

## STEEL STEAMER OR MOTORSHIP.

Received at London Office 20 FEB 1929

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

8<sup>th</sup> Feb. 1929.

Port of

Glasgow

No. 48900

Survey held at

Glasgow

Date First Survey 20. 10. 27

Last Survey 4<sup>th</sup> February 1929.

On the

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

TWIN SCREW MOTORSHIP "HIGHLAND HOPE"

State Type

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

Complete Superstructure with reduced draught

State Type of Erections

Fores &amp; Bridge

TONNAGE under Tonnage Deck

11606.84

CLASS

+100 A1

State if with freeboard as condition of Class

Yes

Built at

Glasgow (Govan)

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

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

L 520'-0"

Launched 24 January 1929 Yard No. 8136

Breadth (greatest moulded)

B 69'-0"

Builders Harland &amp; Wolff Ltd.

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

D 43'-9"

Owners Nelson Steam Nav. Co. Ltd.

Total

1st Longitudinal Number (L x D)

= 21752

Managers H &amp; W. Nelson Ltd.

2nd Numeral L x (B + D)

= 57632

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

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

8'-3"

Residence London

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

11.89

Port of Registry Belfast

Do. Long Bridge to top of keel

9.95

If surveyed while building, afloat, or in dry dock

Draught Moulded

Special Survey.

## 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.
ES, Spacing amidships	27		Bracket Floors, Frame	B.A. 7 1/2 3 1/2 44	
" from 1/2 length to Collision bulkhead	27		" " Reversed Frame	B.A. 7 1/2 3 1/2 37	
" in peaks	24		" " Vertical Struts	B.A. 7 1/2 3 44	
FRAMING.			Centre Girder, depth and thickness amidships	51 65	
Amidships, Angle, [ 2. Mot. Rev 7 x 3 1/2 x 3 1/2 x 50			" " top Angles	double 3 1/2 3 1/2 59	
" Extends up to 1/2 length of Bridge 7 x 4 1/2 x 3 1/2 x 50			" " bottom Angles	5 5 67	
Reversed Frame Amidships, Angle 3 3 36			Side Girders, No. each side and thickness	3 42	
" 3 1/2 3 36			Margin Plate depth (excl. of flange) and thickness	58	
" Extends up to 1/2 length of Bridge 7 x 4 1/2 x 3 1/2 x 50			" " Vertical Angle to Tank side Bracket abaft 1/2 len. from stem	-	
h of Framing Girder	7		" " Vertical Angle to Tank side Bracket forward 1/2 len. from stem	-	
es in Uppermost Continuous 'tween Decks, Angle, [ 7 3 1/2 37			" " Gussets, spacing and scantling abaft 1/2 len. from stem	-	
" Second 'tween Decks, Angle, [ or [			" " Gussets, spacing and scantling forward 1/2 len. from stem	-	
" Third " " " "			Tank Side Brackets, height above base line at toe of Frame and thickness	6-6	
ing in Peaks, Angle, [ 8 1/2 3 1/2 50			INNER BOTTOM PLATING.		
eter and Spacing of Rivets through Frame and Shell Plating amidships	1 1/2 @ 5 1/2 x 4 1/2		Breadth and thickness of Middle Line Strake	59 59	
if Frame Joggled	Yes.		Thickness of remainder in Holds	48 44	
NG ARRANGEMENTS (Sec. 7), state system and particulars	2 Side Keelsons		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?	oil burning	
STRENGTHENING OF BOTTOM FORWARD. State Particulars	4 3 1/2 47		BEAMS.		
BOTTOM.			Uppermost Continuous Deck, amidships	8 x 39 x 3 1/2 x 52	
s, Depth and thickness at mid-line in Holds			" " in Way of Bridge, Angle, [ 8 x 39 x 3 1/2 x 52		
Height of Brackets at side above base line at toe of frame			" " Spacing	every frame	
le Line Keelson, on Floors, Angles, [ or [			Second Deck, amidships, Angle, [ 8 x 39 x 3 1/2 x 52		
" " Through Plate or Intercoastal Plate			" " Spacing	every frame	
" " Foundation Plate on Floors			Third Deck, amidships, Angle, [ 8 x 39 x 3 1/2 x 52		
" " Flat Plate Keel Angles			" " Spacing	do	
Keelsons, No. each side			Fourth Deck, amidships, Angle, [ 8 x 39 x 3 1/2 x 52		
" thickness of Intercoastal Plate			" " Spacing	every frame	
" Angles			Poop Deck, Angle, [ or [	-	
DOUBLE BOTTOM.			" " Spacing	-	
Solid Floors, thickness and spacing	42		Bridge Deck, Angle, [ 8 x 39 x 3 1/2 x 52		
" " Are Frame and Reversed Frame joggled?	frames only		" " Spacing	every frame	
Bracket Floors, breadth and thickness at middle line	36 1/4 42		Forecastle Deck, Angle, [ 8 x 39 x 3 1/2 x 52		
" " breadth and thickness at margin plate	54 42		" " Spacing	every frame	



# 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.</b> No. of Rows.....	3			Stringer Plate, breadth and thickness in way of Bridge .....	70	44	66 x 42
„ in 'tween Decks, Size and Spacing.....	Size and Spacing			Thickness of Plating abreast Deck openings in way of Wells .....	44		
„ „ „ „ „	as per approved plans			Thickness of Plating abreast Deck openings in way of Bridge .....	40		
„ in Holds „ „				Thickness of Plating within line of openings.....	34	36	
„ „ „ „ „				If Sheathed, material and thickness .....			
<b>Centre Line Bulkhead.</b>				<b>Third Deck.</b>			
Stiffeners and Spacing.....	-			Stringer Plate, breadth and thickness.....	70	34	66 x 34
Plating, thickness of .....	-			If Plated, state thickness.....	70	42	
<b>STRINGERS AND DECKS.</b>				<b>Fourth Deck.</b>			
<b>Uppermost Continuous Deck.</b>				Stringer Plate, breadth and thickness.....	70	34	66 x 34
Stringer Plate, breadth and thickness in Wells.....	74	88		If Plated, state thickness .....	30		
„ „ „ „ in way of Bridge.....	74	48	66 x 48	<b>Poop Deck.</b>			
„ Angle in Wells .....	6 x 6	88		Stringer Plate, breadth and thickness .....	-		
Thickness of Plating abreast Deck openings in way of Wells .....	60			Plating, Sheathing, material and thickness .....	-		
Thickness of Plating abreast Deck openings in way of Bridge .....	44			<b>Bridge Deck.</b>			
Thickness of Plating within line of openings.....	36			Stringer Plate, breadth and thickness.....	74	56	
If Sheathed, material and thickness .....	1/4 ash plank where exposed			Plating, Sheathing, material and thickness .....	48	78	2 1/2 P.P.
<b>Second Deck.</b>				<b>Forecastle Deck.</b>			
Stringer Plate, breadth and thickness in Wells.....	70	48	66 x 48	Stringer Plate, breadth and thickness.....		40	
				Plating, Sheathing, material and thickness .....	38		2 1/2 P.P.

## 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.	No. OF ROWS OF RIVETS.	RIVETS.		STRAPPED OR LAPPED.	
	Breadth.	Thickness.	Thickness.	Thickness.					SINGLE OR DOUBLE.	Diam.		Spacing cr. to cr.
	Inches.	Inches.	Inches.	Inches.			Inches.	Inches.	Inches.	Inches.		
FLAT PLATE KEEL	62	1.02	.94	.94		Double	1 1/4	4 1/2	5	1 1/4	5 1/2	Lapped
" DBLG. (if any)												
BOTTOM PLATING, No. of Strakes	4	.70	.70 x .56	.70		"	7/8	3 3/8	4	7/8	3 1/2	"
BILGE PLATING, No. of Strakes	3	.70	.56	.81		"	"	"	"	"	"	"
SIDE PLATING, No. of Strakes	4	.70	.52	.56 x .52		"	"	"	"	"	"	"
UPPER DECK, Sheer-strake in Wells	80	1.00	.52	.52	54 x .88	"	1"	4"	5	1 1/8	5	"
UPPER DECK, Sheer-strake in Bridge		.70	Sheerstrake doubled at bridge ends 44.			"	7/8	3 3/8	4	7/8	3 1/2	"
STRAKE BELOW SHEER-strake in Wells		.80	.52	.52		"	1	4	4	"	"	"
STRAKE BELOW SHEER-strake in Bridge		.70				"	7/8	3 3/8	4	"	"	"
POOP SIDE PLATING												
BRIDGE SIDE PLATING		.82 .64				"	1	3 7/8	4	1	4	"
FOREC'TLE SIDE PLATING			.46			"	3/4	1 1/2	3	3/4	2 5/8	"

WATERTIGHT BULKHEADS.

Total No. of W.T. BULKHEADS in Vessel— 9  
 Extending to Upper Deck (Sec. 3 c) one  
 " Deck next below 8  
 As per Rule 8

## FORGINGS and CASTINGS.

	Casting or Forging.	Scantlings.	Maker's Name.	Any departure from approved plans to be noted.
KEEL, Bar .....		Flat plate keel		✓
STEM .....	Cast steel forging.	Chase & Almy		
	Steel bar	11-8 1/2 x 2 1/4	Colville	✓
STERN FRAME {	Propeller Post .....		Sublon	✓
	Rudder .....	Cast steel	1-6 1/2 x 1-6	✓
RUDDER—A x D		Rudder area 220 sq. ft.	Rudder area above & below 191 sq. ft.	
		Coef $\frac{520.0 \times 24.5}{220} = 57.9$		✓
Speed of Vessel .....		15.9 knots		
RUDDER mainpiece at head ...	Forging	16 1/4 diam	Beardmore	
" " heel ...		12"		
" " how constructed .....		Billet		
" " double or single plate		Single	1.10 and .90	
" " coupling, vertical or horizontal .....		Horizontal		

		Plating Thickness.	STIFFENERS.			
			VERTICAL.		HORIZONTAL.	
			Scantlings.	Spacing.	Scantlings.	Spacing.
MIDSHIP BULKHEAD.	Upper tween decks	26	B.A. 29 4.2 1/2 38 30		✓	✓
"	Second "	30	5.2 1/2 46 "		✓	✓
"	Third "	36	6.3 46 "		✓	✓
"	Holds .....	43-36	7.3 44 "		✓	✓
COLLISION	(in Hold) <i>upper</i>	57.41	8.3 40 24		<i>chain locker flat x plate beam</i>	
AFTER PEAK	"	60-30	7.3 42 23-26		✓	✓

STEEL. Manufacturer's Name or Trade Mark of the Steel used in the construction of the Vessel (state process of manufacture). *Open hearth.*  
*Cathcart & Sons Ltd., Beardmore & Co. Ltd., The Steel Co of Scotland Ltd., Consett Iron Co.,*  
*Stewarts & Luggs, Skinningrove Iron Works, Dorman Long & Co., Lancashire Steel Co., Carnegie & Co.,*  
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.				
61712	1st Bower ...	103	0	21	Stockless	68	7	2	0	99	13	Britannia P. Syles Smold.	LPHT Nov 28 <sup>th</sup> 1928.	Drysdale	
61719	2nd "	102	2	10	do	68	7	2	0	99	13	do	LPHT Nov 30 <sup>th</sup> 1928	Drysdale	
61713	3rd "	101	3	7	do	68	0	0	0	99	13	do	LPHT Nov 28 <sup>th</sup> 1928	Drysdale	
	Collective weight.	307	2	10	RON					298					
	Stream .....	31	0	0	7	3	14	29	3/8	-	-	Common	LPHBC Nov. 19 <sup>th</sup> 1928	Jones	
CHAIN CABLES.										HAWSERS AND WARPS.					
Number of Certificate.	Length and size supplied.		Test per Certificate. Statutory.	Break-ing.	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.			Supplied.	Per Rule.						Length.	Diam.		
32566	330	2 13/16	133.4	186 3/4	1374-1-7	1317	330	2 13/16	Steel R. Syles Smold.	LPHBC 30 <sup>th</sup> Nov 1928	Steel wire TOWLINE	2 @ 130	5	7 3/4	2 @ 130 - 5
											HAWSERS & WARPS	2 @ 120	2 3/4	15 1/2	2 @ 120 - 2 3/4
												2 @ 120	2 3/4	15 1/2	2 @ 120 - 2 3/4
Stream Chain or Steel Wire	120	6		100			120	6	Steel Thomson wire Black & Blk Ltd.						
Steering Gear, Steam Hydraulic Harland & Wolff Ltd., Steering Gear, Hand Electric Windlass J. H. Wilson & Co. Ltd., Boats Steering Chains, Size and Test none Ceiling in Holds, thickness and material Insulated Cargo Battens, thickness, material and spacing Thickness of Hatches 3" Cargo Hatchways. (Upper Deck) Steel plates & angles. Size of No. 1 Hatchway (Forward) 22-6 x 16-0 No. 2 24-9 x 16-0 No. 3 24-9 x 16-0 No. 4 20-3 x 16-0 No. 5 20-3 x 16-0 No. 6 20-3 x 16-0 Number of Shifting Beams and/or Fore and Afters 1 - 2 - 3 - 4 - 5 - 6. {Boats + tonnage strength he completed in form 1929} Builder's Signature For HARLAND AND WOLFF, LIMITED. Gavan Secretary.															
GENERAL DECLARATION. It should be stated (a) whether the vessel 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. The materials and workmanship are good. The vessel, as far as completed, has been built in accordance with the approved plans the Secretary's letters of various dates & in conformity with the Rules for the class contemplated. The vessel is constructed to carry oil fuel in deep tanks and double bottom in way of same, forward of motor room, flash point above 150°F. The tanks, decks, bulkheads and tunnels have been tested in accordance with the Rules, & the requirements of Sect. 20 of the Rules have been complied with where applicable. The vessel has left the port for Belfast where the machinery will be installed and vessel completed. The Belfast Surveyors have been informed.															
(P.T.O.)															
Freeboard (Bel affe) £15. 0. 0 The amount of Entry Fee £12. Special Survey Fee.... £501. 12. 6 Travelling Expenses, if any £ Fees applied for, 25. 1. 30 Received by me, 72. 30 I am of opinion the Vessel should be Classed + 100A1 with freeboard corresponding to moulded draught of 28 feet. For A. Munro & Self. Signature Surveyor to Lloyd's Register of Shipping.															
State whether the Vessel has been built under Special Survey Yes Date of issue 18/2/30 Committee's Minute GLASGOW 19 FEB 1929 Character assigned Deferred. FRI. 31 JAN 1930 + 100A1 With freeboard (on Bel. 10' 3 1/2") Lloyds Assoc + Limb. 1. 30 Write Bel Lloyds Re 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.)

To complete survey on the hull, the following remains to be done:—  
Casings & deck plating in way, left loose for shepping machinery to complete & rivet etc.

Steering gear & windlass trials

W. T. doors to be tested working from decks.

After shell door p. & s. to be hoisted

Boats to ship.

Freeboard computation to be dealt with.

Sister vessels, "Highland Monarch" etc. built at Harland & Wolff's Belfast yard.

List of approved plans forwarded herewith:— also Midship Section as built.

Midship Section

1/16 scale profile

Decks

Framing profile.

Motor casing.

Boat deck plans

Midship section on Prom. B.R.

Finders & pillars fore.

Houses on bridge deck

Aft end framing & stern canals

Finders & pillars aft.

Frame brackets in Port & starboard.

Proposed brackets on aft frames & Mot. Room. B.R. Non-return valve scupper for insulated holds. Sections of tank & bilge sections.

Longitudinal Elevation

Promenade deck plan

Stern frame & boss brackets.

Sketch in way of D.B. showing W.T. longitudinal. Bulk. Stiffening on frame 57 ft.

Also six forging reports.

Stiffening under emergency dynamo. Plan of under-deck.

Bridge front stiffening

Motor casing

Top side plating

Framing in Mot. hold & eng. rooms. Angt. of stiff. under ref. mach.

Top side plating at aft end of bridge. T.T. plating in way of main & aux. diesel engines.

18" square ports in stern tank. Door to oil filling stations.

Pumping arrangements

Air & overflow pipes to oil fuel tanks. Amended ang. of pillaring in Mot. hold.

Arrangement of oil fuel filling pipes. Plan of electric welded top masts.

Oil depth recording gauges. Plan of tank & bilge sections.

Finders under middle line pillars in way of duct keel. Oil fuel discharge (Sheet No. 2)

Amended plan of brackets at sides of Mot. Crank pit. do. (Sheet No. 2)

Oil fuel bunkers.

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Oil fuel bunkers.

Particulars of Drop Test of Cast Steel Anchors, viz. :— Weight, Surveyor's Initials, Number of Certificate, Date of Test.	1st Bower	62-0-18	— C.H.S. — 1863 — 9 <sup>th</sup> February 1928
	2nd "	62-0-23	— C.H.S. — 1869 — do.
	3rd "	62-2-13	— C.H.S. — 1868 — do.

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop ☒ ft., R.Q.D. ☒ ft., Bridge 97 ft., Forecastle 101 ft.  
(in feet and tenths). When the Poop is joined to the B.D., this should be distinctly stated ☒

No. and Material of Decks (this information is to be given as it should appear in the Register Book) 4 dks. (sd.) 5<sup>th</sup> dk. (sd.) in Nos. 2, 3, 4 and 6 holds.

Official No. ☒ ; Signal Letters ☒ Is bottom of Vessel coated with cement ☒ part if not give particulars of composition ☒ (in D.B. water ballast tanks & peak tanks.)

Duct Keel forward of Machinery space.

PARTICULARS OF WATER BALLAST.—

Where Fitted.	*Length. Feet.	Water Capacity. Tons.	Where Fitted.	*Length. Feet.	Water Capacity. Tons.
Double bottom, aft,			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,		
			(If necessary, furnish further information by sketch.)		
			The wells are not to be included in the lengths of the tanks.		

Order for Special Survey No. 5899  
Date 17. 8. 27  
Dates of Surveys held while building  
1927 Oct 20. 24. 26 Nov. 2. 9. 14. 21. 23. 24. 29 Dec. 1. 6. 8. 15. (1928) Jan. 8. 16. 25. 26 Feb. 6. 9. 14. 16. 22. 27  
29 Mar. 2. 6. 9. 14. 15. 22. 28. 30 Apr. 2. 5. 11. 17. 20. 25. 26. 27. 30 May. 3. 10. 11. 17. 16. 21. 28. 31 June 5. 8. 11  
14. 15. 16. 20. 27. 28 July 3. 6. 9. 26. 31 Aug. 3. 9. 15. 21. 24. 31 Sep. 6. 12. 19. 20. 26. 28 Oct. 3. 4. 8. 10. 15. 16. 25  
30. 31 Nov. 1. 12. 15. 16. 27. 28. 30 Dec. 4. 11. 13. 14. 19. 19. 21. 27. 28 (1929) Jan. 7. 8. 14. 15. 17. 18  
21. 22. 29. 25. 30. 31 Feb. 1. 4