

STEEL ~~STEAMER~~ MOTORSHIP.

Received at London Office 6 MAY 1931

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

27th April 1931

Port of

Glasgow

No.

51471

Survey held at

Glasgow

Date First Survey

18th March 1930

Last Survey

23rd April 1931

1931

On the (State if Machinery fitted Aft and

(If Single, Twin or Triple Screw)

Twin Screw Motorship "OPAWA"

State Type

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

Full Scantling

State Type of Erections

Poop Bridge & Fide

TONNAGE under Tonnage Deck

9313.48

CLASS

+100A1

State if with freeboard as condition of Class

no

Built at

Linthouse, Glasgow

Launched

20th January 1931

Yard No. 532

Builders

Alexander Stephens & Sons Ltd.

Owners

New Zealand Shipping Co.

Managers

-

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

Residence

London

Port of Registry

Plymouth

If surveyed while building, afloat, or in dry dock

yes

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 470.4

Breadth (greatest moulded)

B 67.0

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

D 40.0

1st Longitudinal Number (L x D)

= 18816

2nd Numeral L x (B + D)

= 50333

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

17.29

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

11.76

Do. Long Bridge to top of keel

9.72

Draught Moulded

31' 7 1/2"

REGISTERED DIMENSIONS.

FEET.

Length

471.0














Breadth

67.3

Depth

36.8

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	33		Bracket Floors, Frame		
" " from 1/2 length to Collision bulkhead	27		" " Reversed Frame		
" " in peaks	24		" " Vertical Struts		
SIDE FRAMING.			Centre Girder, depth and thickness amidships	48	63
Frame Amidships, Angle []	9 x 3 1/2 x 3 1/2 x 38		" " top Angles	double 3 1/2	3 1/2 x 57
" " Extends up to	upper deck		" " bottom Angles	double 5	5 x 67
Reversed Frame Amidships, Angle	4 4 x 40		Side Girders, No. each side and thickness	two	45
" " Extends up to	lower deck		Margin Plate depth (excl. of flange) and thickness	47	x 57
Depth of Framing Girder	9		" " Vertical Angle to Tank side Bracket abaft 1/2 len. from stem	6	6 x 51
Frames in Uppermost Continuous 'tween Decks, Angle []	as above		" " Vertical Angle to Tank side Bracket forward 1/2 len. from stem	6	6 x 51
Second 'tween Decks, Angle []	do.		" " Gussets, spacing and scantling abaft 1/2 len. from stem	tank top plate raised out 1-11 to form 7/8" thick level out	
" " Third			" " Gussets, spacing and scantling forward 1/2 len. from stem	level out	
Framing in Peaks, Angle []	10 3 1/2 x 48	also intermediate frames 8 x 3 1/2 x 48	Tank Side Brackets, height above base line at toe of Frame and thickness		51
Diameter and Spacing of Rivets through Frame and Shell Plating amidships	1-7/8, 6 x 5/4		INNER BOTTOM PLATING.		
State if Frame Joggled	yes		Breadth and thickness of Middle Line Strake	56 1/2	x 57
PANTING ARRANGEMENTS (Sec. 7), state system and particulars	sharp frames & stringers as above plan		Thickness of remainder in Holds	49	
STRENGTHENING OF BOTTOM FORWARD. State Particulars	6 x 6 x 49 for addit. intermediate bottom plating in deep tanks as per affd. plan	also intermediate frames 8 x 3 1/2 x 48 in deep tanks	Are Rule requirements complied with regarding increases of scantlings in way of double bottom in E. & D. space and framing in Bunkers and Boiler Room?	yes	
SINGLE BOTTOM.			BEAMS.		
Floors, Depth and thickness at mid-line in Holds			Uppermost Continuous Deck, amidships in Wells, Angle []	8 x 3 1/2 x 3 1/2 x 34	
Height of Brackets at side above base line at toe of frame			" " in way of Bridge, Angle []	do.	
Middle Line Keelson, on Floors, Angles, [or []			Spacing	every frame	
" " Through Plate or Intercoastal Plate			Second Deck, amidships, Angle []	8 x 3 1/2 x 3 1/2 x 44	
" " Foundation Plate on Floors			Spacing	every frame	
" " Flat Plate Keel Angles			Third Deck, amidships, Angle []	8 x 3 1/2 x 3 1/2 x 44	
Side Keelsons, No. each side			Spacing	every frame	
" " thickness of Intercoastal Plate			Fourth Deck, amidships, Angle [or []		
" " Angles			Spacing		
DOUBLE BOTTOM.			Poop Deck, Angle []	7	3 x 44
Solid Floors, thickness and spacing	45 every frame		Spacing	every frame	
" " Are Frame and Reversed Frame joggled?	yes		Bridge Deck, Angle []	8 x 3 1/2 x 3 1/2 x 32	
Bracket Floors, breadth and thickness at middle line			Spacing	every frame	
" " breadth and thickness at margin plate			Forecastle Deck, Angle []	8 x 3 1/2 x 3 1/2 x 34	
			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.
PILLARS, No. of Rows.....	3			Stringer Plate, breadth and thickness in way of Bridge	57 x .39	51 x .34	
" in 'tween Decks, Size and Spacing.....	widely spaced pillars			Thickness of Plating abreast Deck openings in way of Wells .....	.47	.42	
" " " " "	+ girders			Thickness of Plating abreast Deck openings in way of Bridge .....	.35	.30	
" in Holds " "	as per			Thickness of Plating within line of openings..	.35 x .41	.30 x .36	
" " " " "	appd plan			If Sheathed, material and thickness	-	-	
Centre Line Bulkhead.				Third Deck.			
Stiffeners and Spacing.....	-			Stringer Plate, breadth and thickness.....	57 x .39	51 x .34	
Plating, thickness of	-			If Plated, state thickness.....	.35	.30	
STRINGERS AND DECKS.				Fourth Deck.			
Uppermost Continuous Deck.				Stringer Plate, breadth and thickness.....	57 x .39	51 x .34	
Stringer Plate, breadth and thickness in Wells	75 x 1.03	68 x .98		If Plated, state thickness .....	.35	.30	
" " " " in way of Bridge	75 x .47	.42		Poop Deck.			
" Angle in Wells	7 7 .92			Stringer Plate, breadth and thickness	39 x .43	39 x .38	
Thickness of Plating abreast Deck openings) in way of Wells .....	.80	.75		Plating, Sheathing, material and thickness .....	.35	.30	
Thickness of Plating abreast Deck openings) in way of Bridge .....	.47	.42		Bridge Deck.			
Thickness of Plating within line of openings...	51 x .41	46 x .36		Stringer Plate, breadth and thickness.....	75 x .69	68 x .64	
If Sheathed, material and thickness	-			Plating, Sheathing, material and thickness	5 x 2 1/2 p.p. abreast of midship sections only .53	.48	
Second Deck.				Forecastle Deck.			
Stringer Plate, breadth and thickness in Wells...	57 x .51	51 x .46		Stringer Plate, breadth and thickness.....	57 x .43	36 x .38	
				Plating, Sheathing, material and thickness .....	.41	.36	

SHELL PLATING.

SCANTLINGS.					RIVETING.								
STRAKES.	AS IN VESSEL.				ANY DEPARTURE FROM APPROVED PLANS TO BE NOTED.	EDGES.			BUTTS.				
	AMIDSHIPS.		FORWARD.	AFT.		State if jogged?	SINGLE OR DOUBLE.	RIVETS.		No. OF ROWS OF RIVETS.	RIVETS.		STRAPPED OR LAPPED.
	Breadth. Inches.	Thickness. Inches.	Thickness. Inches.	Thickness. Inches.				Diam. Inches.	Spacing cr. to cr. Inches.		Diam. Inches.	Spacing cr. to cr. Inches.	
FLAT PLATE KEEL	61	.94	.84	.84	58 x .94	Double	1 1/8	3 3/8	Quad.	1 1/8	4 1/2	Lapped	
„ DELG. (if any)													
BOTTOM PLATING, No. of Strakes	74	.75	.85	.56		„	1 1/8	3 3/8	„	1	4	„	
BILGE PLATING, No. of Strakes	60	.75	.60	.65		„	„	„	„	„	„	„	
SIDE PLATING, No. of Strakes	60	.72	.50	.50		„	7/8	3 3/10	„	7/8	3 1/2	„	
UPPER DECK, Sheer-strake in Wells	52	.90	.50	.50		„	1	3 3/8	treble	1	4	double Straps	
UPPER DECK, Sheer-strake in Bridge ...	52	.72				„	7/8	3 3/10	Quad.	7/8	3 1/2	Lapped	
STRAKE BELOW Sheer-strake in Wells .....		.84	.50	.50		„	1	3 3/8	„	1	4	„
STRAKE BELOW Sheer-strake in Bridge ...		.72				„	7/8	3 3/10	„	7/8	3 1/2	„
POOP SIDE PLATING .....				.42		Single	3/4	3	Single.	3/4	2 7/8	„
BRIDGE SIDE PLATING ...		.70	(74 in way of sidelights)			✓			Quad.	7/8	3 1/2	„
FORE'C'TLE SIDE PLATING			.44			Single	3/4	3	Single.	3/4	2 7/8	„	

WATERTIGHT BULKHEADS.

Total No. of W.T. BULKHEADS in Vessel—	9	<i>20</i>	<i>30d report</i>
Extending to Upper Deck (Sec. 3 c)	7		<i>A.P.B. ✓ 2nd Dr?</i>
Deck next below	2		<i>(re filler & boiler plate)</i>
As per Rule	8		

FORGINGS and CASTINGS.

	Casting or Forging.	Scantlings.	Maker's Name.	Any departure from approved plans to be noted.
KEEL, Bar				<i>Flat plate</i>
STEM				<i>Roll'd steel bars 10 7/8 x 2 7/8</i>
STERN FRAME {				
Propeller Post				<i>Steel on app'd Skoda</i>
Rudder				<i>Casting plan Works</i>
RUDDER—A × D				
Speed of Vessel <i>16 Knots</i>				<i>"Simplex" rudder by</i>
RUDDER mainpiece at head				<i>Deutsche Werft A.G.</i>
" " heel				<i>to</i>
" "				<i>app'd. plan</i>
" how constructed				<i>Certificate herewith</i>
" double or single plate				
" coupling, vertical or				
" horizontal				<i>Horizontal</i>

		Plating Thickness.	STIFFENERS.			
			VERTICAL.		HORIZONTAL.	
			Scantlings.	Spacing.	Scantlings.	Spacing.
(No. 122)						
MIDSHIP BULKH'D,	Upper tween decks	.26	B. A. 5x3x35	26	✓	—
"	Second "	.31	B. A. 6x3 1/2x57	26	✓	—
"	Third "	✓				
"	Holds .....	.44 .33	chans 10x12x55 1/2x57 1/2 3 1/2x3 1/2x54 1/2 on alt. stiff.	26	(Caption)	—
COLLISION	(in Hold) .....	.54-.40	11x 3 1/2x 43	24	Semi-long beams	
AFTER PEAK	" .....	.54-.34	B. A. 10x3 1/2x 46	24	W. T. flats	

STEEL. Manufacturer's Name or Trade Mark of the Steel used in the construction of the Vessel (state process of manufacture) *Steel Co. of Scotland, D. Colville & Sons.* *Open hearth process*

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

EQUIPMENT No. 53523										LETTER <i>f7</i>		ANCHORS.		
Number of Certificate.	Anchor.	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.
64216	1st Bower	90	1	21	Stockless	63	5	0	0	90	90	Stockless	S. Taylor & Sons	Tipton Oct. 17 th 1930
64204	2nd "	89	3	0	"	63	5	0	0	90	90	"	"	Tipton Oct. 14 th 1930
64200	3rd "	77	3	0	"	57	8	3	0	77 1/2	77 1/2	"	"	Tipton Oct. 13 th 1930
	Collective weight.	257	3	21						257 1/2				Drysdale
64210	Stream	27	0	14	IRON	26	9	1	14	26 1/2	26 1/2	Rodgers Ordinary	"	Tipton Oct. 16 th 1930
														Drysdale

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.	Cir.
	Fathoms.	Ins.	Tons.	Break. ing.	Supplied.	Per Rule.	Fathoms.	Ins.					Fathoms.	Ins.	Tons.	Fathoms.	Ins.		
14205	300	2 5/8	120 1/2	169 1/4	1046-2-2	1040	300	2 7/8	Stud Links	S. Taylor & Sons	Chertsey 6 th Nov. 1930	SW	130	6	99.1	130	6		
												POWLINE	4@	120	3 1/2	25.7	100	2 3/4	
												HAWSERS & WARPS	"	"	3	18.6	"	2 3/4	
Stream	120	5 1/2		84 1/4			120	5 1/2	SW										

Steering Gear, Steam	Electric Hydraulic	Brown Bros	Steering Gear, Hand	
Boats	4		Steering Chains, Size and Test	none
Ceiling in Holds, thickness and material	Insulated		Cargo Battens, thickness, material and spacing	Windlass Electric, Clarke Chapman
Cargo Hatchways, (Upper Deck)	Steel plates & angles		Thickness of Hatches	3" P.P.
Size of No. 1 Hatchway (Forward)	28'6" x 20'	No. 2 40'9" x 20'	No. 3 36' x 20'	No. 4 36' x 20'
		No. 5 36' x 20'	No. 6 27'9" x 20'	
Number of Shifting Beams and	Fore and Afters	Not four	Not six	Not 3, 4, 5, fine, No 6, four
FOR ALEXANDER STEPHEN & SONS, LIMITED				
Builder's Signature			<i>Alex Macfellan</i>	

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 has been built in accordance with the approved plans, the Secretary's letters of various dates and in conformity with the Rules for the class contemplated. The vessel is constructed to carry oil fuel in double bottom tanks (except No. 3 aft), tunnel tanks, deep tanks fwd., and in deep oil fuel bunkers at fore end of machinery space, FP above 150°F. The tanks, decks, bulkheads, tunnels & w. T. door have been tested in accordance with the Rules and the requirements of Sect. 20 of the Rules have been complied with where applicable. The freeboard has been verified & the freeboard markings cut in on vessel's sides.

(P.T.O.)

The amount of Entry Fee	£ 12 : 0 : 0	Fees applied for.	5 MAY 1931
Special Survey Fee	£ 451 : 6 : 9	Received by me,	<i>W.M.</i>
Freeboard	£ 15 : 0 : 0	22/5/31	
I am of opinion the Vessel should be Classed <i>+ 100 A1</i>			
State whether the Vessel has been built under Special Survey		yes	
Certificate to be sent to		GLASGOW	
Date of issue		27/5/31	
Signature		<i>A.W. Paterson</i>	
Surveyor to Lloyd's Register of Shipping.			

Committee's Minute GLASGOW 5 MAY 1931

Character assigned *+ 100 A1*

4.31.

Lloyd's A+C

+ L.M.C. 4.31.

W1153-0205 3/2

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.)

Sister vessel of "ORARI" GLS. Rpt. No. 51250.

List of approved plans forwarded herewith:—

(Midship Section as built forwarded in advance.)

Midship Section, Profile & decks, Promenade deck plating, Boat deck plating, after body bulkheads, bulkheads 122 x 150, modification to bulkhead stiffeners, bulkhead 67 to 74, fore peak bulkheads, aft peak bulkhead, pillars & girders, pillars & girders details, detail of pillar head in way of strong beam at frame 128, base for square pillars, hatches 1-2 x 3, hatches 4 x 5, hatch No 6, sliding hatch beams, cranked hatch end beams, engine seating, boss framing, Stern cantle & framing, stern frame moulder & propeller brackets, two "Simpler" rudder plans, midship oil fuel bunkers, tunnel & deep tanks aft, fore deep oil tanks, painting arrangements, strengthening in way of double bottom fore, shell doors, promenade deckhouses, support of Starbd. corner of engine casing at frame 86, deckhouses on bridge deck, modification to fore end of bridge deckhouse, engine & boiler casings, upper deck casings, Section through duct keel, W.T. packing in way of fan shaft in Nos. 1 & 2 fan rooms, pumping arrangements, Suctions plan, gravity davits, riveting list, steering gear tiller crosshead.

Five forging certificates and one certificate for "Simpler" rudder.

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

1st Bower

2nd "

3rd "

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop 66 ft., R.Q.D. — ft., Bridge 234 ft., Forecastle 81 ft. (in feet and tenths). When the Poop is joined to the B.D., this should be distinctly stated.

Rudder electrically welded.

No. and Material of Decks (this information is to be given as it should appear in the Register Book). 2 dks (stl.) 3rd dk (stl.) in fore holds

Official No. 162907 Signal Letters

Is bottom of Vessel coated with cement? pt cem. if not give particulars of composition. (clean of oil fuel)

Duct keel fore of Machinery space.

PARTICULARS OF WATER BALLAST.—

Where Fitted.	*Length. Feet.	SW Water Capacity. Tons.	Where Fitted.	*Length. Feet.	SW Water Capacity. Tons.
Double bottom, aft, in machinery space	121	268	Fore peak tank,		88
Double bottom, under Engines and Boilers,	88	541	After peak tank,		94
Double bottom, if under Engines only,	-	-	Deep tank, aft, Tanks in way of tunnels	113	1605
Double bottom, if under Boilers only,	-	-	Deep tank, forward,	41	294
Double bottom, forward,	134	583	Other tanks, if fitted,		
Total length of D.B. 343 ft.		1392	(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 6082

Date 13.2.30

Dates of Surveys held while building

1930 Mar 18.24.26.28 Apr 1.3.8.15.24.30 May 1.9.15.22.26 June 5.10.18.25 July 2.31 Aug 8.13.14.18.27.28 Sep 1.5.15.17.18.22.30 Oct 2.6.9.13.14.16.17.28.29.30.31 Nov 1.3.6.7.10.12.17.19.21.24.26.27.28 Dec 1.2.3.4.5.8.10.11.12.16.19.22.23.24.29 (1931) Jan 6.8.9.14.15.16.19.20.21.28 Feb 10.18.25.26 Mar 4.17.18.19 Total No. of Visits 105