

STEEL STEAMER ~~OR MOTORSHIP~~ (TUG)

Received at London Office 20 NOV 1942

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

Port of *HULL*No. *51812*Survey held at *Hessle and Hull*Date First Survey *23rd Decr. 1941*Last Survey *12th October 1942*On the *Steel Single Screw Yag "EMPIRE TITAN"*State Type *Full Scantling*State Type of Erections *None*TONNAGE under Tonnage Deck... *228.85*CLASS *+100 A-1.*State if with freeboard as condition of Class *No.*Built at *Hessle*Do. of space or spaces between Tonnage Dk. and Upper Dk. *✓*Length from fore part of stem to after part of stern } most on summer L.W.L. See Sec. 3 (1a) } L *105.0*Breadth (greatest moulded) ..... B *26.5*Depth, at middle of length from top of keel to top of beam at side of uppermost continuous deck. See Sec. 3 (1c) ..... D *13.5*1st Longitudinal Number (L x D) ..... = *1417*2nd Numeral L x (B + D) ..... = *4200*Framing Depth "d," at middle of length. See Sec. 3 (1d) ..... *7.77*Proportions—Depth to Length—Uppermost continuous deck to top of keel ..... *✓*Do. Long Bridge to top of keel ..... *✓*Draught Moulded ..... *12' 3 1/4"*Launched *29th June 1942* Yard No. *5.423.*Builders *Messrs Henry Scarr, Ltd.*Owners *The Ministry of War Transport.*Managers *✓*Residence *London*Port of Registry *Hull*

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 1/2 length amidships to Collision bulkhead	22 BLR RM.		" " Reversed Frame	✓	
" " in peaks	21		" " Vertical Struts	✓	
SIDE FRAMING.			Centre Girder, depth and thickness amidships	30" x 44	
Frame Amidships, Angle, E or F	5 3 30		" " top Angle	SINGLE 2 1/2 x 2 1/2 x 38	
" " IN BUNKERS & BOILER ROOM	5 3 36		" " bottom Angle	3 3 42	
" " Extends up to	UPPER DECK		Side Girders, No. each side and thickness		
Reversed Frame Amidships, Angle	2 1/2 x 2 1/2 x 36	IN FEED TANK	Margin Plate depth (excl. of flange) and thickness		
" " Extends up to	3 x 3 x 40	IN BOILER ROOM	" " Vertical Angle to Tank side		
Depth of Framing Girder	3 1/2 x 3 1/2 x 45 DBL IN ENG.		" " Bracket abaft 1/2 len. from stem		
Frames in Uppermost Continuous 'tween Decks, Angle, E or F			" " Vertical Angle to Tank side		
" " Second 'tween Decks, Angle, E or F			" " Bracket from forward 1/2 len. from stem to Panting Area		
" " Third " " " "			" " Gussets, spacing and scantling abaft 1/2 len. from stem		
" " from 1/2 len. for'd. to 15% len. from Stem			" " Gussets, spacing and scantling from forward 1/2 len. from stem to Panting Area		
" " in Peaks, Angle, E or F	5" x 3 x 30		Tank Side Brackets, height above base line at toe of Frame and thickness		
Diameter and Spacing of Rivets through Frame and Shell Plating amidships	5/8" - 4 1/2"		INNER BOTTOM PLATING.		
State if Frame Joggled	No.		Breadth and thickness of Middle Line Strake	58 x 42	
Are the scantlings and arrangements in the Panting Area in accordance with the Rules and/or as approved?			Thickness of remainder in Holds	44	
Are the scantlings and arrangements in way of the Bottom Forward in accordance with the Rules and/or as approved?			Are Rule requirements complied with regarding increases of scantlings in way of Bottom in E & B space and framing in Bunkers and Boiler Room?	Yes.	
SINGLE BOTTOM.			BEAMS.		
Floors, Depth and thickness at mid-line in Holds	17 x 30		Uppermost Continuous Deck, amidships	5 3 32	
Height of Brackets at side above base line at toe of frame	40 IN BLR RM.		" " in Wells, Angle, E or F		
Middle Line Keelson, on Floors, Angles	3 1/2 x 3 1/2 x 40 DBL IN BOILER SPACE		" " in way of Bridge, Angle, E or F	4 2 1/2 30	
" " Through Plate	3 1/2 x 3 x 30	FORWARD	" " HALF BEAMS		
" " Intercoastal Plate	42 IN BOILER SPACE		Spacing	21 and 22	
" " Foundation Plate on Floors	30 INTERCASTAL FORWARD		Second Deck, amidships, Angle, E or F		
" " Flat Plate Keel Angles	12 x 34		Spacing		
Side Keelsons, No. each side	42 IN BOILER RM.		Third Deck, amidships, Angle, E or F		
Thickness of Intercoastal Plate	3 1/2 x 3 1/2 x 46 DBL IN BOILER RM.		Spacing		
" " Angle	32 x 3 1/2 x 36 - FORWARD		Fourth Deck, amidships, Angle, E or F		
DOUBLE BOTTOM. FRS. 25 TO 36.	ONE		Spacing		
Solid Floors, thickness and spacing	5 x 4 x 38 FOR OF BOILER SR.		Poop Deck, Angle, E or F		
" " Are Frame and Reversed Frame joggled?	5 x 4 x 48 IN BOILER SPACE.		Spacing		
Bracket Floors, breadth and thickness at middle line	36 - 21 - 22		Bridge Deck, Angle, E or F		
" " breadth and thickness at margin plate	No.		Spacing		
			Forecastle Deck, Angle, E or F		
			Spacing		



# PILLARS AND DECKS.

PILLARS, No. of Rows.....	INCHES IN SHIP.		Any Departure from Approved Plans to be Noted.		INCHES IN SHIP.		Any Departure from Approved Plans to be Noted.
in 'tween Decks, Size and Spacing.....	2 3/8	DIAM. IN CONJUNCTION WITH FORE & AFT GIRDERS					
" " " " " "		FITTED IN FORWARD AND AFT ACCN					
in Holds " " " "							
Centre Line Bulkhead, Stiffeners and Spacing.....							
Plating, thickness of .....							
STRINGERS AND DECKS. Uppermost Continuous Deck.							
Stringer Plate, breadth and thickness in Wells.....	57	x 30					
" " " " " " in way of Bridge.....							
" Angle in Wells.....	3	3	30				
Thickness of Plating abreast Deck openings in way of Wells.....	28	- 26					
Thickness of Plating abreast Deck openings in way of Bridge.....							
Thickness of Plating within line of openings.....	26						
If Sheathed, material and thickness .....							
Second Deck. Stringer Plate, breadth and thickness in Wells...							
Stringer Plate, breadth and thickness in way of Bridge.....							
Thickness of Plating abreast Deck openings in way of Wells.....							
Thickness of Plating abreast Deck openings in way of Bridge.....							
Thickness of Plating within line of openings.....							
If Sheathed, material and thickness .....							
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.....							
Plating, Sheathing, material and thickness .....							

## SHELL PLATING.

SCANTLINGS.					RIVETING.							
STRAKES.	AS IN VESSEL.				ANY DEPARTURE FROM APPROVED PLANS TO BE NOTED.	EDGES.		BUTTS.				
	AMIDSHIPS.		FORWARD.	AFT.		State if jogged?	Yes.	No. of Rows of Rivets.	RIVETS.		STRAPPED OR LAPPED.	
	Breadth. Inches.	Thickness. Inches.	Thickness. Inches.	Thickness. Inches.		SINGLE OR DOUBLE.	Diam. Inches.		Spacing cr. to cr. Inches.	Diam. Inches.		Spacing cr. to cr. Inches.
FLAT PLATE KEEL .....	37 1/2	42	40	40		DOUBLE	3/4	6 R. 2 Exc. F. R.	3-2	3/4	2 7/8	STRAPPED
„ DBLG. (if any)	✓	✓							✓			
BOTTOM PLATING, No. of Strakes .....	A 49	32	32	32		SINGLE	5/8	7 R. 2 Exc. F. R.	2	5/8	2 1/4	LAPPED
BILGE PLATING, No. of Strakes .....	B 49 1/2	32	30	32		"	"	"	"	"	"	"
SIDE PLATING, No. of Strakes .....	C 50	32	28	28		"	"	"	"	"	"	"
UPPER DECK, Sheer-strake in Wells.....	D 50 1/2	32	28	28		"	"	"	"	"	"	"
UPPER DECK, Sheer-strake in Bridge ...	E 51	34	30	30		"	"	"	"	"	"	"
STRAKE BELOW Sheer-strake in Wells.....	F 43 1/2	34	30	30		SINGLE	5/8	"	"	5/8	2 1/4	STRAPPED
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—					4 ✓
Extending to Upper Deck (Sec. 3 c)					✓
„ Deck next below					3
As per Rule					
		Plating Thickness.	STIFFENERS.		
			VERTICAL.		HORIZONTAL.
			Scantlings.	Spacing.	Scantlings.
MIDSHIP BULKH'D, Upper tween decks		✓	✓	✓	
„	„ Second „	✓	✓	✓	
„	„ Third „	✓	✓	✓	
„	„ Holds N <sup>o</sup> 44	36-27	4" 2 1/2" x 30	30' ABOVE F.W.TANK	✓
„	„ „ 55	34-30	3 x 2 1/2" x 30	24" INSIDE F.W.TANK	✓
COLLISION „ (in Hold)		34-30	6 x 3 x 34 1/2	24"	
AFTER PEAK „ „		30	4" 2 1/2" x 30	24"	
			3 x 2 1/2" x 30	24"	

## FORGINGS and CASTINGS.

KEEL, Bar .....	FLAT PLATE KEEL. ✓
STEM .....	ROLLED 6 x 1 1/8" STEEL CO. LD.
STERN FRAME (Propeller Post) .....	MILD STEEL 5 1/2 x 2 1/2" STERN FRAME OF WELDED CONSTRUCTION BY H. SCARR LTD. & ANNEALED BY T. FIRTH & T. BROWN LTD.
RUDDER .....	ORDINARY DOUBLE PLATE 93-5'
Speed of Vessel .....	12 KNOTS.
RUDDER TYPE .....	SKINNING GROVE STEEL
" A x D .....	MILD STEEL 5 1/2" DIA. CO. LD.
" Diam. of head .....	" " RUDDER OF WELDED CONSTRUCTION BY H. SCARR LTD.
" Main piece at top pintle .....	" " FORGED FRAME & SIDE PLATES
" heel .....	WELDED CONSTRUCTION ARMS TO MAIN PIECE
" how constructed .....	30" HORIZONTAL
" double or single plate coupling, vertical or horizontal .....	

STEEL.	Manufacturer's Name or Trade Mark of the Steel used in the construction of the Vessel (state process of manufacture). OPEN HEARTH PROCESS.
	PLATES:- APPLEBY-FRODINGHAM STEEL CO. LD.
	SECTIONS:- DORMAN, LONG & CO. LD. APPLEBY-FRODINGHAM STEEL CO. LD.
	Has the Steel been tested as required by the Rules? YES.







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.)

The approved plans are being retained for reference in dealing with sister-ships under construction.

This vessel is a sister ship to H Scanned and No 422 - Hull Report No 51671. "EMPIRE SPRITE"

Copy of completion & interim certificates enclosed herewith, also certificate of test of shot link chain cable.

PARTICULARS OF ELECTRIC WELDING (if employed)

Balun flat forward & aft electrically welded; Reserve feed tank top welded to shell. Fresh water tank top welded to shell. Stem frame and Rudder electrically welded. All in accordance with the approved plans. Approved electrodes employed on this work.

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

\* 100 A1 "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 "

4-0-3 incl. pins.  
3-3-26 " "

A.E.G. 6933.  
A.E.G. 7028.

13-5-42  
18-6-42

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. 167132

Signal Letters

Extreme Breadth over Belting (Circ. 1611)

26'-9 7/8"

Over-all Length (Circ. 1703)

113'-5"

No. and Material of Decks 1 DK (STL).

Parts of Bottom of Vessel coated with cement or approved composition

Cement in fore & after peak tanks, fresh water tanks, also under bilges and in way of open floors elsewhere.

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.	Length. Feet.	Water Capacity. Tons.
Double bottom, aft,			Fore peak tank,	9'-0"	18
Double bottom, under Engines and Boilers,			After peak tank,	15'-3"	23
Double bottom, if under Engines only,			Deep tank, aft, FRESH WATER TANK FORWARD	3'-5"	6
Double bottom, if under Boilers only,			Deep tank, forward, RESERVE FEED TANK	19'-7"	21
Double bottom, forward,			Other tanks, if fitted,		
Total length (if continuous) and Capacity			(If necessary, furnish further information by sketch.)		

Order for Special Survey No. 3297

Date 23rd Sept. 1941.

Dates of Surveys held while building

1941:- Dec. 23. 30. 31. 1942:- Jan. 2. 6. 8. 12. 16. 19. 20. 26. Feb. 2. 9. 12. 19. 20. March 3. 10. 13. 17. 20. 27. 31. April 7. 10. 14. 17. 23. 27. May 1. 8. 12. 15. 19. 22. 26. 29. June 3. 8. 11. 12. 16. 17. 22. 23. July 3. 6. 7. 13. 15. 30. Aug. 6. 11. 13. 19. 24. 25. Sept. 2. 7. 10. 18. 21. 23. 25. 26. Oct. 1. 5. 7. 8. 12.

Total No. of Visits 70.