

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

(Received at London Office

11 JAN 1933

Date of writing Report _____ 19 _____ When handed in at Local Office 10 JAN 1933 Port of Sunderland

No. in Reg. Book. 65512 Survey held at Sunderland Date, First Survey Oct 28 Last Survey Jan 6 1933 (No. of Visits 35)

on the Machinery of the Wood, Iron or Steel Sc. "KING ROBERT."

Tonnage { Gross 5886 Net 3615 Vessel built at Haverhill Hill-on-Sea. By whom Furness S.B. Co. Ltd. When 1920-11m

Nominal Horse Power 573 Engines made at Middlesbrough By whom Richardsons Westgarth, Co. Ltd. When 1920

No. of Main Boilers 3SB Boilers, when made (Main) 1920 (Donkey) _____

No. of Donkey Boilers _____ Owners Scottish S.S. Co. Ltd. Owners' Address _____ (if not already recorded in Appendix to Register Book.)

Steam Pressure in Main Boilers 180 lbs Managers Rodd, Thomson, & Co. Ltd. Port London Voyage _____

in Donkey Boilers If Surveyed Afloat or in Dry Dock Afloat & Sunderland S.S. 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 allowed now expired. | Machinery and Boiler Surveys (including date of N.B., if any) |
|--|----------------------------|---|
| +100A1 | 6.31 | +LMC |
| SS Rule, No. 2. | 29 | MS 7.29 |
| Shell in dk. with fl. | | BS 8.32 |
| C.B. not fitted in twin decks. | | TS (CL) 3.30 |

Last Report No. _____ Port _____

Particulars of Examination and Repairs (if any) MS, Alteration, Docking

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? No.

Do. " Donkey " " " " "

If this was not done, state for what reasons? Not done.

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? _____

Did the Surveyor examine the Safety Valves of the Main Boiler? Superheat Valves Yes To what pressure were they afterwards adjusted under steam? Superheat Valves, 185 lbs.

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? _____, and of the Donkey Boilers? _____

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

Did the Surveyor examine all the mountings of the Main Boilers? Yes, and of the Donkey Boiler? _____

Has screw shaft now been drawn and examined? Yes 1-33 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?

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 the distance between lignum vitae or bearing metal of stern bush and top of after bearing of screw shaft CLOSE.

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

Now Done. Vessel placed in Dry Dock. Stern bush & outside fastenings examined. Following examined, opened out: - cylinders, pistons, slides, crank shaft, thrust shaft, intermediate shafting, tail shaft (drawn inboard), - air, circulating, bilge, feed, ballast & general service pumps, condenser under test, valves, cocks, pipes & strainers of pumping arrangements, windlass, steering engine & electric light installation generally. Main engine, auxiliaries, windlass, steering gear & electrical installation tried under steam. Sea connections examined (14/33)

Boilers examined under steam & superheat safety valves adjusted 185 lbs. Washers P 1/32 C 3/32 S 3/32

Repairs effected & Alterations carried out.
 Stern bush lower half rewooded, new propeller fitted, 4 blades, C.I.
 18'-6" Pitch, 17'-6" Dia. 106 sq Surface. I.P.T.O.

General Observations, Opinion, and Recommendation:— The Machinery of this vessel, as
(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, I.S. 9.11, B.&M.S. 9.11, or L.M.C. 9.11, 140 lb., F.D., &c.)
now seen, is in good & efficient condition, and eligible in my opinion to remain as classed, with fresh records of survey M.S. 1.33, T.S. (C.L) 1.33.

Survey Fee (per Section 29) £ 10: 0: 0

Special Damage or Repair Fee (if any) £ 10: 16: 0

Traveling expenses (if chargeable) £ 10: 16: 0

Committee's Minute _____

Assigned L.M.C. MS. 1.33

CERTIFICATE WRITTEN 1.2.33

Fees applied for _____ 19 _____

Received by me, W. H. [Signature] 12.1.1933

Engineer Surveyor to Lloyd's Register of Shipping.

Lloyd's Register Foundation

W 987-0113

If the Report sent now, or when will it be sent? (The Surveyors are requested not to write on or below the space for Committee's minute.)

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

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

Repairs & Alterations (contd)

New HP cylinder with Lentz type poppet valves & gear fitted, and coupled up to existing eccentric rods & reversing gear. HP rings renewed. Main condenser altered to regenerative system, 200 tubes plugged & Weiss vacuum augmentor fitted. Which condenser tubes renewed & condenser tested.

Cascade fitted, live steam feed heater fitted.

Steam ends of following auxiliaries bored out, new pistons, rings & piston valves fitted:- circulating pump, fan engine, dynamo engine, & inboard feed pump.

Boilers. New smoke tube type superheater fitted. Installation tested to 360 lbs. hydraulically after assembly. New stop valve, steam change valves & throttle valve in Cast Steel and new steel steam pipes fitted all hydraulically tested 540 lbs. in shops before fitting.

Smoke tube blowers with necessary valves & piping fitted.

5 Furnaces set up where slightly distorted.

Electrical installation, - cables renewed where necessary, navigation light indicator placed in working order. Dynamo governor springs & pins renewed & all placed in good working order.

[Signature]

N.B.—If this Report is copied by copying Press, special care must be taken that the copying paper is not so much damped as to spread the ink, or to cause it to show through to the other side.

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THE MARGIN.