

STEEL STEAMER OF MOTORSHIP.

Received at London Office 19 JUN 1929

State if Report has been sent on the Freeboard of the Vessel YESState if Report is sent on the Machinery of the Vessel YES

Date of completion of report FRIDAY 13TH JUNE 1929 Port of GLASGOW
 Survey held at PAISLEY Date First Survey 12. 11. 28 Last Survey 7TH JUNE 1929
 No. 49329

On the T.S.S. "RATA" MACHINERY AMIDSHIPS

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

FULL SCANTLINGWELL DECKState Type of Erections RAISED. QUARTER DECK
BRIDGE + FOGLETONNAGE under Tonnage Deck... 665.05CLASS 100 A.1.

State if with freeboard as condition of Class

NOBuilt at PAISLEY

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 209Launched 12.4.29Yard No. 481

Total

Breadth (greatest moulded) B 34.25'Builders BON McLACHLAN & CO LTDGross Tonnage 973.98Depth, at middle of length from top of keel to top of beam at side of uppermost continuous deck. See Sec. 3 (1c) D 19' 6" U.D.Owners ANCHOR FOUNDRY & SHIPPING CO LTDRegister Tonnage 375.381st Longitudinal Number (L x D) = 2717Managers ✓

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

REGISTERED DIMENSIONS. FEET.

Length 209.7Framing Depth "d," at middle of length. See Sec. 3 (1d) 10.46 U.D.
14.46 R.D.
16.08 AT U.D.
12.30 AT R.D.Residence NELSON N. ZEALAND.Breadth 34.25Proportions—Depth to Length—Uppermost continuous deck to top of keel ✓Port of Registry NELSON N. ZEALAND.Depth 10.85Do. Long Bridge to top of keel ✓

If surveyed while building, afloat, or in dry dock

Draught Moulded 12'-2"WHILE BUILDING & AFLOAT

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		<u>APPROVED</u>	Bracket Floors, Frame		<u>APPROVED.</u>
" " from $\frac{3}{4}$ length to Collision bulkhead	<u>22" THROUGHOUT</u>		" " Reversed Frame		
" " in peaks			" " Vertical Struts		
SIDE FRAMING.			Centre Girder, depth and thickness amidships	<u>30 1/2 x .48</u>	<u>.36</u>
Frame Amidships, <u>8 x 8 x .40</u> (reflex)			top Angle <u>3 x 3 x .36</u>		<u>3 x 3 x .36</u>
" " Extends up to <u>4" DECK</u>			bottom Angle <u>3 x 3 x .36</u>		<u>3 x 3 x .36</u>
Reversed Frame Amidships, Angle	<u>8 x 8 x .40</u>	<u>4 1/2 x 8 x .36</u>	Side Girders, No. each side and thickness	<u>ONE x .36</u>	<u>.36</u>
" " Extends up to <u>MAIN DECK</u>			Margin Plate depth (excl. of flange) and thickness	<u>25 1/2 x .36</u>	
Depth of Framing Girder	<u>5"</u>		" " Vertical Angle to Tank side	<u>8 x 8 x .36</u>	
Frames in Uppermost Continuous 'tween Decks, Angle, [or]			Bracket abaft $\frac{1}{4}$ len. from stem		
" " Second 'tween Decks, Angle, [or]			" " Vertical Angle to Tank side	<u>8 x 8 x .36</u>	
" " Third " " " "			Bracket forward $\frac{1}{4}$ len. from stem		
Framing in Peaks, Angle	<u>4 1/2 x 3 = .36</u>		" " Gussets, spacing and scantling		
Diameter and Spacing of Rivets through Frame and Shell Plating amidships			abaft $\frac{1}{4}$ len. from stem		
State if Frame Joggled	<u>YES.</u>		" " Gussets, spacing and scantling		
PANTING ARRANGEMENTS (Sec. 7), state system and particulars	<u>DEEPER FRAMING</u> <u>2 SIDE STRINGS</u> <u>AS PER APPROVED PLAN</u>		Tank Side Brackets, height above base line at toe of Frame and thickness	<u>42" x .25</u>	
STRENGTHENING OF BOTTOM FORWARD. State Particulars	<u>BOTTOM FRAMES</u> <u>DOUBLE BOTTOM</u> <u>AS PER APPROVED PLAN</u>		INNER BOTTOM PLATING.		
SINGLE BOTTOM.			Breadth and thickness of Middle Line Strake	<u>34 x .36</u>	
Floors, Depth and thickness at mid-line in Holds <u>BRIDGE SPACE</u>	<u>18 x .36</u>	<u>18 x .48</u>	Thickness of remainder in Holds	<u>.36</u>	
Height of Brackets at side above base line at toe of frame	<u>36"</u>		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?	<u>40 IN WAY OF OIL</u> <u>YES</u>	
Middle Line Keelson, on Floors, Angles,	<u>4 x 3 1/2 x .46</u>	<u>4 x 3 1/2 x .48</u>	BEAMS.		
" " Through Plate <u>DOUBLE</u>	<u>.62</u>	<u>.60</u>	Upper <u>Deck, amidships</u>	<u>4 x 2 x .36</u>	
" " Foundation Plate <u>ON</u>	<u>12 x .62</u>	<u>12 x .60</u>	" <u>Angle, [or]</u>	<u>4 x 2 x .36</u>	
" " Flat Plate Keel Angles	<u>3 1/2 x 3 1/2 x .47</u>	<u>3 1/2 x 3 1/2 x .48</u>	" <u>in way of Bridge, Angle, [or]</u>	<u>4 x 2 x .36</u>	
Side Keelsons, No. each side	<u>TWO</u>		Spacing	<u>36"</u>	
" " thickness of Intercoastal Plate	<u>.46</u>	<u>.42</u>	Second Deck, amidships, Angle, [or]		
" " DBL. Angles ON TOP OF FLOORS	<u>4 1/2 x 3 x .45</u>	<u>4 1/2 x 3 x .44</u>	Spacing		
DOUBLE BOTTOM.			Third Deck, amidships, Angle, [or]		
Solid Floors, thickness and spacing	<u>32 SPACED 22"</u>	<u>.28</u>	Spacing		
" " Are Frame and Reversed Frame joggled?	<u>YES</u>		Fourth Deck, amidships, Angle, [or]		
Bracket Floors, breadth and thickness at middle line			Spacing		
" " breadth and thickness at margin plate			Poop Deck, Angle, [or]		
			Spacing		
			Bridge Deck, Angle, [or]	<u>5 x 3 x .30</u>	
			Spacing	<u>22"</u>	
			Forecastle Deck, Angle, [or]	<u>3 1/2 x 3 x .34</u>	
			Spacing	<u>22"</u>	

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, 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 " "		WIDE SPACED AS PER APPROVED PLAN		Thickness of Plating within line of openings...			
" " " "				If Sheathed, material and thickness			
Centre Line Bulkhead.				Third Deck.			
Stiffeners and Spacing.....		✓		Stringer Plate, breadth and thickness.....			
Plating, thickness of		✓		If Plated, state thickness.....			
STRINGERS AND DECKS.				Fourth Deck.			
Uppermost Continuous Deck.				Stringer Plate, breadth and thickness.....			
{ Stringer Plate, breadth and thickness in Wells		51 x .56		If Plated, state thickness			
{ UPPER DECK				Peep Deck.			
RAISED OR DECK " " in way of Bridge		61 x .32		Stringer Plate, breadth and thickness			
CLEAR " " " "		61 x .56 to 45 x .34		Plating, Sheathing, material and thickness ...			
Angle in Wells " " " "		5 x 5 x .56		Bridge Deck.			
Thickness of Plating abreast Deck openings in way of Wells		3 1/2 x 3 1/2 x .40		Stringer Plate, breadth and thickness.....		60 x .32	
Thickness of Plating abreast Deck openings in way of Bridge		30		Plating, Sheathing, material and thickness ...		26	
Thickness of Plating within line of openings...		30		Forecastle Deck.			
If Sheathed, material and thickness		40 UNDER NINGLES UNSHEATHED		Stringer Plate, breadth and thickness.....		30 x .29	27 x .29.
Second Deck.				Plating, Sheathing, material and thickness ...		26 3" AP	
Stringer Plate, breadth and thickness in Wells...		✓					

SHELL PLATING.

SCANTLINGS.					RIVETING.								
STRAKES.	AS IN VESSEL.				ANY DEPARTURE FROM APPROVED PLANS TO BE NOTED.	EDGES.			BUTTS.				
	AMIDSHIPS.		FORWARD.	AFT.		State if joggled?	RIVETS.		No. of Rows of Rivets.	RIVETS.		STRAPPED OR LAPPED.	
	Breadth.	Thickness.	Thickness.	Thickness.			Single or Double.	Diam.		Spacing cr. to cr.	Diam.		Spacing cr. to cr.
	Inches.	Inches.	Inches.	Inches.									
FLAT PLATE KEEL	40	.51	.46	.42	APPROVED 40 x .47 = .42	DOUBLE	3/4	3 1/2	TREBLE	3/4	25/8	LAPPED	
„ DBLG. (if any)													
BOTTOM PLATING, No. of Strakes	20	.37	.37	.33	.37 - .33	"	3/4	3 1/2	DOUBLE	3/4	25/8	"	
BILGE PLATING, No. of Strakes37	.33	.33		SINGLE	3/4	3 1/2	"	3/4	25/8	"	
SIDE PLATING, No. of Strakes37	.33	.33		"	3/4	3 1/2	"	3/4	25/8	"	
UPPER DECK, Sheer-strake in Wells	45	.64	.33	.33		"	3/4	3 1/2	QUAD TREBLE DOUBLE	7/8	3 1/8	"	
UPPER DECK, Sheer-strake in Bridge ...	41	.37				SINGLE	3/4	3 1/2	TREBLE TO DOUBLE	3/4	25/8	"	
STRAKE BELOW SHEER-strake in Wells	41	.47 - .33				SINGLE	3/4	3 1/2	"	3/4	25/8	"	
STRAKE BELOW SHEER-strake in Bridge37 IN WAY OF BRIDGE				"	3/4	3 1/2	"	3/4	25/8	"	
POOP SIDE PLATING													
BRIDGE SIDE PLATING36				SINGLE	3/4	3 1/2	DOUBLE	3/4	25/8	"	
FOREC'TLE SIDE PLATING		.29				"	3/4	3 1/2	DOUBLE	3/4	25/8	"	

WATERTIGHT BULKHEADS

		Plating Thickness.	STIFFENERS.			
			VERTICAL.		HORIZONTAL.	
			Scantlings.	Spacing.	Scantlings.	Spacing.
MIDSHIP BULKH'D, Upper tween decks		✓				
"	" Second "	✓				
"	" Third "	✓				
"	" Holds	✓	44-26	5 1/2 x 3 x 30 B.A	@ 27"	
COLLISION	" (in Hold)	✓	"	6 x 3 x 38 B.A	@ 24"	
AFTER PEAK	"	✓	42-30-26	6 1/2 x 3 x 38 B.A	@ 24"	

FORGINGS and CASTINGS.

	Casting or Forging.	Scantlings.	Maker's Name.	Any departure from approved plans to be noted.
KEEL, Bar				
STEM	ROLLED MILD STEEL	6" x 1 1/2"		
STERN FRAME	Propeller Post CAST STEEL Rudder " FORGING	6 1/2 x 2	by CARYNGE STEEL & CO. by CALEDONIAN FORGE CO.	
RUDDER—A x D	127			
Speed of Vessel	9 1/4 K.			
RUDDER mainpiece at head	FORGING	6"	by CALEDONIAN FORGE CO.	
" " heel		4 3/4		
" " how constructed	ARMS SHRUNK & KEYED TO STOCK.			
" " double or single plate	SINGLE PLATE			
" " coupling, vertical or horizontal	HORIZONTAL			

MANUFACTURER'S NAME OR TRADE MARK OF THE STEEL USED IN THE CONSTRUCTION OF THE VESSEL (STATE PROCESS OF MANUFACTURE)

STEEL. WM BEARDMORE & CO LTD. CONSETT IRON CO. LANARKSHIRE STEEL CO. OPEN HEARTH PROCESS

DAVID COLVILLE & SONS. STEEL CO OF SCOTLAND.

HAS THE STEEL BEEN TESTED AS REQUIRED BY THE RULES? YES.

EQUIPMENT No. 10714.1												LETTER m	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.				
90472	1st Bower ...	28	2	7	STOCKLESS	28	15	2	14	28 1/4	STOCKLESS	NOT STATED	NETHERTON 18.1.29. GREEN.		
90473	2nd " ...	22	1	14	50	23	8	0	14	23 1/4	50	50	50		
90474	3rd " ...	22	3	21	50	23	2	2	0	20 1/4	50	50	50		
	Collective weight.	70	0	14						66 3/4					
90484	Stream	6	0	2	1 2 19	8	7	2	0	6	IRON. STOCK	WILLETTS & SONS	50 23.1.29 50		

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.		Material.	Where and when tested and Superintendent.
	Fathoms.	Diam.	Tons.	Break-ing.	Supplied.	Per Rule.	Fathoms.	Diam.					Fathoms.	Diam.		Fathoms.	Diam.		
90361	105 1/2	1 7/16	37 1/2	55 5/8	111 1 11	222 1/2	210	1 7/16	STUD LINK	WILLETTS	NETHERTON 29.1.29 GREEN.	LOWLINE	90	3/4	22	90	3/4	MANILLA	NETHERTON 29.1.29 GREEN.
90460	105 1/2	1 7/16	37 1/2	65 5/8	111 1 12	222 1/2	210	1 7/16	STUD LINK	WILLETTS	NETHERTON 29.1.29 GREEN.	LOWLINE	90	3/4	22	90	3/4	MANILLA	NETHERTON 29.1.29 GREEN.
	60	3 1/2		26			60	3 1/2											

Steering Gear, Steam (by) BROWN BROS. Steering Gear, Hand (by) BROWN BROS.
Boats 2 @ 22' x 7'-8" x 2'-9" Steering Chains, Size and Test NONE (TELENOTOR) Windlass CLARKE CHAPMAN
Ceiling in Holds, thickness and material 2 1/2" N.P. 3" RP UNDER HATCHES. Cargo Battens, thickness, material and spacing 2" N.P. VERTICAL SPARRING
Cargo Hatchways. (Upper Deck) STEEL PLATES + ANGLES Thickness of Hatches 3" 2 SPARS IN EACH SPACE FLUSH WITH FRAMES
Size of No. 1 Hatchway (Forward) 22'-6" x 16'-1" No. 2 25'-6" x 16'-1" No. 3 25' x 16' COAL HATCH No. 4 4'-4" x 16'-1" No. 5 No. 6
Number of Shifting Beams and/or Fore and Aft 3 at No. 1
3 at No. 2
4 at No. 3

Builder's Signature

GENERAL DECLARATION. It should be stated (a) whether the vessel is fitted for the carriage and burning of oil used as fuel ☒ (b) whether the vessel, not being an oil tanker, is fitted for carrying oil as cargo ☒ 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.

THIS VESSEL HAS BEEN BUILT IN ACCORDANCE WITH THE APPROVED PLANS, THE SECRETARY'S LETTERS OF VARIOUS DATES AND IN GENERAL CONFORMITY WITH THE RULES FOR THE CLASS CONTEMPLATED. ALL DOUBLE BOTTOM TANKS, DEEP TANKS, + FORE + AFT PEAK TANKS TESTED UNDER WATER PRESSURE, AND WEATHER DECKS + BULKHEADS HOSE TESTED IN ACCORDANCE WITH THE RULES. PUMPS TESTED. TUNNEL FLAT HOSE TESTED. FREEBOARD MARKING CUT IN ON SIDES AND VERIFIED.

LIST OF PLANS OVERLEAF

T.R.M.J.

* Vessel is not actually fitted for the burning of oil fuel but settling tanks + double Bottom have been constructed in accordance with Rule Requirements for the carriage of oil fuel.

The amount of Entry Fee £ 4 : 0 : 0 Fees applied for, 18 JUN 1929
Special Survey Fee £ 97 : 8 : 0 Received by me, 40.6.29
FREEBOARD FEE 3.13.4
Travelling Expenses, if any £ : : I am of opinion the Vessel should be Classed 100 A.I.

State whether the Vessel has been built under Special Survey YES

Signature

T.R. McIlwain

Certificate to be sent to GLASGOW Date of issue 21/6/29

Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 18 JUN 1929

Character assigned 100 A.I.

6.29

Lloyd's Atch

+ L.M.C. 6.29

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 FOLLOWING PLANS ARE FORWARDED HERewith:—

- ✓ MIDSHIP SECTION
- ✓ PROFILE + DECK.
- ✓ STERNPOST + RUDDER.
- ✓ AFT HATCH + QUARTER DECK GIRDERS
- ✓ NO 1 & 2 HATCHES + UPPER DECK PILLARS + GIRDERS
- ✓ BULKHEADS + WEB FRAMES
- ✓ SPECTACLE BRACKETS
- ✓ AFT END NO 3 HATCH
- ✓ PAINTING AFT + STIFFENING FORWARD.
- ✓ BRACKETS AT AFT END OF NO 3 HOLD
- ✓ BRIDGE FRONT END.
- ✓ DETAIL OF BASE FRAMES
- ✓ SCHEME OF RIVETING

THE FOLLOWING FORGING REPORTS ARE ATTACHED HERETO:—

STERN FRAME
PROPELLER BRACKETS
RUDDER FRAME
TALKER

T. R. Smith

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

1st Bower 15.0.24 M.A.B. 1201 2049 JUNE 1927
2nd " 16.0.24 " 1254 " "
3rd " 14.2.60 A.B. 3267 2ND MARCH 1926

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop 15 ft., R.Q. 15 ft., Bridge 47 ft., Forecastle 26 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)

Official No.

Signal Letters

Is bottom of Vessel coated with cement

No

if not give

particulars of composition

EITUNASTIC ENAMEL.

PARTICULARS OF WATER BALLAST.—

Where Fitted.	Length. Feet.	Water Capacity. Tons.	Where Fitted.	Length. Feet.	Water Capacity. Tons.
Double bottom, aft,	27.5	26.5	Fore peak tank,	15	26.5
Double bottom, under Engines and Boilers,	✓	✓	After peak tank,	12.8	23.8
Double bottom, if under Engines only,	18.2	26.5	Deep tank, aft,	17.3	16.1
Double bottom, if under Boilers only,	✓	✓	Deep tank, forward,	17.3	16.1
Double bottom, forward,	100.5	192.0	Other tanks, if fitted,	13.7	6.0
Total capacity of double bottom		249.0	SETTLING TANKS	13.7	6.0

* The wells are not to be included in the lengths of the tanks.

Order for Special Survey No. 5952

Date 21. 11. 28

Dates of Surveys held while building

1928 Nov. 12 Dec 3. 5. 11. 20. 25 (1929) Jan 8. 11. 16. 21. 22. 24. 25. 31 Feb. 13. 15. 19. 25 Mar 4. 12. 18. 21. 26. 27. 29 Apr 2. 4. 8. 9. 10. 12. 15. 24 May 2. 7. 10. 15. 21. 23. 27. 29. 31 June 4. 7

Total No. of Visits 14 14