

STEEL STEAMER ~~OR~~ MOTORSHIP. TUG

13 DEC 1944

Received at London Office

State if Report has been sent on the Freeboard of the Vessel YesState if Report is sent on the Machinery of the Vessel YesDate of completion of report 4th December 1944Port of HULLNo. 52672Survey held at Selly and HullDate First Survey 18th February 1944Last Survey 1st December 1944

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

Steel Single Screw Steam Tug "ENFORCER"

A/M.S. 792

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

Hull ScantlingState Type of Erections Long Forecastle

TONNAGE under Tonnage Deck ...

561.77CLASS 100 A.1.State if with freeboard as condition of Class No.

FOR TOWING SERVICES

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

FEET

160'-0"

Breadth (greatest moulded)

B 34'-6"

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

D 16'-6"

1st Longitudinal Number (L x D)

2640

2nd Numeral L x (B + D)

8160

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

16'-5"

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

9'-7"

Do. Long Bridge to top of keel

Draught Moulded

15'-0 1/2"Built at SellyLaunched 22nd July 1944 Yard No. 1288Builders Bochane & Sons LtdOwners The Admiralty

Managers

(Where necessary to be entered in Reg. Book)

Residence London

Port of Registry

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	22	✓	Bracket Floors, Frame		
" " from 1/2 length amidships to Collision bulkhead	18	✓	" " Reversed Frame		
" " in peaks	22	✓	" " Vertical Struts		
FRAMING.			Centre Girder, depth and thickness amidships		
Same Amidships, Angle, E or F IN B.L.R. RM.	5 1/2 3 .46	✓	" " top Angles		
" " ELSEWHERE	5 1/2 3 .36	✓	" " bottom Angles		
" " Extends up to	UPPER DECK	✓	Side Girders, No. each side and thickness		
Reversed Frame Amidships, Angle	3 3 .46	✓	Margin Plate depth (excl. of flange) and thickness		
" " SINGLE " FORWARD	3 3 .36	✓	" " Vertical Angle to Tank side Bracket abaft 1/4 len. from stem		
" " Extends up to	ACROSS FLOORS	✓	" " Vertical Angle to Tank side Bracket from forward 1/4 len. from stem to Panting Area		
Depth of Framing Girder	5 1/2	✓	" " Gussets, spacing and scantling abaft 1/4 len. from stem		
Frames in Uppermost Continuous 'tween Decks, Angle, C or F			" " Gussets, spacing and scantling from forward 1/4 len. from stem to Panting Area		
" " Second 'tween Decks, Angle, C or F			Tank Side Brackets, height above base line at toe of Frame and thickness		
" " Third " " " "			INNER BOTTOM PLATING.		
" " from 1/2 len. for'd. to 15% len. from Stem			Breadth and thickness of Middle Line Strake		
" " in Peaks, Angle, C or F	5 1/2 3 .36	✓	Thickness of remainder in Holds		
Diameter and Spacing of Rivets through Frame and Shell Plating amidships	3/4" - 5/16"	✓	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	✓
State if Frame Joggled	160	✓	BEAMS.		
Are the scantlings and arrangements in the Panting Area in accordance with the Rules and/or as approved?	AS APPROVED	✓	Uppermost Continuous Deck, amidships in		
Are the scantlings and arrangements in way of the Bottom Forward in accordance with the Rules and/or as approved?			Wells, Angle, E or F	5 1/2 3 .32	✓
SINGLE BOTTOM.			" " in way of Bridge, Angle	6 3 .35	✓
Floors, Depth and thickness at mid-line in Holds	23" x .36	✓	HOLD E or F		
Height of Brackets at side above base line at toe of frame	50 ER - 46 B.R.	✓	Spacing	22	✓
Middle Line Keelson, on Floors, Angles, C or F	2 x 4 x 3/16 x 30	✓	Second Deck, amidships, Angle, C or F		
" " Through Plate or Inter-costal Plate			Spacing		
" " Foundation Plate on Floors			Third Deck, amidships, Angle, C or F		
" " Flat Plate Keel Angles			Spacing		
Side Keelsons, No. each side	TWO	✓	Fourth Deck, amidships, Angle, C or F		
" " thickness of Inter-costal Plate	✓		Spacing		
" " Angle IN BOILER ROOM	5 4 .60	✓	Poop Deck, Angle, C or F		
GILGE KEELSON - FRAMES 62-78	5 4 .50	✓	Spacing		
DOUBLE BOTTOM. INTERCOSTAL PLATE	3/16	✓	Bridge Deck, Angle, C or F		
Solid Floors, thickness and spacing			Spacing		
" " Are Frame and Reversed Frame joggled?			Forecastle Deck, Angle, E or F	5 1/2 3 .30	✓
Bracket Floors, breadth and thickness at middle line			Spacing	36	✓
" " breadth and thickness at margin plate					



# 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		Stringer Plate, breadth and thickness in way of Bridge	✓	
in 'tween Decks <sup>FORWARD</sup> Size and Spacing	2 3/4" DIAR. IN CONJUNCTION WITH C.L.B.H.D. 54" SP.		Thickness of Plating abreast Deck openings in way of Wells	26	✓
in Holds	✓		Thickness of Plating abreast Deck openings in way of Bridge	✓	
Centre Line Bulkhead. (BETWEEN FRS. 62-78)	5 3 30	✓	Thickness of Plating within line of openings	26	✓
Stiffeners and Spacing	18" SP.	✓	If Sheathed, material and thickness	5" x 2 1/2" DOUGLAS FIR	✓
Plating, thickness of	30	✓	Third Deck.		
STRINGERS AND DECKS.			Stringer Plate, breadth and thickness		
Uppermost Continuous Deck.			If Plated, state thickness		
Stringer Plate, breadth and thickness in Wells	47 x 36	✓	Fourth Deck.		
in way of Bridge	✓		Stringer Plate, breadth and thickness		
Angle in Wells	3 3 40	✓	If Plated, state thickness		
Thickness of Plating abreast Deck openings in way of Wells	30	✓	Poop Deck.		
Thickness of Plating abreast Deck openings in way of Bridge	✓		Stringer Plate, breadth and thickness		
Thickness of Plating within line of openings	30	✓	Plating, Sheathing, material and thickness		
If Sheathed, material and thickness			Bridge Deck.		
BOAT Second Deck.			Stringer Plate, breadth and thickness		
Stringer Plate, breadth and thickness in Wells	55 x 26	✓	Plating, Sheathing, material and thickness		
			Forecastle Deck.		
			Stringer Plate, breadth and thickness	45 x 26	✓
			Plating, Sheathing, material and thickness	26-5 x 2 1/2" D.F.R.	✓

## SHELL PLATING.

SCANTLINGS.					RIVETING.							
STRAKES.	AS IN VESSEL.				ANY DEPARTURE FROM APPROVED PLANS TO BE NOTED.	EDGES.		BUTTS.				
	AMIDSHIPS.		FORWARD.	AFT.		State if joggled? 400.	SINGLE OR DOUBLE.	RIVETS. Diam. Spacing cr. to cr.	No. of Rows of RIVETS.	RIVETS.		STRAPPED OR LAPPED.
	Breadth.	Thickness.	Thickness.	Thickness.						Diam.	Spacing cr. to cr.	
GARBOARD	Inches.	Inches.	Inches.	Inches.			Inches.	Inches.		Inches.	Inches.	
Flat Plate Keel.....	40	42	42	42		DOUBLE	3/4	6 R.R.	3-2	3/4	2 7/8	STRAPPED
„ Dblg. (if any)	✓	✓				✓			✓			
Bottom Plating, No. of Strakes 2.....	B 65 1/2	375	375	375		DOUBLE	3/4	6 R.R.	2	3/4	2 7/8	LAPPED
Bilge Plating, No. of Strakes 2.....	C 63 1/2	375	375	375		„	„	„	„	„	„	„
Side Plating, No. of Strakes.....	D 65 1/2	375	375	375		„	„	„	„	„	„	„
	E 64	375	375	375		✓	„	„	✓	„	„	„
Upper Deck, Sheer-strake in Wells.....	G 45	50	50	375		DOUBLE	3/4	6 R.R.	3-2	3/4	2 7/8	STRAPPED
Upper Deck, Sheer-strake in Bridge ...	✓	✓				✓			✓			
Strake below Sheer-strake in Wells.....	F 55	40	40	375		DOUBLE	3/4	6 R.R.	2	3/4	2 7/8	LAPPED
Strake below Sheer-strake in Bridge ...	✓	✓				✓		8 x 8 for riv.				
Poop Side Plating.....	✓	✓				✓			✓			
Bridge Side Plating.....	✓	✓				✓			✓			
TOP STRAKE	50	30				DOUBLE	3/4	6 R.R.	2	3/4	2 7/8	LAPPED
BOTTOM	39	30				„	„	6 R.R.	2	3/4	2 7/8	„
Forecastle Side Plating												

## WATERTIGHT BULKHEADS.

Total No. of W.T. BULKHEADS in Vessel	W.T. B.H.DS.	O.T. B.H.DS.
Extending to Upper Deck (Sec. 3 c)	2	3 2
Deck next below	3	
As per Rule	4	

## FORGINGS AND CASTINGS.

	Casting or Forging.	Scantlings.	Maker's Name.	Any Departure from Approved Plans to be Noted.
KEEL, Bar	FLAT BAR.	M.S.	8" x 2"	✓
STEM	"	"	8" x 2"	✓
STERN FRAME	Propeller Post		8" x 4"	T.S. FORSTER & SONS L.D.
	Rudder		6" x 4"	"
Speed of Vessel			14 KNOTS	✓
RUDDER—Type			DOUBLE PLATE STREAM LINE TYPE.	
A x D			269 4	✓
Diam. of head			9"	✓
Mainpiece at top pintle			9" x 7"	✓
heel			5" x 7"	✓
how constructed			FORGED & BUILT.	✓
double or single plate coupling, vertical or horizontal			DOUBLE 40	✓

## STIFFENERS.

	Plating Thickness.	VERTICAL.				HORIZONTAL.			
		Scantlings.	Spacing.	Scantlings.	Spacing.	Scantlings.	Spacing.	Scantlings.	Spacing.
MIDSHIP BULKH'D, Upper 'tween decks		7 x 3 x 33	21"	21"	21"	12 x 38	9'0"		
FRAME N° 30	35-30	5 1/2 x 3 x 35	21"	21"	21"	5 1/2 x 3 x 35	9'0"		
FRAME N° 39	35-30	7 x 3 x 33	21"	21"	21"	"	"	9'0"	
FRAME N° 32	35-30	5 1/2 x 3 x 32	21"	21"	21"	"	"	9'0"	
FRAME N° 62	34-30	6 x 3 x 36	24"	24"	24"	W.T. FLAT			
FRAME N° 34	34-30	5 1/2 x 3 x 34	24"	24"	24"	"	"		
COLLISION (in Hold)	85-34-30	7 x 3 x 34	24"	24"	24"	"	"		
AFTER PEAK	7 50-30	4 x 3 x 40	24"	24"	24"	"	"		

## 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:— CONSETT IRON CO. LD. DORMAN, LONG & CO. LD. APPLEBY—FRIDINGHAM STEEL CO. LD.

SECTIONS:— APPLEBY—FRIDINGHAM STEEL CO. LD. DORMAN, LONG & CO. LD.

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



EQUIPMENT No. ✓ 8160												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.			
57658 ✓	1st Bower	15	3	16 ✓	STOCKLESS			17	5	1	7 ✓	16 ✓	HALL'S TYPE (CAST STEEL HEAD)	NOT STATED.	CRADLEY HEATH 29.4.44. W.V. NORMAN ✓
57659 ✓	2nd "	15	3	21 ✓	"			17	7	2	0 ✓	16 ✓	" " "	" "	" " "
	3rd "														
	Collective weight											32 ✓			
✓	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.			
	Length.	Diam.	Statu- tory.	Break- ing.	Supplied.	Per Rule.	Length.	Diam.	Length.					Cir.	Length.		Cir.	Length.	Cir.	
	Fathoms	Ins.	Tons.	Tons.	Cwts. qrs. lbs.	Cwts.	Fathoms	Ins.						Fathoms	Ins.	Tons.	Fathoms	Ins.		
68913	180	7/16"	28 3/8	42 1/8	147-2-22	120	150	1 1/4	STUD LINK	B. HINGLEY & SONS.	CRADLEY HEATH		TOWLINE	60	7		60	7		
											11. 10. 44 W.V. NORMAN		HAWSERS & WARPS }	60	5 1/2		60	5 1/2		
Iron Stream Chain or Steel Wire	✓	✓											"							
													"	8 TO ADMIRALTY REQUIREMENTS.						

Steering Gear, Type (Power ~~or hand~~) DONKIN & CO. LTD - STEAM HYDRAULIC GEAR ✓ Alternative Means of Steering TILLER WITH BLOCKS & TACKLE ✓

Steering Chains (Size and Test) NONE ✓ Windlass STEAM - CLARKE CHAPMAN & CO. LTD ✓ 1 MOTOR BOAT 26'0" x 8'0" x 3'6" ✓ Boats 1 LIFEBOAT 25'6" x 7'10 1/2" x 3'2 1/2" ✓

Ceiling in Holds, thickness and material 1 3/8" WHITE PINE ✓ Cargo Battens, thickness, material and spacing 1 3/8" W.P. - 6" ✓

Cargo Hatchways. (Upper Deck) STEEL PLATES & ANGLES ✓ Thickness of Hatches 3" ✓

Size of Hatchway AFT 8'0" x 6'0" ✓ No. 2 ✓ No. 3 ✓ No. 4 ✓ No. 5 ✓ No. 6 ✓

Number of Shifting Beams and/or Fore and Afters NONE ✓

Builder's Signature V. Gray

**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 Yes ✓

(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 ship has been built in conformity with the Society's Rules and Regulations and the Secretary's letters. The scantlings and arrangements are in accordance with, or equivalent to, those shown on the approved plans. ✓

The supervision of the specification has been carried out. ✓

The materials and workmanship are good. ✓

Fore & after peak tanks, water ballast tanks, feed tanks, fresh water tanks and oil fuel tanks have been tested to rule requirements and found in order. Flash point of oil fuel 150°F. ✓

Oil fuel tanks are situated between the engine & boiler spaces & immediately forward of the boiler room. ✓

Decks, casings, hatchways, watertight bulkheads & shell hoisted and found in order. ✓

Windlass & steering arrangements tried under working conditions and found in order. ✓

A freeboard has been assigned, the marks cut in on the vessel's sides and verified. ✓

The amount of Entry Fee..... £ 4 : 0 : 0 } Fees applied for, 12 DEC 1945

FREEBOARD FEE £ 8 : 0 : 0

Special Survey Fee..... £ 76 : 4 : 0

SUPERVISION OF SPECIFICATION £ 19 : 1 : 0 } Received by me, \_\_\_\_\_

Travelling Expenses, if any ..... £ 4 : 19 : 11 } 19

I am of opinion the Vessel should be Classed + 100 A-1. ✓

FOR TOWING SERVICES. ✓

State whether the Vessel has been built under Special Survey Yes ✓

Certificate to be sent to 1 Hull. Date of issue 22/1/45

Committee's Minute FRI 12 JAN 1945

Character assigned + 100 A1 "For Towing Services"

Lloyd's A+CP + LMC 12.44

Fitted for oil fuel 12.44 FP above 150°F

FD. 0.0.

White Hull.

" Mech.



© 2020 Lloyd's Register Foundation



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 vessels under construction.

The following reports are enclosed herewith:—

Helm frame Sld. Rpt. No 1009  
Rudder frame rudder head. " " " 2948.  
Two tillers + one tiller keep " " " 3985

An echo sounding device has been fitted.

The vessel is a sister ship to "ENIGMA" - Hull Rpt No 52626.

The vessel was built for the A.M.S. branch and handed over to the Admiralty at the final inspection. She sails under the white ensign.

Rpt 8 enclosed.

#### PARTICULARS OF ELECTRIC WELDING (if employed)

Watertight flats electrically welded at ships side.  
Approved electrodes used.

#### 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	9.3-24 incl. pins	AEG	7251.	17.9.42
2nd "	10-1-8 "	AEG.	9716	20.1.44.
3rd "				

#### PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop, ft., R.Q.D., ft., Bridge, ft., Forecastle, 76.6 ft.

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

Official No. ✓ Signal Letters ✓ Extreme Breadth over Belting 36.04 ft. ✓ Over-all Length 174.23 ft. ✓  
No. and Material of Decks 1 Dk (SL)

Parts of Bottom of Vessel coated with cement or approved composition. Bitumastic clear of oil fuel tanks.

Particulars of composition (if fitted) and of approval. Approved by Admiralty.

#### 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.	11.83	25 1/2
Double bottom, under Engines and Boilers.			After peak tank.	12.83	8 1/2
Double bottom, if under Engines only.			Deep tank, aft. FRESH WATER TANK	16.5	46 1/2
Double bottom, if under Boilers only.			Deep tank, forward. FEED WATER TANK	3.0	12
Double bottom, forward.			Other tanks, if fitted, BALLAST TANKS AFT (2)	5.5	25
Total length (if continuous) and Capacity.			(If necessary furnish further information by sketch.)		

Order for Special Survey No. 3423

Date 14th October 1943

Dates of Surveys held while building

1944:— Feb. 18. 21. 25 March 3. 15. 16. 20. 23. 29. April 3. 6. 14. 20. 24. 26 May 1. 4. 12. 15. 18. 22. 25  
June 7. 13. 16. 20. 23. 26. July 3. 5. 10. 11. 18. 20. Aug. 14. 16. 18. 23. 25. 28. 30. Sept. 13. 20. 22. 2  
Oct. 4. Nov. 1. 8. 14. 16. 18. 20. 27. Dec. 1.

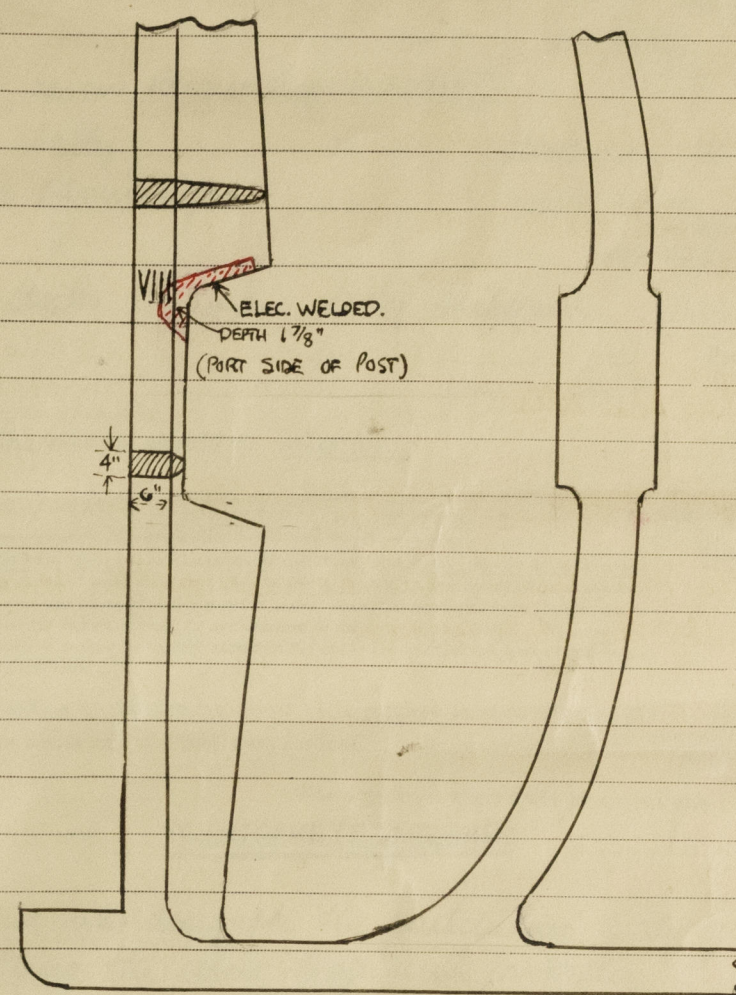
Total No. of Visits 55

Rpt. 9a.

Port of HULL.

Continuation of Report No. 52672 dated 12th December 1944. on the

#### RESCUE TUG "ENFORCER"



SKETCH OF STERNFRAME SHOWING  
E.W. REPAIR.

J. Macleod



© 2020

Lloyd's Register  
Foundation

0088 3/3