

## STEEL STEAMER or MOTORSHIP

Received at London Office

12 SEP 1941

State if Report has been sent on the Freeboard of the Vessel

State if Report is sent on the Machinery of the Vessel

Date of completion of report

10 SEP 1941

Port of

NEWCASTLE-ON-TYNE

No. 99774

Survey held at

Date First Survey

16 Feb 1941

Last Survey

22 August

1941

On the

Single Screw Steamer "EMPIRE FLINT"

Machinery aft.

State Type

Full Steaming

State Type of Erections

Forecastle

TONNAGE under Tonnage Deck

7203.86

CLASS +100A.1.

Carrying petroleum in bulk.

State if with freeboard as condition of Class

No

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

Total

Gross Tonnage

8129.07

Register Tonnage

4630.23

## REGISTERED DIMENSIONS.

FEET.

Length

468.4

Breadth

59.4

Depth

33.8

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

L 462.6

Breadth (greatest moulded)

B 59.0

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

D 34.0

1st Longitudinal Number (L x D)

= 15725

2nd Numeral L x (B + D)

= 43012

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

13.6

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

Do. Long Bridge to top of keel

Draught Moulded

27.4 1/2

Built at

Walkend-on-Tyne

Launched

29th March 1941

Yard No. 1601

Builders

S. Hunter, Wigham, Richardson &amp; Co.

Owners

His Majesty represented by The Ministry of War Transport.

Managers

Anglo Siam Petroleum Co.

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

Residence

Port of Registry

Newcastle

If surveyed while building, afloat, or in dry dock

Yes

## FRAMES, DOUBLE BOTTOM AND BEAMS.

For Longit. Framing See Rpt. 1\*

FRAMES, Spacing amidships

32

" " from 1/2 length amidships to Collision bulkhead

27

" " in peaks

24

SIDE FRAMING.

Frame Amidships, Angle, [ or ]

10 3 1/2 50

" " Extends up to

Upper deck

Reversed Frame Amidships, Angle

✓

" " Extends up to

✓

Depth of Framing Girder

10

Frames in Uppermost Continuous 'tween Decks, Angle, [ or ]

✓

" " Second 'tween Decks, Angle, [ or ]

✓

" " Third

" " Ford. C.D. to Coll. Bulk.

" " from 1/2 len. fwd. to 15% len. from stem

" " in Peaks, Angle, [ or ]

Diameter and Spacing of Rivets through Frame and Shell Plating amidships

State if Frame Joggled

Are the scantlings and arrangements in the Panting Area in accordance with the Rules and/or as approved?

Are the scantlings and arrangements in way of the Bottom Forward in accordance with the Rules and/or as approved?

SINGLE BOTTOM.

Floors, Depth and thickness at mid-line in Holds

Height of Brackets at side above base line at toe of frame

Middle Line Keelson, on Floors, Angles, [ or ]

" " Through Plate or Intercoastal Plate

" " Foundation Plate on Floors

" " Flat Plate Keel Angles

Side Keelsons, No. each side

" " thickness of Intercoastal Plate

" " Angles

DOUBLE BOTTOM. IN E &amp; B space only

Solid Floors, thickness and spacing

" " Are Frame and Reversed Frame joggled?

Bracket Floors, breadth and thickness at middle line

" " breadth and thickness at margin plate

Bracket Floors, Frame

B.A.

8 3 1/2 7/16

" " Reversed Frame

B.A.

6 3 1/2 7/16

" " Vertical Struts

B.A.

6 6 1/2

Centre Girder, depth and thickness amidships

" " top Angles

Double

6 3 1/2 50

" " bottom Angles

J.E.R. 2-52

6 6 1/2

Side Girders, No. each side and thickness

B.R. 1-52

Margin Plate depth (excl. of flange) and thickness

B.R. only

38 x 60

" " Vertical Angle to Tank side

Bracket

4 4 1/2

" " Vertical Angle to Tank side

Bracket from forward 1/2 len. from stem to Panting Area

✓

" " Gussets, spacing and scantling

aft 1/2 len. from stem

52 cont.

" " Gussets, spacing and scantling

from forward 1/2 len. from stem to Panting Area

✓

Tank Side Brackets, height above base line at toe of Frame and thickness

7 1/2 x 54

INNER BOTTOM PLATING. in E &amp; B space only

Breadth and thickness of Middle Line Strake

78 x 58

Thickness of remainder in Holds

1.00 under Engine Bed.

Are Rule requirements complied with regarding increases of scantlings in way of double bottom in E. &amp; B. space and framing in Boiler and Boiler Room?

Yes

BEAMS.

Uppermost Continuous Deck, amidships

in Wells, Angle, [ or ]

" " in way of Bridge, Angle, [ or ]

Spacing

Second Deck, amidships, Angle, [ or ]

Spacing

Third Deck, amidships, Angle, [ or ]

Spacing

Fourth Deck, amidships, Angle, [ or ]

Spacing

Poop Deck, Angle, [ or ]

Spacing

Bridge Deck, Angle, [ or ]

Spacing

Forecastle Deck, Angle, [ or ]

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.
<b>PILLARS, No. of Rows.....</b>	✓		Stringer Plate, breadth and thickness in way of Bridge .....	✓	
„ in 'tween Decks, Size and Spacing.....	✓		Thickness of Plating abreast Deck openings in way of Wells .....	✓	
„ „ „ „ „	✓		Thickness of Plating abreast Deck openings in way of Bridge .....	✓	
„ in Holds „ „	✓		Thickness of Plating within line of openings...	✓	
„ „ „ „ „	✓		If Sheathed, material and thickness .....	✓	
<b>Wing</b>			<b>Third Deck.</b>		
<b>Centre Line Bulkhead 3</b>			Stringer Plate, breadth and thickness.....	✓	
Stiffeners and Spacing 32	10 3 1/2 80 B.A.		If Plated, state thickness.....	✓	
Plating, thickness of .....	.43		<b>Fourth Deck.</b>		
<b>STRINGERS AND DECKS.</b>			Stringer Plate, breadth and thickness.....	✓	
<b>Uppermost Continuous Deck.</b>			If Plated, state thickness .....	✓	
Stringer Plate, breadth and thickness in Wells	81 x 81		<b>Poop Deck.</b>		
„ „ „ „ in way of Bridge	.92 x 81		Stringer Plate, breadth and thickness .....	38 x 36	
„ Angle in Wells .....	6 6 5/8		Plating, Sheathing, material and thickness ...	.30 bare steel	
Thickness of Plating abreast Deck openings in way of Wells .....	Centre strake through Hatch .76		<b>Bridge Deck.</b>	.28 - 1 1/4 Composition	
Thickness of Plating abreast Deck openings in way of Bridge .....	.76		Stringer Plate, breadth and thickness.....	See plan	
Thickness of Plating within line of openings...	.58		Plating, Sheathing, material and thickness ...	.34 Composition in accommodation	
If Sheathed, material and thickness .....			<b>Forecastle Deck.</b>		
<b>Second Deck.</b>			Stringer Plate, breadth and thickness.....	.36	
Stringer Plate, breadth and thickness in Wells...	✓		Plating, Sheathing, material and thickness ...	.36 bare steel	

## SHELL PLATING.

SCANTLINGS.					RIVETING.						
STRAKES.	AS IN VESSEL.				ANY DEPARTURE FROM APPROVED PLANS TO BE NOTED.	EDGES.		BUTTS.			
	AMIDSHIPS.		FORWARD.	AFT.		State if jogged?		RIVETS.		STRAPPED OR LAPPED.	
	Breadth.	Thickness.	Thickness.	Thickness.		SINGLE OR DOUBLE.		No. OF ROWS OF RIVETS.			
FLAT PLATE KEEL .....	57	.99	.82	.82		2R	1 4	5R	1 1/8	5	Lapped.
„ DBLG. (if any)						✓	✓	✓	✓	✓	✓
BOTTOM PLATING, No. of Strakes .....	B 7 1/2 E 8 7/2 F 7 1/2	.67 .67 .64	.74 .74 .54	.67 .64 .54		2R	7/8 3 1/2	4R	7/8	3 1/2	
BILGE PLATING, No. of Strakes .....	85	.64	.48	.54		2R	7/8 3 1/2	4R	7/8	3 1/2	
SIDE PLATING, No. of Strakes .....	G 7 4 H 7 8 J 7 7	.64	.48	.50		2R	7/8 3 1/2	4R	7/8	3 1/2	
UPPER DECK, Sheer-strake in Wells.....	51	1.03	.48	.48		✓	✓	5R	1 1/8	5	
UPPER DECK, Sheer-strake in Bridge ...	51	1.24				2R	1 1/8 4 1/2	5R	1 1/4	5 5/8	
STRAKE BELOW Sheer-strake in Wells.....	84	.76	.48	.48		2R	1 4	4R	1	4	Lapped
STRAKE BELOW Sheer-strake in Bridge ...	84	.76				2R	1 4	4R	1	4	
POOP SIDE PLATING .....	✓	.40	✓	✓		1R	7/8 3 1/2	2R	3/4	2 5/8	
BRIDGE SIDE PLATING ...	✓	.43	✓	✓		✓	✓	2R	3/4	2 5/8	
FORECASTLE SIDE PLATING	✓	.43	✓	✓		1R	3/4 3	1R	3/4	2 5/8	

## WATERTIGHT BULKHEADS.

Total No. of W.T. BULKHEADS in Vessel—

Extending to Upper Deck (Sec. 3 c)

„ Deck next below

As per Rule

16

## FORGINGS and CASTINGS.

Casting or Forging. Scantlings. Maker's Name. Any Departure from Approved Plans to be Noted.

KEEL, Bar .....

STEM .....

STERN FRAME

Propeller Post .....

Rudder .....

Speed of Vessel .....

RUDDER—Type.....

A x D .....

Diam. of head .....

Mainpiece at top pintle

„ „ heel ...

how constructed .....

double or single plate

coupling, vertical or

horizontal.....

10 x 2 3/4

plate

Cast steel as per

Fager approved

plans

11 Knots

Simpson balanced

12"

10 1/2

In accordance with

approved plans.

Horizontal

2020

STEEL.

Manufacturer's Name or Trade Mark of the Steel used in the construction of the Vessel (state process of manufacture)

Long Co.; Appleby &amp; Hodgkinson Steel Co.; Skinningrove Steel &amp; Iron Co.; South Durham Steel &amp; Iron Co. Ltd. open hearth.

Has the Steel been tested as required by the Rules?

yes

# Newcastle-on-Tyne 99774

## PARTICULARS OF LONGITUDINAL FRAMING.

FRAMING.		AMIDSHIPS.			ENDS.			Any Departure from Approved Plans to be Noted.	RIVETING.				
		In Ship.			In Ship.				Rivets in Longitudinal Frames.		Spacing of Rivets on each side of Transverses and Bulkheads. Inches.	Rivets in Brackets to Bulkheads.	
		Ins.	Ins.	Ins.	Ins.	Ins.	Ins.		Diam. Ins.	Spang. Ins.		Number.	Diameter. Inches.
Framing of L, L or C		<u>Side Shell Stringers</u>											
Frames in Bridge 'tween Decks		<u>Upper stringer plate. 28x.42</u>						✓					
Frames from Uppermost Continuous Deck	No. 1	<u>" " Face angle 3 1/2 x 3 1/2 x .44</u>						✓					
	2	<u>Lower " Plate 32x.44.</u>						✓					
	3	<u>" " Face Angle 3 1/2 x 3 1/2 x .44.</u>						✓					
	4	<u>Longit. Bulkhead.</u>											
	5	<u>Upper stringer Plate 28x.42.</u>						✓					
	6	<u>" " Face Angle 3 1/2 x 3 1/2 x .44</u>						✓					
	7	<u>Lower " Plate 32x.44.</u>						✓					
	8	<u>" " Face Angle 3 1/2 x 3 1/2 x .44</u>						✓					
	9												
<u>Bottom Shell Longitudinals.</u>	10	<u>17x4x4x .55/-68</u>		<u>17x4x4x .55/-68</u>					7/8	5 1/4	7/8 - 3 1/8	18	7/8
	11												
	12												
	13												
	14												
	15												
	16												
Spacing of Longitudinal Frames	Amidships	<u>33" Centre Tanks</u>											
	At Ends	<u>30" Side "</u>											
Double Bottoms L, L or C	Tank Top Longitudinals	<u>Studs in Each Wing Tank at -</u>											
	Bottom	<u>Upper &amp; lower string in line with deep Transverse.</u>											
	Amidships	<u>30x.42 Plate - 6" flange</u>						✓					
	At Ends...	<u>15x4x4x .50/-62 channel with (dotted)</u>						✓					
Transverses.													
Side (in 'tween Decks)	Depth and Thickness												
	Face Angles												
	Lugs to Shell*												
Side (in Hold)	Depth and Thickness												
	Face Angles												
	Lugs to Shell*												
Bottom	Depth and Thickness	<u>Centre</u>		<u>Wings.</u>									
	Face Angles	<u>42x.44</u>		<u>37x.42</u>									
	Lugs to Shell*	<u>6x3 1/2x.50 Double</u>		<u>6x3 1/2x.50 Single</u>									
	" " Back Bars	<u>6x6x.50.</u>		<u>6x6x.50</u>									
	Brackets	<u>3 1/2 x 3 1/2 x 7/16</u>		<u>2 in way of Trans.</u>									
	Spacing of Transverse Frames	<u>8'3" x .44.</u>		<u>10'11" x .44.</u>									
State if joggled or liners.		<u>10'8"</u>		<u>clear of Trans. 6'3" x .42.</u>		<u>10'8"</u>							
Longitudinal Beams of L, L or E	Bridge Deck	✓	✓	✓	✓	✓	✓	Spacing. 33" at Cr. Tanks. 30" at Wing Tanks	Transverse Beams.	Plate.	Face Angles.	Any Departure from Approved Plans to be Noted.	
	Upper	9	3 1/2	.440	✓	✓	✓			30x.42	4x4x.50		
	Second	✓	✓	✓	✓	✓	✓						
	Third	✓	✓	✓	✓	✓	✓						

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

EQUIPMENT No 44871										LETTER C/	ANCHORS.	
Number of Certificate.	Anchor.	WEIGHT, <del>By</del> STOCK			WEIGHT OF STOCK.			TEST, PER CERTIFICATE.				Where and when tested and Superintendent.
		Cwts.	qrs.	lbs.	Cwts.	qrs.	lbs.	Tons.	cwts.	qrs.	lbs.	
39628	1st Bower ...	73	2	0	-	-	-	55	10	0	0	✓ L.P.H.S. 30/3/40 W.V. Hornum
39627	2nd " ...	73	1	21	-	-	-	55	10	0	0	✓ L.P.H.S. 30/3/40 W.V. Hornum
	3rd " ...											
	Collective weight.											
53397	Stream ...	22	1	0	5	2	20	22	11	1	0	✓ L.P.H.C.H. 24/6/40 S.C. Paul.

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- ing.	Break- ing.	Supplied.	Per Rule.			Length.	Diam.					Length.	Cur.		Length.	Cur.
	Fathoms.	Ins.	Tons.	Tons.	Cwts.	qrs.	lbs.	Cwts.	Fathoms.	Ins.					Fathoms.	Ins.	Tons.	Fathoms.	Ins.
112486	240	2 1/16	10 9/16	149 3/5	713	1	24				Steel	✓ L.P.H.N. 21/5/40 J.A. Ruff		TOWLINE...	130	5 1/4	77.5	130	5 1/4
	60 fms short													HAWSERS & WARPS)	2-100	2 3/4	15.2	2-100	2 3/4
														"	2-100	2 3/4	15.2	2-100	2 3/4
		Cir.								Cir.				"					
Stream cable or Steel Wire)	120	5"	✓	52.8	✓			✓	✓	✓	9/12	✓		"	✓	✓	✓	✓	✓

Steering Gear, Type (Power or hand) Power (Steam hydraulic) Alternative Means of Steering Blocks & Tackle

Steering Chains (Size and Test) ✓ Windlass Emerson Walker (Steam) Boats 1 Motor Boat - 24'1" x 7'5 1/2" x 3'1"  
3 Steel life boats - 24'0" x 7'6" x 3'1"

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

Cargo Hatchways.-(Upper Deck) 24-O.T. Hatches 4'3" x 3'6" { 8'0" x 8'6" } Thickness of Hatches .60 Steel

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 ✓ For SWAN, HUNTER, & WIGHAM RICHARDSON, LTD.

Builder's Signature W. Buckie

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 Tanker. 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 Vessel has been built in accordance with the approved plans, The Secretary's letters and generally conforms with The Society's Rules for the class contemplated.

The materials and workmanship are good.

The weather decks clear of oil tanks & the W.T. bulkhead above the fore peak tanks have been hose tested and found Satisfactory.

The peak tanks, all cargo tanks, deep tank forward, oil fuel bunkers, F.W. Tanks, Cofferdams, and double bottom tanks have been tested as required by the Rules and found Satisfactory.

The requirements of Section 20 of the Rules, where applicable, for the carriage of oil fuel having a F.P. above 150°F have been complied with and the oil fuel is carried in bunkers at the forward end of the engine room, in fore deep tank and part of the double bottom under the engines. The windlass, main and auxiliary steering gear have been tried over Satisfactorily. The assigned fuelboards have been marked on the vessel's sides, Verified and cut in.

The amount of Entry Fee ..... £ 11 : 0 : 0 Fees applied for, 110 SEP 1941

Special Survey Fee.... £ 604 16 9 Received by me, \_\_\_\_\_

Freeboard Travelling Expenses, if any £ 19 : 0 : 0 \_\_\_\_\_

I am of opinion the Vessel should be Classed +100 A.I. Carrying Petroleum in bulk.

State whether the Vessel has been built under Special Survey yes Signature E.H. Dean.

Surveyor to Lloyd's Register of Shipping.

Certificate to be sent to Newcastle-on-Tyne Date of issue 30/9/41

FRI. 26 SEP 1941

Committee's Minute 4100 A1

Character assigned Carrying petroleum in bulk

Fitted for oil fuel P. 41 F.P. above 150°F

Lloyd's A & C.P. + Linc 8.41

Write N/A

The Surveyor is 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 similar to the "ENNERDALE" hawcastle report no. 9965-7, excepting that, no special admiralty patterns etc. have been fitted. The approved plans are in the Wokingham office having been forwarded with the first Entry report on the Ennerdale.

Four forging reports are forwarded with this report.

PARTICULARS OF ELECTRIC WELDING (if employed) only minor details of the structure electrically welded; electrodes used and methods employed are in accordance with the Rules.

SPECIAL NOTATIONS:—Either as part of the vessel's class or for record in the Register Book. Curved stem, Machinery aft, Longitudinal framing at bottom and at deck, Clowds a/c. E.S.D. D.F.

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

1st Bower	W <sup>E</sup> 44-1-8. Unit. J.D. Ld of Cert. 2489. Date 16-12-39.
2nd "	" 44-0-4. " J.D. " 2503. " 27-12-39
3rd "	" 46-1-4

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop 111.83 ft., R.Q.D. ft., Bridge 46.5 ft., Forecastle 39.6 ft.

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

Official No. 185814 Signal Letters Extreme Breadth over Bolting 159.4' Over-all Length 483.08' (Circ. 1611) (Circ. 1703)

No. and Material of Decks 10<sup>th</sup> Std. 2<sup>nd</sup> 0<sup>th</sup> clear of cargo tanks.

Parts of Bottom of Vessel coated with cement or approved composition Bottom of fore & after peak tanks and Engine room after well cemented.

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,	24.25	156
Double bottom, under Engines and Boilers,	✓	✓	After peak tank,	16.0	87
Double bottom, if under Engines only, Feed Water	62.5	124 F.W.	Deep tank, aft, Cofferdam	3.0	168
Double bottom, if under Boilers only,	✓	✓	Deep tank, forward, Cofferdam	3.0	159
Double bottom, forward,	✓	✓	Other tanks, if fitted, FORE DEEP	35.6	628
Total length (if continuous) and Capacity	93.5	284 T.S.W.	(If necessary, furnish further information by sketch.)	✓	✓

See letter 30.8.41 M "ENNERDALE".

Order for Special Survey No. 5604

Date 31.1.40

Dates of Surveys held while building

1940  
Feb. 16. 22. 26. Mar. 5. 13. 26. Apr. 4. 9. 22. May 2. 8. 31. June 4. 5. 6. 7. 10. 12. 14. 18. 20. 25. 27. July 1. 3. 5. 8. 11. 17. 14. 30. Aug. 1. 6. 21. 23. 28. Sep. 4. 9. 25. Oct. 1. 12. 16. 23. 25. 31. Nov. 5. 8. 12. 14. 19. 20. 21. 22. 26. 28. Dec. 2. 5. 11. 13. 18. 31. 1941  
Jan. 3. 8. 14. 29. Feb. 5. 10. 11. 14. 17. 24. 25. 28. Mar. 3. 4. 5. 6. 7. 8. 10. 11. 12. 13. 14. 17. 18. 20. 21. 23. 25. 26. 27. 28. 29. Apr. 7. 11. May 2. June 6. July 11. 18. 21. 24. 25. 29. Aug. 5. 7. 12. 22.

Total No. of Visits 109.