Rpt. 9.

No. 4194

REPORT OF SURVEY FOR REPAIRS, &c., OF ENGINES AND BOILERS

(Received at London Office 3. JUN 1946)

Date of writing Report 20th.May 1946 When handed in at Local Office ..... 19.... Port of LISBON

No. in Reg. Book. Survey held at LISBON Date. First Survey 17th.Oct. Last Survey 23rd.May 1946 (No. of Visits 30.)

31454 on the Machinery of the ~~Xxxxxxxxxxxx~~ Steel "ALCANTARA" ex (POLLENZO)

36738 Tonnage { Gross 6470 Net 3997

Nomical Horse Power { -

No. of Main Boilers -

No. of Donkey Boilers -

Steam Pressure— in Main Boilers - in Donkey Boilers -

Vessel built at Middlesbro' By whom Furness S.B.Co.Ld. When 1920 YEAR. 4mo. MONTH.

Engines made at Hartlepool By whom RichardsonsWestgarth & Co.Ld. When 1920

Boilers, when made (Main) - (Donkey) -

Owners Soc.de Nav.Oceanica Ltd. Owners' Address (if not already recorded in Appendix to Register Book).

Managers Port Panama Voyage

If Surveyed Afloat or in Dry Dock Both No.1 DD. (State name of Dock.)

Last Report, No. Port

Particulars of Examination and Repairs (if any) RECLASSIFICATION

(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? yes

" " Donkey " " " -

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 All 2-5-46 Present condition of funnel (s) Good

Did the Surveyor examine the Safety Valves of the Main Boiler? yes To what pressure were they afterwards adjusted under steam? 200lbs

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

Did the Surveyor examine all the manholes, doors and their fastenings of the Main Boilers? yes, and of the Donkey Boilers? -

Did the Surveyor examine the drain plugs of the Main Boilers? none, and of the Donkey Boilers? -

Did the Surveyor examine all the mountings of the Main Boilers? yes, and of the Donkey Boilers? -

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

Has shaft now been changed? no 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 17-1-46 State the distance between lignum vitæ or bearing metal of stern bush and top of after bearing of screw shaft 1-5 m/m

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

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.

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).
+... 4,21 (Leilson. Cont.)		+

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

Now done:-

Vessel placed in drydock. Propeller,tail shaft, stern bush, sea connections and all outside fastenings examined and found in good order.

The Turbine casings and rotors examined, with their thrust and main bearings.The double reduction gear wheels and pinions together with all bearings examined

The main thrust and intermediate shafts examined.

The feed, ballast, air, circulating,general service pumps, fan & dynamo steam engine,pumping arrangements, lubricating oil gravity and drain tanks examined.

All steam pipes over 3" dia. have been tested to 400lbs.per sq.ins. and all feed pipes to 500 lbs.per sq.ins.

General Observations, Opinion, and Recommendation:— (p.t.o.)

(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,

The Machinery of this vessel is eligible in my opinion to be CLASSED with the record of +L.M.C. 5.46 and T.S.(CL) 1,46.

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

rve Fee (per Section 29) & Rprs. Esc:- £1.000$00

cial Damage or Repair Fee (if any) (per Sec. 29) £

Dwelling Expenses (if chargeable) £ 200$00

Fees applied for, 29/5/46

Received by me, 1.6. 1946

ommittee's Minute FRI. 30 AUG 1946

ssigned + LMC 5.46 S 1.46

CERTIFICATE WRITTEN

Engineer Surveyor to Lloyd's Register of Shipping.

009267-009277-0151 1/2

Spare gear examined and in excess of Rule requirements
The three main water tube boilers opened out and examined internally and externally together with their safety valves and other mountings. The boilers were retubed at thie time and were tested hydraulically to 220 lbs. per sq.ins. on completion of repairs. All safety valves adjusted as above and the boilers examined under steam and found satisfactory
An oil engine driven generator has been fitted on board and the switchboard renewed with double bus-bars and change-over switches fitted to all circuits.
The switchboard and fittings are in accordance with the Rules and together with the lighting installation throughout has been megger tested and found or put in order.

The oil engine was made by Messrs.Ruston & Hornsby and is a 4 cylinder 4 stroke single acting engine with cylinders 4 ½" dia.by 5 ½" stroke 1000 R.P.M. Eng.No.228300
This engine has been satisfactorily fitted on a new flat at the starboard side of the engine room. This flat is oil tight and the storage and daily use tanks are fitted over. The arrangements of the tanks and fittings is in accordance with the plan approved and amended on the 29th.March 1946.
The generator was made by Messrs. Lancashire Dynamo & Crypto Ltd.No.198100/1944 of 26 K.W. compound wound

Repairs:-

H.P. & L.P. Turbine rotors placed in lathe and skimmed up in way of carbon packing. Blading thoroughly cleaned, and clearances verified. The journals of the rotors, gear wheel shafle and pinions have been lapped and the wear down of all bearings checked by gauges on board and found in order. Carbon packing renewed.
The lubricating oil pipes and pieces all dismantled cleaned and refitted.
The turbine stop valves and emergency cut off gear has been thoroughly overhauled
The circulating pump and engine are new and new inlet and discharge pipes fitted.
All pumps ppened out, rods skimmed, valves overhauled and all placed in good conditio
New steam valve chest have been fitted to the Feed,Air and General Service Pumps.

The main and auxiliary condensers completely dismantled, cleaned, tube plates rejoint tubes replaced with part new and repacked. The main condenser shell of steel found pitted at bottom and now built up by E.W.
Condensers tested by head of water and found tight
The ballast and bilge suction piping in engine room and outside machinery spaces ren with new strums.

Steering Engine

Rods skimmed and gland and neck bushes renewed
Piston ring groove machined and new rings fitted.
Valves and valve rods renewed and all working parts rebushed or adjusted as necessar
New telemotor fitted.

Electric Installation.

The electric wiring in the accommodation aft and amidships has been renewed throughc
The navigation lights have been thoroughly overhauled with part new wiring.
The boiler room lighting has been renewed with two separate circuits and in the engi room an additional alternate lighting circuit has been fitted.
The steam driven generator has been rewound, the commutator skimmed and brush gear c hauled.

Main Boilers.

About 60 % of the 4" tubes and all small tubes have now been renewed. The tube heade doors have all been fitted with new studs and several doors renewed.

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The boiler supports and ash pans and their supports have been renewed. The air trunk plating, closing plates, and uptakes have been part renewed. The firing doors,frames and fittings all renewed.

All mountings were removed from the shell, studs renewed as necessary and rejointed after thorough overhaul. The automatic feed regulator floats have been renewed and new pressure gauges fitted

The floor plates and bearers in boiler room renewed throughout. Boiler brickwork renewed throughout.

Boilers relagged after hydraulic test.

On completion of repairs the machinery was tried under working conditions and found satisfactory.