

STEEL STEAMER ~~OF~~ MOTORSHIP.

Received at London Office

20 FEB 1934

State if Report has been sent on the Freeboard of the Vessel **YES**State if Report is sent on the Machinery of the Vessel **✓**

Date of completion of report

Port of **MIDDLESBROUGH**No. **15046**Survey held at **MIDDLESBROUGH**Date First Survey **10 May 33**Last Survey **12 February 1934**

On the (State if Machinery fitted Aft and if Single, Twin or Triple Screw)

STEEL SINGLE SCREW STEAMER ARCTEES

State Type (Full Scantling, Complete Superstructure with or without Tonnage Openings)

FULL SCANTLING (SPECIAL DESIGN)State Type of Erections **POOP BRIDGE & FE**

TONNAGE under Tonnage Deck

3666.15CLASS **100 A.1** State if with freeboard**NO**Built at **HAYERTON HILL ON-TEES**

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)

360.0Launched **25-1-34**Yard No. **226**

Total

Breadth (greatest moulded)

57.3Builders **FURNESS S.B.C.**

Gross Tonnage

3952.77

Depth, at middle of length from top of keel to top of beam at side of uppermost continuous deck. See Sec. 3 (1c)

25.9Owners **ARCTEES SHIPPING CO. LTD.**

Register Tonnage

2381.56

1st Longitudinal Number (L x D)

9270

Managers

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

2nd Numeral L x (B + D)

27900

Residence

REGISTERED DIMENSIONS.

FEET.

Length

362.5

Breadth

57.5

Depth

23.65

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

22.7

Proportions—Depth to Length—Uppermost continuous deck to top of keel

13.98Port of Registry **MIDDLESBROUGH**

Do. Long Bridge to top of keel

10.74

If surveyed while building, afloat, or in dry dock

Draught Moulded

22.11 7/8**WHILE BUILDING.**

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	28"		Bracket Floors, Frame	✓	
" " from 1/2 length to Collision bulkhead	28"		" " Reversed Frame	✓	
" " in peaks	24"		" " Vertical Struts	30" APART	10 x 3 1/2 x 3 1/2 x 42 L
SIDE FRAMING.			Centre Girder, depth and thickness amidships	38" x 48	
Frame Amidships, Angle B.A.	11 x 3 1/2 x 44		" " top Angles	DOUBLE	3 x 3 x 46
" " Extends up to	UPPER DECK		" " bottom Angles	DOUBLE	4 x 4 x 52
Reversed Frame Amidships, Angle	✓		Side Girders, No. each side and thickness	✓	
" " Extends up to	✓		Margin Plate depth (excl. of flange) and thickness	35" x 44	54 BR.
Depth of Framing Girder	11"		" " Vertical Angle to Tank side	6 x 6 x 4	
Frames in Uppermost Continuous 'tween Decks, Angle, [or]	LONG. FRAMING IN BRIDGE 'TWEEN DECK	SEE SEPARATE SHEET	" " Bracket abaft 1/2 len. from stem	6 x 6 x 4	
" " Second 'tween Decks, Angle, [or]			" " Vertical Angle to Tank side	6 x 6 x 4	
" " Third " " " "			" " Bracket forward 1/2 len. from stem	4 x 4 x 52	ON EVERY FR.
Framing in Peaks, Angle B.A.	7 x 3 x 37		" " Gussets, spacing and scantling abaft 1/2 len. from stem	4 x 4 x 56	ON EVERY FR.
Diameter and Spacing of Rivets through Frame and Shell Plating amidships	7/8 6 1/4 C. TO C.		" " Gussets, spacing and scantling forward 1/2 len. from stem	39" x 44	
State if Frame Joggled	NO		Tank Side Brackets, height above base line at toe of Frame and thickness		
PANTING ARRANGEMENTS (Sec. 7), state system and particulars	PANTING FRG. & SIDE STRINGERS & PANTING BEAMS IN FORE PEAK. AS APP.		INNER BOTTOM PLATING.		
STRENGTHENING OF BOTTOM FORWARD. State Particulars	TWO STRAKES OF BOTTOM PLATING NEXT KEEL .57 THICK DOUBLE FLOOR C.NHS. TO SHELL		Breadth and thickness of Middle Line Strake	73 1/2" x 46	
SINGLE BOTTOM.			Thickness of remainder in Holds	.38 TO .35 .43 FOR P.	
Floors, Depth and thickness at mid-line in Holds	✓		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.	
Height of Brackets at side above base line at toe of frame	✓		BEAMS.		
Middle Line Keelson, on Floors, Angles, [or]	✓		Uppermost Continuous Deck, amidships in Wells, Angle, [or]	LONGITUDINAL	
" " Through Plate or Intercoastal Plate	✓		" " in way of Bridge, Angle, [or]	(SEE SEPARATE SHEET)	
" " Foundation Plate on Floors	✓		Spacing		
" " Flat Plate Keel Angles	✓		Second Deck, amidships, Angle, [or]	✓	
Side Keelsons, No. each side	✓		Spacing		
" " thickness of Intercoastal Plate	✓		Third Deck, amidships, Angle, [or]	✓	
" " Angles	✓		Spacing		
DOUBLE BOTTOM.			Fourth Deck, amidships, Angle, [or]	✓	
Solid Floors, thickness and spacing	.38 9' 4" APART		Spacing		
" " Are Frame and Reversed Frame joggled?	REV. FRG. ONLY		Bridge Deck, Angle, [or]	D:	
Bracket Floors, breadth and thickness at middle line	✓		Spacing		
" " breadth and thickness at margin plate	15" x 36		Forecastle Deck, Angle, [or]	D:	
			Spacing		

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.....	CENTRE		Stringer Plate, breadth and thickness in way of Bridge	✓	
„ in 'tween Decks, Size and Spacing.....	LONGITUDINAL		Thickness of Plating abreast Deck openings in way of Wells	✓	
„ „ „ „ „	BULKHEAD		Thickness of Plating abreast Deck openings in way of Bridge	✓	
„ in Holds „ „	PILLARS AT ENDS OF HATCHES		Thickness of Plating within line of openings...	✓	
„ „ „ „ „	AS APPROVED.		If Sheathed, material and thickness	✓	
Centre Line Bulkhead.			Third Deck.		
Stiffeners and Spacing.....	4' 8" APART 12" x 3 1/2" x .5 B.A.	✓	Stringer Plate, breadth and thickness.....	✓	
Plating, thickness of3	✓	If Plated, state thickness.....	✓	
STRINGERS AND DECKS.			Fourth Deck.		
Uppermost Continuous Deck.	AFT. 83" x .91 to 60" x .57	✓	Stringer Plate, breadth and thickness.....	✓	
Stringer Plate, breadth and thickness in Wells	5' 76" x .91 to 50" x .57	✓	If Plated, state thickness	✓	
„ „ „ „ in way of Bridge	67" x .36	✓	Poop Deck.		
„ Angle in Wells	6" x 6" x .74	✓	Stringer Plate, breadth and thickness	54" x .34	✓
Thickness of Plating abreast Deck openings in way of Wells	50" x .4	✓	Plating, Sheathing, material and thickness ...	32" x .28 2 1/2" O.P.	✓
Thickness of Plating abreast Deck openings in way of Bridge32	✓	Bridge Deck.		
Thickness of Plating within line of openings...	.32	✓	Stringer Plate, breadth and thickness.....	60" x .4	✓
If Sheathed, material and thickness	NO	✓	Plating, Sheathing, material and thickness ...	37" x .33	✓
Second Deck.			Forecastle Deck.		
Stringer Plate, breadth and thickness in Wells...	✓	✓	Stringer Plate, breadth and thickness.....	48" x .34	✓
			Plating, Sheathing, material and thickness ...	32	✓
				4" O.P. UNDER HANDLERS	✓

SHELL PLATING.

SCANTLINGS.					RIVETING.							
STRAKES.	AS IN VESSEL.				ANY DEPARTURE FROM APPROVED PLANS TO BE NOTED.	EDGES. State if joggled? <i>YES</i>			BUTTS.			
	AMIDSHIPS.		FORWARD.	AFT.		SINGLE OR DOUBLE.	RIVETS.		NO. OF ROWS OF RIVETS.	RIVETS.		STRAPPED LAPPED
	Breadth.	Thickness.	Thickness.	Thickness.			Diam.	Spacing cr. to cr.		Diam.	Spacing cr. to cr.	
	Inches.	Inches.	Inches.	Inches.								
FLAT PLATE KEEL	<i>47</i>	<i>.64</i>	<i>.62</i>	<i>.62</i>		<i>DOUBLE</i>	<i>7/8</i>	<i>3 1/2</i>	<i>QUAD. TO TR.</i>	<i>7/8</i>	<i>3 1/2</i>	<i>3" LAPP</i>
„ DELG. (if any)		<i>NONE</i>										
BOTTOM PLATING, No. of of Strakes <i>T.M.R.</i>	<i>A 85 1/2</i>	<i>.5</i>	<i>.42</i>	<i>.42</i>	<i>—</i>	<i>DOUBLE</i>	<i>7/8</i>	<i>3 1/2</i>	<i>TREBLE</i>	<i>7/8</i>	<i>3 1/2</i>	<i>"</i>
BILGE PLATING, No. of Strakes <i>T.M.R.</i> ..	<i>B 77 1/2</i>	<i>.5</i>	<i>.44</i>	<i>.44</i>	<i>1</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>
	<i>C 77 1/2</i>	<i>.52</i>	<i>.42</i>	<i>.42</i>	<i>6</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>
SIDE PLATING, No. of Strakes <i>T.M.R.</i> ...	<i>D 63 1/2</i>	<i>.52</i>	<i>.42</i>	<i>.42</i>	<i>7</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>
	<i>E 73</i>	<i>.52</i>	<i>.42</i>	<i>.42</i>	<i>1</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>
UPPER DECK, Sheer- strake in Wells.....	<i>F 72 1/2</i>	<i>.52</i>	<i>.42</i>	<i>.42</i>	<i>1</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>
	<i>78</i>	<i>.76</i>	<i>.42</i>	<i>.42</i>	<i>1</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>QUAD. TO</i>	<i>1"</i>	<i>4"</i>	<i>"</i>
UPPER DECK, Sheer- strake in Bridge ...	<i>78</i>	<i>.52</i>			<i>1</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>TREBLE</i>	<i>7/8</i>	<i>3 1/2</i>	<i>"</i>
	<i>: 88 AT ENDS OF BRIDGE 1</i>					<i>"</i>	<i>"</i>	<i>"</i>	<i>TREBLE</i>	<i>7/8</i>	<i>3 1/2</i>	<i>"</i>
STRAKE BELOW Sheer- strake in Wells.....	<i>78</i>	<i>.65</i>	<i>.42</i>	<i>.42</i>	<i>1</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>
	<i>78</i>	<i>.52</i>			<i>1</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>
STRAKE BELOW Sheer- strake in Bridge ...		<i>.36</i>	<i>✓</i>			<i>SINGLE</i>	<i>3/4</i>	<i>3</i>	<i>SINGLE</i>	<i>3/4</i>	<i>2 5/8</i>	<i>"</i>
		<i>.53</i>	<i>✓</i>			<i>ONE PLATE</i>	<i>7/8</i>	<i>3 1/2</i>	<i>TREBLE</i>	<i>7/8</i>	<i>3 1/2</i>	<i>"</i>
POOP SIDE PLATING	<i>98 1/2</i>	<i>.53</i>	<i>✓</i>						<i>BR. SIDE BUTTS</i>			
BRIDGE SIDE PLATING ...		<i>.4</i>	<i>✓</i>			<i>SINGLE</i>	<i>3/4</i>	<i>3</i>	<i>REINFORCED BY</i>			
									<i>ELECTRIC WELDING</i>			
FORE'C'TLE SIDE PLATING									<i>ON INSIDE</i>			
									<i>SINGLE</i>	<i>3/4</i>	<i>2 5/8</i>	<i>"</i>

WATERTIGHT BULKHEADS.

Total No. of W.T. BULKHEADS in Vessel—		6			
Extending to Upper Deck (Sec. 3 c).....					
" Deck next below.....		6			
As per Rule.....					
	Plating Thickness.	STIFFENERS.			
		VERTICAL.		HORIZONTAL.	
		Scantlings. Spacing.		Scantlings. Spacing.	
MIDSHIP BULKH'D, Upper-tween decks	34	49	15" x 3.9"		
" " Second	57	45" x 3.9"	8" B.A. 3 1/4"		
" " Third	76	45" x 3.9"	12" B.A. 0"		
" " Holds	123	47" x 3.9"	12" B.A. 0"		
COLLISION " (in Hold)	147	48" x 3.9"	6" B.A. 24"		
AFTER PEAK " "	8" x 10"	.3	8" B.A. 20"		
Manufacturer's Name or Trade Mark of the Steel used in the construction of the Vessel (state process of manufacture)					
CARGO FLEET IRON C: L? SOUTH DURHAM STEEL T-IRON C: L? CONSET					
FRODINGHAM IRON & STEEL C: L? DORMAN LONG & C? COLVILLE'S L?					
Has the Steel been tested as required by the Rules? YES.					

FORGINGS and CASTINGS.

	Casting or Forging.	Scantlings.	Maker's Name.	Any departure approved to be noted.
KEEL, Bar	FLAT PLATE			
STEM	ROLLED STEEL 9" x 2 1/4"	✓	FRODINGHAM	
STERN FRAME	Propeller Post	CAST STL. AS STROEMMENS		
	Rudder	CAST STL. APP. YAES STED		
RUDDER—A x D.	438		OSLO	
Speed of Vessel	10 1/2			
RUDDER mainpiece at head	10" x 7 1/2"	✓	STROEMMENS	
„ „ heel	6 1/2" x 6"	✓	YAES STED	
„ „ how constructed	FORGED STEEL			
„ „ double or single plate	DOUBLE .38	✓		
„ „ coupling, vertical or horizontal	VERTICAL 2020	✓		
Manufacturer's Name or Trade Mark of the Steel used in the construction of the Vessel (state process of manufacture)	OPEN HEARTH			
STEEL.	CARGO FLEET IRON C: L? SOUTH DURHAM STEEL T-IRON C: L? CONSET			
	FRODINGHAM IRON & STEEL C: L? DORMAN LONG & C? COLVILLE'S L?			
Has the Steel been tested as required by the Rules?	YES.			

Rp 1*.

Mod nft no. 15046

PARTICULARS OF LONGITUDINAL FRAMING.

FRAMING.	AMIDSHIPS.			ENDS.			AMIDSHIPS.			ENDS.			RIVETING.		
	In Ship.			In Ship.			Per Rule or as approved.			Per Rule or as approved.			Rivets in Longitudinal Frames.		Spacing of Rivets on each side of Transverses and Bulkheads.
	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Diam.	Speng.	
aming of K , L or E															
imes in Bridge 'tween Decks B.A.	6	3	32	6	3	32	6	3	32	6	3	32	7/8	5 1/4	
imes from Uppermost Continuous Deck No. 1															
" 2															
" 3															
" 4															
TRANSVERSE " 5															
" 6															
" 7															
" 8															
" 9															
" 10															
" 11															
" 12															
" 13															
" 14															
" 15															
" 16															
Amidships															
At Ends															
Tank Top Longitudinals	B.A.	6	3 1/2 x .3	6	3 1/2 x .3	5 1/2 x 3 x .32	5 1/2 x 3 x .32	7/8	5 1/4	7/8	5 1/4	7/8	5 1/4	7/8	5 1/4
Bottom "	B.A.	6	3 1/2 x .32	6	3 1/2 x .32	6	3 1/2 x .32	6	3 1/2 x .32	7/8	5 1/4	7/8	5 1/4	7/8	5 1/4
Longitudinals { Amidships			30"			30"			30"			30"			
{ At Ends...			30"			30"			30"			30"			
Transverses.															
Depth and Thickness	3'-0" to 1'-3" x .38			D°		3'-0" to 1'-3" x .38			D°						
Face Angles	3 1/2" FLANGED			D°		3 1/2" FLANGED			D°						
Lugs to Shell*	SINGLE 3 1/2" 3" x .38 SINGLE			D°		3 x 3 x .38			D°				3/4	3 1/4	
Depth and Thickness															
Face Angles	✓														
Lugs to Shell*															
Depth and Thickness															
Face Angles															
Lugs to Shell*	✓														
" " Back Bars															
Brackets															
g of Transverse Frames	9'-4"			9'-4"		9'-4"			9'-4"			9'-4"			
* State if joggled or liners.															
udinal															
Bridge Deck	B.A.	5 1/2	3 x .3	5 1/2	3 x .3	5 1/2	3 x .3	5 1/2	3 x .3	9'-4"		9'-4"			
Upper	B.A.	6 1/2	3 x .32	6 1/2	3 x .32	6 1/2	3 x .32	6 1/2	3 x .32	9'-4"		9'-4"			
Second			✓												
Third			✓												
Transverse Beams.															
In Ships.															
As approved.															
Plate.															
Angles.															
Plate.															
Angles.															
15" x .47 x 4 x 4 x .62 CHAMF.															
18" x .46 x 3 1/2 x .58 L D° D°															
PLATE															

The particulars of framing in peaks (if ordinary), Floors, Centre Girders, 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.

HAWSERS AND WARPS.

W31 - 0060 (3/2)

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.)

Castings reports enclosed herewith.

LIST OF APPROVED PLANS ENCLOSED HEREWITH.

Midship Section
Profile & Deck plan
Rudder & Stern frame
Watertight Bulkheads
Hatch covers
Arrangement of longitudinals in double bottom at ends.
Cen. line bulkhead stiffener
Outline riveting section.
Tank side frame brackets in painting area.
Stiffening at hatch end corners
Stern strengthening
Bulkhead plan
Casing plan
Welded mast & derrick rings
Ash shoot
Cen. line bulkhead stiffener at hatch end beams
Proposed arrangement at tank margin.

Midship Section & Profile & deck plan as built

Particulars of Drop Test of Cast Steel Anchors, viz.:— Weight, Surveyor's Initials, Number of Certificate, Date of Test.	1st Bower	34 CENTS. 2 QRS. 5 LBS.	A.B. 6739	14-9-32
	2nd "	33 " 1 QR. 7 LBS.	M.B. 9537	28-1-32
	3rd "	28 " 2 QRS. 16 LBS.	A.B. 6519	13-11-31.

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop 33.08 ft., R.Q.D. ✓ ft., Bridge 226.33 ft., Forecastle 30.0 (in feet and tenths). When the Poop is joined to the B.D., this should be distinctly stated No.

No. and Material of Decks (this information is to be given as it should appear in the Register Book) 1 DK. (STL)

Official No. ; Signal Letters Is bottom of Vessel coated with cement YES if not

particulars of composition DOUBLE BOTTOM TANKS CEMENT WASHED T FILLETS. FORE & AFT PEAKS, DRY TANK & WELLS. BOTTOM CEMENTED.

PARTICULARS OF WATER BALLAST.—

Where Fitted.	Length. Feet.	Water Capacity. Tons.	Where Fitted.	Length. Feet.	Water
Double bottom, aft,	93'4"	191	Fore peak tank,	18	
Double bottom, under Engines and Boilers,			After peak tank,	18'4"	
Double bottom, if under Engines only,	21'0	65	Deep tank, aft,	✓	
Double bottom, if under Boilers only, DRY TANK	21'0	65	Deep tank, forward,	✓	
Double bottom, forward,	168	448	Other tanks, if fitted,	✓	
Total capacity of double bottom		769	(If necessary, furnish further information by sketch.)		

* The wells are not to be included in the lengths of the tanks.

Order for Special Survey No. 1479

Date 10-5-33

Dates of Surveys held while building

1933: May 10, 12, 15, 19, 24, 25, 26, 29, 31. June 1, 7, 8, 12, 14, 15, 16, 19, 21, 22, 23, 26, 28, 29. July 2, 7, 12, 13, 17, 19, 31. Aug. 2, 3, 8, 9, 14, 16, 18, 24, 29, 30, 31. Sep. 5, 19, 25, 26. Oct. 2, 4, 5, 10, 11, 12, 13, 16, 17, 20, 23, 25, 27, 30. Nov. 2, 6, 7, 8, 14, 16, 20, 22, 23, 24, 27, 29. Dec. 1, 4, 6, 8, 11, 13, 15, 18, 19, 21, 22. 1934: Jan. 3, 5, 8, 9, 10, 11, 12, 15, 16, 17, 21, 22, 24, 25, 26, 29. Feb. 1.

Total No. of Visits