Rpt. 9.

No. 3493.

Report of Survey for Repairs, &c., of Engines and Boilers.

(Received at London Office 15 JUL 1942)

Date of writing Report 11th May 1942 When handed in at Local Office ..... 19 .... Port of Rio de Janeiro

No. in Reg. Book 19413 Survey held at Rio de Janeiro Date, First Survey April 8th Last Survey May 11th 1942 (No. of Visits 6)

on the Machinery of the ~~Wood, Iron or~~ Steel Twin S.C. M.V. "ARARAQUARA"

Tonnage: Gross 4877, Net 2974

Nominal Horse Power 1008

No. of Main Boilers ✓

No. of Donkey Boilers 1

Steam Pressure— in Main Boilers ✓

in Donkey Boilers 120 lbs

Vessel built at Monfalcone By whom Cant. Naz. Triestino When 1927 10 (Year. Month.)

Engines made at Turin By whom Fiat "Stab. Tecnico Molini" When 1927

Boilers, when made (Main) ✓ (Donkey) 1927

Owners Lloyd Nacional Soc. Anon. Owners' Address ✓ (if not already recorded in Appendix to Register Book.)

Managers ✓ Port Rio de Janeiro Voyage Brazilian Coasting

If Surveyed Afloat ~~or~~ in Dry Dock Jos. Inh. do Viana (State name of Dock.)

Particulars of Classification (which must be inserted precisely as in Register Book & Supplements).

Character ✠ for Special Survey Date of last Survey and of Periodical Surveys.	Years assigned now expired.	Machinery and Boiler Surveys (including date of N.B., if any)
✠ 100A - with freeboard		✠ L.M.C. 5-40
Docking date. 10. 7-41		D.B.S. 7-41
S.S. Rio Nos. 5-40.		O.G. 12-40
South American Coasting:- Bahia Blanca + Trinidad.		

Last Report No. 3435 Port Rio de Janeiro

Particulars of Examination and Repairs (if any) L.M.C.(M) + D.B.S.

(Periodical Surveys, when held, must be reported in detail and seriatim in the terms of the Rules. State clearly the cause of Repairs, if any, and, in detail, the nature and extent of Examinations and subsequent Repairs. Repairs on account of Damage (the cause of which must be stated) should be separated from Repairs due to other causes; and besides being detailed in the body of the report, should be briefly summarised at the end of the report. State also the dates and initials of any letters respecting this case.

In damage cases where the Surveyor has not made a special damage report he is required to state whether he offered his services for this purpose, and why they were declined ✓

Was a damage report made by anyone else? If so, by whom? ✓

Did the Surveyor personally go inside each Main Boiler separately and make a thorough examination at this time? ✓

" " Donkey " " " Yes.

If this was not done, state for what reasons? ✓

And what parts of the Boilers could not be thus thoroughly examined? ✓

Also what special means, in the absence of internal examination, were adopted by the Surveyor to assure himself of the thorough efficiency of those parts of each Boiler? ✓

State latest date of internal examination of ~~each~~ boiler 17th April 1942. Present condition of funnel(s) Good.

Did the Surveyor examine the Safety Valves of the Main Boiler? ✓ To what pressure were they afterwards adjusted under steam? ✓

Did the Surveyor examine the Safety Valves of Donkey Boiler? Yes. To what pressure were they afterwards adjusted under steam? 120 lbs ✓

Did the Surveyor examine all the manholes, doors and their fastenings of the Main Boilers? ✓, and of the Donkey Boiler? Yes.

Did the Surveyor examine the drain plugs of the Main Boilers? ✓, and of the Donkey Boilers? ✓

Did the Surveyor examine all the mountings of the Main Boilers? ✓, and of the Donkey Boilers? Yes.

Has screw shaft now been drawn and examined? No. Is it fitted with continuous liner? ✓ Is an approved appliance fitted at the after end of the shaft to permit of it being efficiently lubricated? Yes.

Has shaft now been changed? ✓ If so, state reasons ✓

Has the shaft now fitted been previously used? ✓ Has it a continuous liner? ✓ Is an approved appliance fitted at the after end of the shaft to permit of it being efficiently lubricated? ✓

State date of examination of Screw Shaft ✓ State the distance between ~~lignum vitae or~~ bearing metal of stern bush and top of after bearing of screw shaft P. 3/32 S. 1/8.

Engine parts, when referred to by numbers, should be counted from forward. Is electric light and/or power fitted? Yes. Bow.

If so, did the Surveyor examine the generators, motors, switchgear, cables and fuses? Yes.

Has the insulation resistance of the generators, circuits and apparatus been tested and found to be not less than 100,000 ohms.? Yes.

If the Survey is not complete, state what arrangements have been made for its completion and what remains to be done Complete.

Vessel placed in dry dock, fastenings of propeller, stern brackets and sea connections examined and found in order. Sea valves and cocks opened up and examined, found satisfactory, and the oil retaining glands overhauled. The donkey boiler examined internally and externally, also all mountings, doors and safety valves, found in good order, and safety valves adjusted under steam.

Required survey of machinery. Port main motor No.s 2+3 (propulsion) liners, jackets, cover, valves + gear, piston rods, examined, No 2 liner renewed due to wear. All crossheads, crank pins and main bearings opened up and examined, the white metal renewed in No.s 1.3+4 crank pin brasses and No.s 1.3+4 crossheads. Main compressor opened out all working parts including crank shaft examined and found in order. Main fuel pumps off and reconditioned. The main exhaust range has now been completely renewed. Thrust shaft bearing, also intermediate shaft bearings examined and found in order.

P.T.O.

General Observations, Opinion, and Recommendation:— This results machinery, so far as now seen,

(State clearly what alteration, if any, is suggested to be made in the existing classification of the vessel's machinery in the Register Book, consequent upon this survey, and also any alteration required to be made in the records of the vessel's machinery, boilers, working pressures, &c.; thus, for example, B.S. 9,11, B.&M.S. 9,11, ✠L.M.C. 9,11, or ✠LMC 140 lb., F.D., &c.) CS 3,34,

is in good order, eligible to be continued as classed, with record of ✠ L.M.C.(M) 5-42, and D.B.S. 5-42.

Survey Fee (per Section 29) £2:00:00

Special Damage or Repair Fee (if any) £ : :

(per Section 29.)

Travelling expenses (if chargeable) £4:50:00

Fees applied for 8th May 1942

Received by me, 19

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI. 24 JUL 1942

Assigned + L.M.C. 5.42

D.B.S. 5.42

CERTIFICATE WRITTEN

Insert Character of Ship and Machinery precisely as in the Register Book

Is a Certificate required? If so, to be sent to

Rpt. 9a.

Port of Rio de Janeiro Continuation of Report No. 3493 dated 11th May 1942 on the

T.M.V. "ARARAQUARA"

Starboard main motor. No.s 1 & 4 (forward) liners, jackets, pistons & rods, covers, valves and gear, all crosshds. No.s 1 & 4 crank pins and all main bearings opened up, examined, found replaced in order. No 4 crank pin brasses renewed, also No.s 1 & 2 crosshead brasses (white metal). Lubricating oil, piston circulating, and jacket water circulating pumps reconditioned, also on the Port engine. Thrust shaft bearing and intermediate shaft bearings examined, found in order. The main exhaust range completely renewed. The air receivers drained, opened up and examined internally and externally with the valves and pressure piping, found same in good order.

Generator No1. stripped down and examined. Both liners & pistons renewed, crank shaft bearings skimmed and brasses remetalled, covers, valves and rods in good order, compressor reconditioned.

Generator No2. stripped down and examined. Cylinder body prechecked, new body fitted, both liners pistons and rings renewed. Crankshaft and crank pin brasses remetalled, compressor overhauled.

Generator No3. stripped down and examined. Both liners, pistons & rings renewed, and crank pin brasses remetalled.

All motors were megger tested and found satisfactory, and the electric circuits tested. On completion of the overhaul the main and auxiliary machinery were examined under working and manoeuvring conditions and found to be satisfactory

A Mayborne

+Lun. (M) due 5.42 Held
O.B.S. due 7.42 Held
Minor repairs effected

It is submitted that
this vessel is eligible for
THE RECORD.

+Lun. 5.42
O.B.S. 5.42

Jmm
21.7.42