

## STEEL STEAMER OR MOTORSHIP.

Received at London Office

-8 JUL 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

4. 7. 42

Port of

*Belfast*

No.

13281

Survey held at

*Belfast*

Date First Survey

7 October 1940

Last Survey

25 -

6 -

1942

On the

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

*Single Screw Motor Yanker EMPIRE CHAPMAN (Machinery aft)*

State Type

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

*Full Scantling*

State Type of Erections

*Pop. R. & c.*

TONNAGE under Tonnage Deck ...

*7229.82*

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

al

*7229.82*

ss Tonnage

*8194.35*

ister Tonnage

*4776.97*

## REGISTERED DIMENSIONS.

FEET

gth

*465.6*

adth

*59.5*

th

*33.85*CLASS *+100 A1. Carrying.*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)

FEET

*460*

Breadth (greatest moulded)

B

*59*

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*

1st Longitudinal Number (L x D)

*15640*

2nd Numeral L x (B + D)

*42780*

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

*✓*

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

*13.52*

Do.

Long Bridge to top of keel

*✓*

Draught Moulded

*27-4 1/4*

Built at

*Belfast*

Launched

*17 Jan 1942.*

Yard No.

*1080*

Builders

*Harland & Wolff Ltd*

Owners

*Ministry of War Transport*

Managers

*Sw R. Rapner & Co. Ltd*

(Where necessary to be entered in Reg. Book)

Residence

Port of Registry

*Belfast*

If surveyed while building, afloat, or in dry dock

*building afloat and in dry dock*

## 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	<i>31 1/2</i>	<i>✓</i>	Bracket Floors, Frame	<i>✓</i>	
" " from 1/3 length amidships to Collision bulkhead	<i>27</i>	<i>✓</i>	" " Reversed Frame	<i>✓</i>	
" " in peaks	<i>24</i>	<i>✓</i>	" " Vertical Struts	<i>✓</i>	
SIDE FRAMING.			Centre Girder, depth and thickness amidships	<i>60-57 1/2 46</i>	<i>✓</i>
Frame Amidships, Angle, <i>E or F</i>	<i>10 3 1/2 7/16</i>	<i>✓</i>	" " top Angles	<i>4 4 9/16</i>	<i>✓</i>
" " <i>ford tanks</i> <i>BA</i>	<i>11 3 1/2 7/16</i>	<i>✓</i>	" " bottom Angles	<i>4 4 9/16</i>	<i>✓</i>
" " Extends up to	<i>upper deck</i>	<i>✓</i>	" " Gussets, spacing and scantling abaft 1/4 len. from stem	<i>2 0.60</i>	<i>✓</i>
Reversed Frame Amidships, Angle	<i>✓</i>		" " Gussets, spacing and scantling from forward 1/4 len. from stem to Panting Area	<i>1 0.42</i>	<i>✓</i>
" " Extends up to	<i>✓</i>		Margin Plate depth (excl. of flange) and thickness <i>tank top strength</i>	<i>.54</i>	<i>✓</i>
Depth of Framing Girder	<i>10</i>	<i>✓</i>	" " Vertical Angle to Tank side Bracket abaft 1/4 len. from stem	<i>6 6 50</i>	<i>✓</i>
Frames in Uppermost Continuous 'tween Decks, Angle, <i>E or F</i>	<i>✓</i>		" " Vertical Angle to Tank side Bracket from forward 1/4 len. from stem to Panting Area	<i>✓</i>	
" " Second 'tween Decks, Angle, <i>E or F</i>	<i>✓</i>		" " Gussets, spacing and scantling abaft 1/4 len. from stem	<i>✓</i>	
" " Third <i>ford tanks</i> <i>11 coll BH</i>	<i>11 3 1/2 44</i>	<i>✓</i>	" " Gussets, spacing and scantling from forward 1/4 len. from stem to Panting Area	<i>✓</i>	
" " from 1/3 len. for'd. to 15% len. from Stem	<i>9 3 1/2 7/16</i>	<i>✓</i>	Tank Side Brackets, height above base line at toe of Frame and thickness	<i>46 H 3"</i>	
" " in Peaks, Angle, <i>E or F</i>	<i>8 3 1/2 7/16</i>	<i>✓</i>	INNER BOTTOM PLATING.		
Diameter and Spacing of Rivets through Frame and Shell Plating amidships	<i>7/8 0 47/8</i>	<i>✓</i>	Breadth and thickness of Middle Line Strake	<i>1 1/8</i>	<i>✓</i>
State if Frame Joggled	<i>yes</i>		" " <i>tank top in way of motor</i>	<i>.52</i>	<i>✓</i>
Are the scantlings and arrangements in the Panting Area in accordance with the Rules and/or as approved?	<i>as app'd</i>		Thickness of remainder in Holds	<i>.52</i>	<i>✓</i>
Are the scantlings and arrangements in way of the Bottom Forward in accordance with the Rules and/or as approved?	<i>as app'd</i>		Are Rule requirements complied with regarding increases of scantlings in way of double bottom in E. <i>space</i> and framing in O.F. Bunkers and Boiler Room?	<i>as app'd</i>	
SINGLE BOTTOM.			BEAMS.		
Floors, Depth and thickness at mid-line in Holds	<i>See Log.</i>		Uppermost Continuous Deck, amidships in way of <i>prop</i> <i>Walls, Angle E or F</i>	<i>8 3 1/2 7/16</i>	<i>✓</i>
Height of Brackets at side above base line at toe of frame	<i>See Log.</i>		" " <i>in way of Bridge, Angle, E or F</i> <i>See Log.</i>	<i>8 3 1/2 7/16</i>	<i>✓</i>
Middle Line Keelson, on Floors, Angles, <i>E or F</i>	<i>framing</i>		" " Spacing	<i>every</i>	<i>✓</i>
" " Through Plate or Inter-costal Plate	<i>plan</i>	<i>✓</i>	Second Deck, amidships, Angle, <i>E or F</i>	<i>8 3 1/2 437</i>	<i>✓</i>
" " Foundation Plate on Floors	<i>✓</i>		" " Spacing	<i>9 3 1/2 437</i>	<i>✓</i>
" " Flat Plate Keel Angles	<i>✓</i>		" " <i>deep tank top</i>	<i>8 3 1/2 7/16</i>	<i>✓</i>
Side Keelsons, No. each side	<i>✓</i>		" " Spacing	<i>every</i>	<i>✓</i>
" " thickness of Intercoastal Plate	<i>✓</i>		Fourth Deck, amidships, Angle, <i>E or F</i>	<i>✓</i>	
" " Angles	<i>✓</i>		" " Spacing	<i>✓</i>	
DOUBLE BOTTOM. <i>in motor space</i>			Poop Deck, Angle, <i>E or F</i>	<i>8 3 1/2 35</i>	<i>✓</i>
Solid Floors, thickness and spacing	<i>46 C 3 1/2, 30 3/4</i>	<i>✓</i>	" " Spacing	<i>every</i>	<i>✓</i>
" " Are Frame and Reversed Frame joggled?	<i>yes</i>	<i>✓</i>	Bridge Deck, Angle, <i>E or F</i>	<i>8 3 1/2 437</i>	<i>✓</i>
Bracket Floors, breadth and thickness at middle line	<i>✓</i>		" " Spacing	<i>every</i>	<i>✓</i>
" " breadth and thickness at margin plate	<i>✓</i>		Forecastle Deck, Angle, <i>E or F</i>	<i>10 3 1/2 7/16</i>	<i>✓</i>
			" " Spacing	<i>9 3 1/2 7/16</i>	<i>✓</i>

## 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 .....						Stringer Plate, <del>breadth</del> and thickness in way of Bridge <i>forward</i> .....		.36	✓		
"	in 'tween Decks, Size and Spacing .....	400.				Thickness of Plating abreast Deck openings in way of Wells <i>aft</i> .....		.36	✓		
"	" " " " " " .....	Long <sup>d</sup> BH <sup>d</sup>	✓			Thickness of Plating abreast Deck openings in way of Bridge <i>forward</i> .....		.34	✓		
"	in Holds " " " " " " .....					Thickness of Plating within line of openings...		✓			
"	" " " " " " .....					If Sheathed, material and thickness.....		✓			
Long	Center Line Bulkhead. 11 ft P/S Ba.	10 3 1/2 7/16	✓			Third Deck. <i>deep tank top</i>					
	Stiffeners and Spacing .....	3 3 1/2	✓			Stringer Plate, <del>breadth</del> and thickness.....		.42	✓		
	Plating, thickness of .....	.12 Vert.	✓			If Plated, state thickness .....		.38	✓		
STRINGERS AND DECKS.						Fourth Deck.					
	Uppermost Continuous Deck.					Stringer Plate, breadth and thickness.....		✓			
	Stringer Plate, breadth and thickness in Wells	97 1/2 87 1/2 80	✓			If Plated, state thickness.....					
"	" " " " " in way of Bridge	97 1/2 87	✓			Poop Deck.					
"	Angle in Wells .....	6 6 7/8	✓			Stringer Plate, <del>breadth</del> and thickness.....		.34	✓		
	Thickness of Plating abreast Deck openings in way of Wells <i>ce. continuous plates</i> .....	.76	✓			Plating, Sheathing, material and thickness ...		.26	✓	<i>2 ft 6 in 1/2 in</i>	✓
	Thickness of Plating abreast Deck openings in way of Bridge .....	✓				Bridge Deck.					
	Thickness of Plating within line of openings... <i>ce. in way of 2.7 hatch</i> .....	.58	✓			Stringer Plate, <del>breadth</del> and thickness.....		.43	✓		
	If Sheathed, material and thickness.....	No	✓			Plating, <del>Sheathing</del> , material and thickness ...		.34	✓		
Second Deck.						Forecastle Deck.					
	Stringer Plate, breadth and thickness in Wells <i>aft</i> .....	.40	✓			Stringer Plate, <del>breadth</del> and thickness.....		.37	✓		
						Plating, Sheathing, material and thickness...		.36	✓		

## SHELL PLATING.

SCANTLINGS.					RIVETING.								
STRAKES.	AS IN VESSEL.				ANY DEPARTURE FROM APPROVED PLANS TO BE NOTED.	EDGES.			BUTTS.				
	AMIDSHIPS.		FORWARD.	AFT.		State if joggled?	SINGLE OR DOUBLE.	RIVETS.		No. OF ROWS OF RIVETS.	RIVETS.		STRAPPED OR LAPPED.
	Breadth.	Thickness.	Thickness.	Thickness.				Diam.	Spacing cr. to cr.		Diam.	Spacing cr. to cr.	
	Inches.	Inches.	Inches.	Inches.			Inches.	Inches.		Inches.	Inches.		
Flat Plate Keel.....	57	96	78	78		double	1	4	five	1 1/8	4 1/2	lapped	
„ Dblg. (if any)													
Bottom Plating, No. of Strakes ..... 4 }		67, 64	74, 50	50, 55		double	7/8	3 1/2	four	7/8	3 1/2	lapped	
Bilge Plating, No. of Strakes ..... one }		64	50	50		double	7/8	3 1/2	four	7/8	3 1/2	lapped	
Side Plating, No. of Strakes ..... three }		64	50	50		double	7/8	3 1/2	four	7/8	3 1/2	lapped	
Upper Deck, Sheer- strake in Wells.....	55	99	50	50		-	-	-	five	1 1/8	5	lapped	
Upper Deck, Sheer- strake in Bridge ...	55	99	50	50		-	-	-	five	1 1/8	5	lapped	
Strake below Sheer- strake in Wells.....	83	76	50	50		double	1	4	four	1	4	lapped	
Strake below Sheer- strake in Bridge ...	83	76	50	50		double	1	4	four	1	4	lapped	
Poop Side Plating.....				40		one strake			two	3/4	2 5/8	lapped	
Bridge Side Plating.....		43				one strake			two	3/4	2 5/8	lapped	
Forecastle Side Plating			43			single	3/4	3	one	3/4	2 5/8	lapped	

## WATERTIGHT BULKHEADS.

Total No. of W.T. BULKHEADS in Vessel—  
Extending to Upper Deck (Sec. 3 c) 17 ✓  
,, Deck next below ✓  
As per Rule ordinary cargo 7

## FORGINGS AND CASTINGS.

	Casting or Forging.	Scantlings.	Maker's Name.	Any Departure from Approved Plans to be Noted.
KEEL, Bar	flat keel			
STEM	rolled	10 1/4	2 3/4	
STERN FRAME	Propeller Post	cast	as	
	Rudder	steel	app	Beardmore
Speed of Vessel		12 knots		
RUDDER—Type		Simple type		Beardmore
" A X D		double plate		
" Diam. of head		brass cast		
" Mainpiece at top pintle		steel frame		
" " heel		forged post		
" how constructed		semi balanced		
" double or single plate coupling, vertical or horizontal		as app	des	
		lots of	11"	

STEEL.

Manufacturer's Name or Trade Mark of the Steel used in the construction of the Vessel (state process of manufacture) *open hearth - S M*

*Bolvelle, Steel Co of Scotland; Lanarkshire Steel Co.:*

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

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.	Rivets in Brackets to Bulkheads.	
		Ins.	Ins.	Ins.	Ins.	Ins.	Ins.		Diam.	Spang.		Number.	Diameter.
Framing of L, L or C													
Frames in Bridge 'tween Decks ...													
Frames from Uppermost Continuous Deck Int. centre girders No. 1													
" 2													
" 3													
" 4													
" 5													
" 6													
" 7													
" 8													
" 9													
" 10													
" 11													
" 12													
" 13													
" 14													
" 15													
" 16													
Spacing of Longitudinal Frames													
Amidships	1-4												
At Ends	6-9												
Double Bottoms													
Tank Top Longitudinals													
Bottom													
Spacing of Longitudinals													
Amidships													
At Ends...													
Transverses.													
Side													
'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													
Face Angles													
Lugs to Shell*													
" " Back Bars													
Brackets													
Spacing of Transverse Frames													
* State if joggled or liners.													
Longitudinal Beams of L, L or C													
Bridge Deck													
Upper													
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.

EQUIPMENT No. 44392

LETTER CT

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.			
40536	1st Bower	74	0	0				55	15	0	0	77	Byron Imp. Stockless	not dated	Sunderland 14/2/41. Norman
40506	2nd "	73	1	14				55	10	0	0	77	do do	do	do 31/1/41 do
	3rd "											653			
	Collective weight											2192			
54156	Stream	22	2	7	5	2	20	22	16	3	14	22	Rodgers Forge W.I.	not dated	Bradley H. 30/5/41. 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.	Stagnation.	Breaking.	Supplied.	Per Rule.		Length.	Diam.					Length.	Ins.	Tons.	Length.	Ins.
116583A	240	2 3/4	106 1/2	149 3/4	708-3-25			240	2 3/4	did	not dated	Netherland 30/8/41 Reef	TOWLINE	130	5 1/4	77 1/2	130	5 1/4
116787	forming shackles for	2 3/4	106 1/2	149 3/4	2-0-14						not dated	Netherland 16/2/42 Reef	HAWSERS & WARPS	20ft 100	2 3/4	15 1/2	20ft 100	2 3/4
Iron Stream Chain or Steel Wire	120	5"		52 1/2				120	5"									

Steering Gear, Type (Power or hand) *Harter's steam hydraulic* Alternative Means of Steering *Block & tackle to after wheel*Steering Chains (Size and Test) *telemotor control* Windlass *steam, efficient* Boats *4, (1 fitted with motor)*Ceiling in Holds, thickness and material *none* Cargo Battens, thickness, material and spacing *steel bottom in fore hold*Cargo Hatchways.—(Upper Deck) *steel O.T. hatchways 40* Thickness of Hatches *54 steel.*Size of Hatchways No. 1 (Fwd.) *8' x 8'* No. 2 *27 hatchways to cargo tanks 4'6" x 3'6"* No. 3 No. 4 No. 5 No. 6Number of Shifting Beams and/or Fore and Afters *none* For HARLAND & WOLFE, LIMITED.Builder's Signature *A. Marshall*

Secretary

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 *motor ship*(b) whether the vessel, not being an oil tanker, is fitted for carrying oil as cargo *oil 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).

oil fuel is carried in bunkers situated at the fore side of the motor space, in deep tank forward of forward cofferdam and in the double bottom under engines. oil cargo is carried in 27 compartments between forward and after cofferdam separated into three groups by two pump rooms

This vessel has been built in accordance with the approved plans, the Secretary's Rules and the Rules of the Society. The material and workmanship are good. All cargo tanks, oil fuel bunkers, deep tank forward, fore and after peak tanks, fresh water tanks, double bottom compartment in motor space and cofferdams have been tested to Rule requirements and found satisfactory. Weather decks, W.T. bulkheads, also scullights have been satisfactorily tested. Bilge pumping arrangements tried and found in order. Freeboard verified and cut in.

The amount of Entry Fee..... £11:0:0 Fees applied for, 6.7.1942 (Special notations, where part of class, to be stated.)

Special Survey Fee..... £67:5:6

Received by me, *Frederick* 19

Travelling Expenses, if any ..... £19:0:0

State whether the Vessel has been built under Special Survey *Yes*I am of opinion the Vessel should be Classed *+100A1.* at *carrying petroleum in bulk. Long framing at bottom & deck*Signature *Wm Balfour* Surveyor to Lloyd's Register of Shipping.Certificate to be sent to *Belfast* Date of issue *11/8/42*

Committee's Minute

Character assigned *+100A1*

*Carrying petroleum in bulk*  
*Lloyd's arch. & S.D.*  
*note for S.R.L.*

*+Limb 6.42 2208-1508*  
*oil Eng. Co.*

Lloyd's Register Foundation

002485-002489-00673/3

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 the same Builder Derwentdale N4052, Empire Diamond N4052 and Densdale N1078. This vessel is modified to suit defence regulations.

The following forging and casting reports are enclosed

Stern frame; back post; rudder stock; teller; rudder castings; 5 certificates  
also certificates for masts and derricks 5 certificates.

PARTICULARS OF ELECTRIC WELDING (if employed) Welding employed for angle built and corners for  
oil tightness and for non structural items

SPECIAL NOTATIONS :—Either as part of the vessel's class or for record in the Register Book oil engine, machinery aft, cruiser  
stem D.F. E.S.D.

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

1st Bower 47c 39m 3 lbs (with pm); J.D. Sunderland; N3269; 2.10.40.  
2nd „ 49c 19m 0 lbs (K K) J.L. Newcastle; N3534; 31.10.40.  
3rd „

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop 93 ft., R.Q.D. ✓ ft., Bridge 46 ft., Forecastle 51 ft.

(in feet and tenths). When the Poop or Forecastle are joined to the B.D., this should be distinctly stated No

Official No. 168512 Signal Letters Extreme Breadth over Belting no belting Over-all Length 483

No. and Material of Decks one deck steel and second deck steel clear of cargo tanks

Parts of Bottom of Vessel coated with cement or approved composition none

Particulars of composition (if fitted) and of approval none

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.
Double bottom, aft, under engines	69.5	156	Fore peak tank,		150
Double bottom, under Engines and Boilers,			After peak tank,		88
Double bottom, if under Engines only,			Deep tank, aft,		
Double bottom, if under Boilers only,			Deep tank, forward,	24.7	275
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. 894

Date 26.2.40

Dates of Surveys  
held while building

1940 Oct 4 Nov. 6. 15 1941 Jan 24 Feb 3. 10. 27 Mar 4. 13. 17. 18. 27. 31 Apr 7. 8. 11. 29 May 1. 19  
26. 28 June 2. 10. 11. 17. 23. 25 July 1. 3. 4. 8. 10. 21. 23. 25. 28. 31 Aug 4. 6. 8. 14. 18. 19. 28 Sept 1  
10. 18. 19. 29 30 Oct 3. 6. 7. 8. 10. 21. 22. 23. 27. 29. 30. 31 Nov. 3. 4. 5. 7. 10. 11. 12. 13. 14. 17. 19. 20. 21. 22  
27. 28 Dec 1. 2. 6. 8. 11. 12. 15. 17. 18 5. 22. 30. 31 Jan 1. 3. 5. 6. 9. 12. 15. 16. 17 Mar 4. 27 Apr 10. 15  
May 8. 9. 27 June 2. 4. 8. 10. 12. 16. 17. 18. 25

Total No. of Visits 126