times 7'-0" = 3'-9"$ Steering Chains, Size and Test *✓* Windlass $11" \times 14"$ by *Clarke Chapman*
 Ceiling in Holds, thickness and material $3"$ *kw under hatches* Cargo Battens, thickness, material and spacing $2"$ *kw & 6"*
 Cargo Hatchways.—(Upper Deck) *Steel plates and angles* Thickness of Hatches $3"$
 Size of No. 1 Hatchway (Forward) $18'-0" \times 14'-0"$ No. 2 $33'-6" \times 17'-0"$ No. 3 $15'-0" \times 14'-6"$ No. 4 $10'-0" \times 14'-6"$ No. 5 $22'-6" \times 16'-0"$ No. 6 $17'-6" \times 16'-0"$
 Number of Shifting Beams and/or Fore and Afters $3, 6, 3, 2, 4, 3$ respectively *For Barclay, Curle & Co., Ltd.*
 Builder's Signature *H. S. Cunliffe*

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 in Sept 2007* The positions in which oil is carried as fuel or cargo should
be indicated, together with the flash point.

This vessel has been built in accordance with the approved plans, the Secretary's letter of various dates and in general conformity with the Society's rules. The workmanship and materials are good. The double bottom tanks, peaks and deep tank, have been tested as required by the rules. The weather decks, bulkheads, and tunnel have been tested with satisfactory results. The freeboards have been verified and the marks cut in on the vessel's sides. The bottom forward of $\frac{1}{2}$ length has been strengthened in accordance with the rules. The deep tank is constructed to carry oil F.P. about 150°F and Section 20 of the rules complied with. The underwater shell plating, including the keel of this vessel has been pickled.

The approved plans as noted on the back of this report are forwarded herewith.

The amount of Entry Fee £ 12 : 0 : 0

Special Survey Fee.... £ 463 : 10 : 3

Travelling Expenses, if any £ 20 : 0 : 0

Freeboard

Fees applied for, 15/10/1936

Received by me, 6.11.36

State whether the Vessel has been built under Special Survey

Certificate to be sent to GLASGOW

Date of issue 25/11/36

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

I am of opinion the Vessel should be Classed +100A1 with Freeboard corresponding to a Summer loadline draft of 28'-4"

Signature J. Norman Dutton

Surveyor to Lloyd's Register of Shipping.

Committee's Minute **GLASGOW** 20 OCT 1936 TUE. 29 DEC 1936
Character assigned \div 100A1
With freeboard
10.36.
Lloyd's A & C.
+ L.M.C. 10.36 FD.
Carrying oil fuel F.P. above 150°F in Deep Tank.

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 Plans.

- Midship Section as built (forwarded in advance)
- Midship Section
- Profile & Decks.
- Promenade Deck
- Engine Room Pillars & Girders
- Engine Seating
- Coupling ports & shell doors
- Hatch Coamings & Trunks
- Midship House on Prom Dk
- Do on Shelter Dk (2)
- Stiffening under midship house on Shelter Dk
- Double bottom in way of Boiler Room
- Tunnel Escape.
- Part Shell Expansion
- Stem Casting (2)
- After end framing
- Engine & Boiler Casings
- Deep Tank (2)
- Sharp Tunnel
- Rudder & Sternframe
- Details of Sternframe
- Regions for equipment numeral (2)
- Watertight bulkheads (2)
- Auxiliary Steering Gear
- Fore end framing
- Quadrant & Tiller
- Garbage Shoot
- End Connections of Stiffs on midship house.
- Oil tight hatch to Deep Tank
- Profile & Main Dk at after end
- Modification in way of recess at tunnel side
- N.T. Dk stiffeners bracket connections
- Stiffener connections at midship house on Prom Dk
- Pillars & Girders (8)
- Pumping plan
- Levelling Connection between deep tank
- Piping plan
- Steel skylight flaps on Shelter Dk
- Skylight flaps
- Forward scupper
- Main entrance door to midship house on Shelter Dk
- Brass scupper (detail)
- Windows in House
- Deadlights to various lights
- Sidelights
- Freeing ports in bulwarks.
- Plan showing heights of Coamings (2)
- Forging & Casting Certificate of Rudder frame, Rudder Stock Stem frame. Quadrant & Tiller & Stem.
- Cancelled plans of
- 60/61 Bilge & Ballast arrangements (2)
- 62 Midship Section.

SPECIAL NOTATIONS:—Either as part of the vessel's class or for record in the Register Book. With freeboard, Carrying oil fuel F. Patore 150° F in Deep Tank, Whistles, Cruises steam, Echo Sounding apparatus, Direction finding apparatus, (P).

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

1st Bower	60	1	14	J.D.	No 1113	23/6/36
2nd "	60	3	21	J.D.	No 1112	23/6/36
3rd "	47	2	21	J.D.	No 1041	8/4/36

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop _____ ft., R.Q.D. _____ ft., Bridge _____ ft., Forecastle 41.0 ft. (in feet and tenths). When the Poop or Forecastle are joined to the B.D., this should be distinctly stated

No. and Material of Decks 3 Dk

Official No. _____; Signal Letters GZDW.
particulars of composition Pt. Cem.

Is bottom of vessel coated with cement in way of boilers No. if not give

PARTICULARS OF WATER BALLAST.—

Where Fitted.	Length.	Water Capacity.	Where Fitted.	Length.	Water Capacity.
	Feet.	Tons.		Feet.	Tons.
Double bottom, aft, (including 2' 6" cofferdam) in length	137.5	351	Fore peak tank,		87
Double bottom, under Engines and Boilers, incl. Dam 2' 6"	62.5	312	After peak tank,		82
Double bottom, if under Engines only,			Deep tank, aft,	32.5	853
Double bottom, if under Boilers only,			Deep tank, forward,		
Double bottom, forward, including cofferdam 2' 6" in length	211.25	780	Other tanks, if fitted,		
Total length of Double Btm: 411.25'	Total capacity of double bottom:	1443	(If necessary, furnish further information by sketch.)		

* The wells are not to be included in the lengths of the tanks (See Circular No. 1284).

Order for Special Survey No. 242

Date 24. 8. 35

Dates of Surveys held while building

1935 Sep. 26 Oct. 10 24 28 Nov. 1. 6. 8. 13. 15. 18. 25. 27. 29 Dec. 2. 3. 9. 10. 11. 12. 16
17. 18. 23. 24. 27. 31 (1936) Jan. 6. 9. 14. 16. 17. 21. 22. 23. 24. 27. 28. 29. 31 Feb. 3. 4. 5
7. 10. 11. 12. 13. 14. 17. 18. 19. 20. 21. 24. 25. 26. 27. 28 Mar. 3. 5. 6. 9. 11. 16. 17. 18. 19. 20. 23. 24
25. 26. 27. 30. 31 Apr. 1. 3. 6. 7. 8. 9. 10. 14. 16. 17. 20. 21. 22. 23. 24. 27. 28. 29. 30 May
1. 4. 5. 6. 12. 13. 14. 18. 19. 20. 26. 27. 29 June 1. 2. 3. 4. 5. 8. 9. 10. 11. 15. 16. 17. 22
23. 24. 25. 26. 29. 30 July 1. 2. 3. 6. 30 Aug. 3. 5. 14. 25. 31 Sep. 4. 9. 10. 18. 25. 29 Oct. 1. 2. 6. 7. 16

Total No. of Visits 147