

STEEL STEAMER OR MOTORSHIP.

2 DEC 1942

Received at London Office

State if Report has been sent on the Freeboard of the Vessel No

State if Report is sent on the Machinery of the Vessel Yes

Date of completion of report 19th November 1942 Port of HULL No. 51819

Survey held at THORNE Date First Survey 16th October 1941 Last Survey 18th November 1942

On the (State if Machinery is fitted with or without Tonnage Openings) STEEL SINGLE SCREW TUG "EMPIRE ARIEL"

State Type (Full Scantling, Complete Superstructure with or without Tonnage Openings) FULL SCANTLING State Type of Erections FLUSH DECK

TONNAGE under Tonnage Deck ... 123.17

Do. of space or spaces between Tonnage Dk. and Upper Dk. ✓

Total 123.17

Gross Tonnage 129.13

Register Tonnage NIL

CLASS 1007.1 State if with freeboard as condition of Class No

Length from fore part of stem to after part of stern post on summer L.W.L. See Sec. 3 (1a) 92.0

Breadth (greatest moulded) B 20.5

Depth, at middle of length from top of keel to top of beam at side of uppermost continuous deck. See Sec. 3 (1c) D 10.5

1st Longitudinal Number (L x D) 966

2nd Numeral L x (B + D) 2852

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

Proportions—Depth to Length—Uppermost continuous deck to top of keel 8.76

Do. Long Bridge to top of keel ✓

Draught Moulded ✓

Built at THORNE

Launched 20th September 1942 Yard No. 373

Builders RICHARD JUNSTON & CO

Owners MINISTRY OF WAR TRANSPORT

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

Residence LONDON

Port of Registry GOOLE

If surveyed while building, afloat, or in dry dock

DURING CONSTRUCTION

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.....	21'		Bracket Floors, Frame	✓	
" " from 1/3 length amidships to Collision bulkhead.....	21'		" " Reversed Frame.....	✓	
" " in peaks	21'		" " Vertical Struts	✓	
SIDE FRAMING.			Centre Girder, depth and thickness amidships	30" x .40	✓
Frame Amidships, Angle, <u>4 2 1/2 .32</u>	4 2 1/2 .32	✓	" " top Angles	2 1/2 2 1/2 .38	✓
" " Extends up to <u>DECK</u>	4 2 1/2 .38	✓	" " bottom Angles.....	3 3 .42	✓
Reversed Frame Amidships, Angle <u>2 1/2 2 1/2 .26</u>	2 1/2 2 1/2 .26	✓	Side Girders, No. each side and thickness.....	✓	
" " Extends up to <u>ACROSS FLOORS</u>	2 1/2 2 1/2 .36	✓	Margin Plate depth (excl. of flange) and thickness	✓	
Depth of Framing Girder.....	4	✓	" " Vertical Angle to Tank side Bracket abaft 1/4 len. from stem	✓	
Frames in Uppermost Continuous 'tween Decks, Angle, [or [.....			" " Vertical Angle to Tank side Bracket from forward 1/4 len. from stem to Panting Area	✓	
" " Second 'tween Decks, Angle, [or [.....			" " Gussets, spacing and scantling abaft 1/4 len. from stem.....	✓	
" " Third " " " "			" " Gussets, spacing and scantling from forward 1/4 len. from stem to Panting Area	✓	
" " from 1/2 len. for'd. to 15% len. from Stem			Tank Side Brackets, height above base line at toe of Frame and thickness	✓	
" " in Peaks, Angle <u>4 2 1/2 .32</u>	4 2 1/2 .32	✓	INNER BOTTOM PLATING.		
Diameter and Spacing of Rivets through Frame and Shell Plating amidships	5/8 - 4 1/2	✓	Breadth and thickness of Middle Line Strake..	48" x .36	✓
State if Frame Joggled.....	No	✓	Thickness of remainder in Holds44	✓
Are the scantlings and arrangements in the Panting Area in accordance with the Rules and/or as approved?	<u>Yes</u>	✓	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?.....	✓	
Are the scantlings and arrangements in way of the Bottom Forward in accordance with the Rules and/or as approved?	<u>Yes</u>	✓	BEAMS.		
SINGLE BOTTOM.			Uppermost Continuous Deck, amidships <u>4 3 .32</u>	4 3 .32	✓
Floors, Depth and thickness at mid-line in Holds.....	14" x .36	✓	Walls, Angle, <u>4 3 .30</u>	4 3 .30	✓
Height of Brackets at side above base line at toe of frame.....	✓		" " in way of Bridge, Angle, <u>3 2 1/2 .30</u>	3 2 1/2 .30	✓
Middle Line Keelson, on Floors, Angles, <u>3 1/2 3 .38</u>	3 1/2 3 .38	✓	Spacing	21'	✓
" " Through Plate or Intercostal Plate42	✓	Second Deck, amidships, Angle, [or [.....		
" " Foundation Plate on Floors	12" x .42	✓	Spacing		
" " Flat Plate Keel Angles <u>3 1/2 3 1/2 .40</u>	3 1/2 3 1/2 .40	✓	Third Deck, amidships, Angle, [or [.....		
Side Keelsons, No. each side.....	ONE	✓	Spacing.....		
" " thickness of Intercostal Plate.....	✓		Fourth Deck, amidships, Angle, [or [.....		
" " Angles <u>5 4 .48</u>	5 4 .48	✓	Spacing.....		
" " <u>5 4 .38</u>	5 4 .38	✓	Poop Deck, Angle, [or [.....		
DOUBLE BOTTOM. FRAMES 23 to 30 FEED TRAJUL			Spacing.....		
Solid Floors, thickness and spacing	30" x .36	✓	Bridge Deck, Angle, [or [.....		
" " Are Frame and Reversed Frame joggled?	No	✓	Spacing.....		
Bracket Floors, breadth and thickness at middle line	✓		Forecastle Deck, Angle, [or [.....		
" " breadth and thickness at margin plate.....	✓		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	ONE						
" in 'tween Decks, Size and Spacing	2 1/2 Dia. Pillars in conjunction with Fore and Aft Girder fitted in fwd main space			Stringer Plate, breadth and thickness in way of Bridge			
" " " "				Thickness of Plating abreast Deck openings in way of Wells			
" in Holds				Thickness of Plating abreast Deck openings in way of Bridge			
" " " "				Thickness of Plating within line of openings			
Centre Line Bulkhead. Stiffeners and Spacing				If Sheathed, material and thickness			
Plating, thickness of				Third Deck. Stringer Plate, breadth and thickness			
STRINGERS AND DECKS. Uppermost Continuous Deck. Stringer Plate, breadth and thickness in Wells	35 x 58 x 30			If Plated, state thickness			
" " " " in way of Bridge				Fourth Deck. Stringer Plate, breadth and thickness			
" Angle in Wells	3 3 30			If Plated, state thickness			
Thickness of Plating abreast Deck openings in way of Wells	30 - 26			Poop Deck. Stringer Plate, breadth and thickness			
Thickness of Plating abreast Deck openings in way of Bridge				Plating, Sheathing, material and thickness			
Thickness of Plating within line of openings	32 - 30 - 26			Bridge Deck. Stringer Plate, breadth and thickness			
If Sheathed, material and thickness	LEADER FITTED UNDER STEEL DECK			Plating, Sheathing, material and thickness			
Second Deck. Stringer Plate, breadth and thickness in Wells				Forecastle Deck. Stringer Plate, breadth and thickness			
				Plating, Sheathing, material and thickness			

SHELL PLATING.

STRAKES.	AS IN VESSEL.				ANY DEPARTURE FROM APPROVED PLANS TO BE NOTED.	RIVETING.				
	AMIDSHIPS.		FORWARD.	AFT.		EDGES. State if joggled?	BUTTS.			
	Breadth.	Thickness.	Thickness.	Thickness.			SINGLE OR DOUBLE.	RIVETS. Diam. Spacing cr. to cr.	NO. OF ROWS OF RIVETS.	RIVETS. Diam. Spacing cr. to cr.
Flat Plate Keel <i>OUT</i>	36	40	38	38		2 Rows	3/4" 6 Rows	3 Rows	3/4" 2 7/8"	STRAPS
" <i>1/2" OUT. Dble. (if any)</i>	47	30	30	26	30 in STEERWAY	1	5/8" 7 Rows	2	5/8" 2 1/2"	LAPS
Bottom Plating, No. of Strakes	47	30	28	28	30	1	-	2	-	-
Bilge Plating, No. of Strakes	44	30	26	26		1	-	2	-	STRAPS
Side Plating, No. of Strakes	47	30	30	30		1	-	2	-	LAPS
Upper Deck, Sheer-strake in Wells <i>OUT</i>	43	30	30	30		1	-	2	-	STRAPS
Upper Deck, Sheer-strake in Bridge										
Strake below Sheer-strake in Wells										
Strake below Sheer-strake in Bridge										
Poop Side Plating										
Bridge Side Plating										
Forecastle Side Plating										

WATERTIGHT BULKHEADS.

Total No. of W.T. BULKHEADS in Vessel—	
Extending to Upper Deck (Sec. 3 c)	4
" Deck next below	-
As per Rule	3

FORGINGS AND CASTINGS.

	Casting or Forging.	Scantlings.	Maker's Name.	Any Departure from Approved Plans to be Noted.
KEEL, Bar		FLAT PLATE KEEL		
STEM	ROLLED BAR	5 1/2"	DORMAN LONG & CO	
STERN FRAME	Propeller Post	ROLLED BAR	5 1/2"	MATERIAL BY APPLEBY FRODINGHAM STEEL CO.
	Rudder	"	"	FRAME OF WELDED CONSTRUCTION BY THORNE & DONKIN LTD. THORNE & DONKIN LTD. SHEFFIELD.
Speed of Vessel		12 KNOTS		
RUDDER—Type		ORDINARY DOUBLE PLATE RUDDER		
" A x D		32.496 x 1.875 = 63.6		
" Diam. of head	ROLLED BAR	5 Dia		RUDDER OF WELDED CONSTRUCTION BY SHIPBUILDERS.
" Mainpiece at top pintle		"		
" heel		"		
" how constructed		ROLLED FROM 90 SIDE PLATE		
" double or single plate coupling, vertical or horizontal		- 28		NO COUPLING. STEEL CLASPS.

STIFFENERS.

	Plating Thickness.	STIFFENERS.			
		VERTICAL.		HORIZONTAL.	
		Scantlings.	Spacing.	Scantlings.	Spacing.
MIDSHIP BULKH'D, Upper 'tween decks					
" " Second					
" " Third					
" " Holds	N: 38	39	26	3 x 2 1/2 x 30	27" FLAT
COLLISION (in Hold)	N: 48	34	30	6 x 3 x 48	24" FLAT
AFTER PEAK	5	50	30	3 x 2 1/2 x 26	24" FLAT

STEEL.

Manufacturer's Name or Trade Mark of the Steel used in the construction of the Vessel (state process of manufacture) **DORMAN LONG & CO., APPLEBY FRODINGHAM STEEL CO.** OPEN HEARTH PROCESS.

Has the Steel been tested as required by the Rules? **Yes.**

EQUIPMENT No.

LETTER

ANCHORS.

Number of Certificate.	Anchors.	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.	lbs.			
54628	1st Bower	4	0	8	1	0	8	6	10	0	0	4	4	ORDINARY FORGED WROUGHT IRON PUMPER. NAME NOT GIVEN. CAPABLE HEATH 16-12-41 S.C. PAUL.		
54629	2nd "	4	0	9	1	0	9	6	10	0	0	4	4	"	"	" 16-12-41 "
	3rd "															
	Collective weight	8	0	17	2	0	17					8	8			
	Stream															

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.				
	Fathoms.	Diam.	Tons.	Tons.	Supplied.		Per Rule.	Fathoms.	Diam.					Fathoms.	Diam.		Fathoms.	Cir.	Tons.	Fathoms.	Cir.
					Cwts.	qrs.															
64673	60	5/8	13 3/4	20 5/8	24	2	14	23 1/2	60	5/8	STUD LINK. CONSIDOR BRAS. L ^{td} (CAPABLE HEATH. 5-2-42. S.C. PAUL.	TOWLINE	-	-	-	-	-				
												HAWSERS & WARPS	60	5 1/2	-	60	5 1/2				
														60	3	-	60	3			

Steering Gear, Type (Power or hand) STEAM STEERING GEAR BY DONKIN & CO. NEWCASTLE 60-TYPE. Alternative Means of Steering TILLER WITH BLOCKS & TACKLE.

Steering Chains (Size and Test) 3/4 DIA. 6 3/4 TONS TEST. Windlass STEAM BY EMERSON WALKER & CO. Boats 2 WOOD LIFEBOATS

Ceiling in Holds, thickness and material Cargo Battens, thickness, material and spacing

Cargo Hatchways.—(Upper Deck) 2 SMALL COILING HATCHES ON CASING TOP. Thickness of Hatches STEEL HINGED COVERS.

Size of Hatchways No. 1 (Fwd.) No. 2 No. 3 No. 4 No. 5 No. 6

Number of Shifting Beams and/or Fore and Afters PER PRO RICHARD DUNSTON, LTD.

Builder's Signature Richard Dunston

DIRECTOR

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

This vessel has been built in accordance with the approved plans and specification and in conformity with the Rules for the class contemplated.

The materials and workmanship are good.

The fore and after peaks, main peak tank and fresh water tank have been tested to Rule requirements and found satisfactory.

Deck, casing, N.T. bulkheads, steering gear, windlass and hand pump to fore peak have been tested.

The amount of Entry Fee £ 2:00 Fees applied for, (Special notations, where part of class, to be stated.)

Special Survey Fee £ 20:00 RECEIVED BY ME, 1942

I am of opinion the Vessel should be Classed 100A.1 FOR TOWING SERVICES

State whether the Vessel has been built under Special Survey YES

Signature W. B. England Surveyor to Lloyd's Register of Shipping.

Certificate to be sent to Hull Date of issue 5/1/43

Committee's Minute

TUE 15 FEB 1942

Character assigned

100A.1 For Towing Services

Lloyd's Reg. O.D.

date 11.4.42

The Surveyors are requested not to write on or below the Committee's Minutes.



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 A SISTER SHIP TO "EMPIRE TOBY" HULL F.E. REPORT NO 51724.

PARTICULARS OF ELECTRIC WELDING (if employed)

STERN FRAME AND RUDDER OF WELDED CONSTRUCTION.

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

100A1. For Towing Services

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

1st Bower ✓
2nd " ✓
3rd " ✓

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

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

Official No. 169076. Signal Letters. Extreme Breadth over Berth 20'9" (Circ. 1611) Over-all Length 97'6" (Circ. 1703)

No. and Material of Decks 1st STEEL

Parts of Bottom of Vessel coated with cement or approved composition. BOTTOM CEMENTED TRILGE TO RILGE.

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, MIDSHIP RESERVE FEED TANK	12.25	11 1/2	Fore peak tank,		
Double bottom, under Engines and Boilers,			After peak tank,		
Double bottom, if under Engines only,			Deep tank, aft,		
Double bottom, if under Boilers only,			Deep tank, forward,		
Double bottom, forward,			Other tanks, if fitted, F.H. TANK 38'00 FRAMES	3.5	6
Total length (if continuous) and Capacity			(If necessary furnish further information by sketch.)		

Order for Special Survey No. 3283.

Date 19.9.41.

Dates of Surveys held while building

1941. Oct 16. 31. Nov. 13. 21. Dec. 22. 29. 1942. Jan. 7. Feb. 29. 16. 27. Mar. 4. 11. May 13. 18. 19. July 1. 6. 10. 17. 22. 28. Aug 12. 18. 21. Sept. 1. 4. 11. 15. 17. 18. 23. Oct 1. 6. 20. 28. Nov. 3. 10. 16. 18.

Total No. of Visits 401

