

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

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Date of writing Report 10th April 1952 When handed in at Local Office

Port of Bremen

No. of Survey held at Bremenhaven Date First Survey 15th March Last Survey 6th April, 1952
Reg. Book. Survey held at Bremenhaven Date First Survey 15th March Last Survey 6th April, 1952
24772 on the Machinery of the Ship Steel S.S. "ROYAL WILLIAM"Tonnage Gross 7120 Vessel built at Victoria Mch. B.C. By whom Victoria Mch. Depot Co. Ltd. When 1943 Month 3
Net 4298 Engines made at Toronto, Ont. By whom John English Co. Ltd. When 1943 Month 3
Nominal Horse Power 505 Boilers, when made (Main) 1943/3 (Donkey) Owners Address
Horse Power 505
Gross 7120
Net 4298
Nominal Horse Power 505
Horse Power 505
Tonnage Gross 7120
Net 4298
Nominal Horse Power 505
Horse Power 505No. of Main Boilers 3
No. of Donkey Boilers -
Steam Pressure in Main Boilers 220 lbs
in Donkey BoilersIf Surveyed Afloat or in Dry Dock Both stbd. bendershels for bennet not abd. Particulars of Classification (which must be inserted precisely as in Register Book & Supplements).
(State name of Dock.) (Norddeutscher Lloyd)Last Report No. to be carried. Port of bennet not abd. Manager's Address
Particulars of Examination and Repairs (if any) LMC, SRL, TS CL, O.F. Alterati
(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 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. Yes, report made. No, reason given. If so, state date and reason.

Was a damage report made by anyone else? If so, by whom? no

Did the Surveyor personally go inside each Main Boiler separately and make a thorough examination at this time? yes
Donkey "What parts of the Boilers could not be thus thoroughly examined?
If not, state for what reasons.

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 p. 25.3.52, centre & stbd. 27.3.52 Present condition of funnel(s) efficient

Did the Surveyor examine the Safety Valves of the Main Boilers? yes To what pressure were they afterwards adjusted under steam? 220 lbs
To what pressure were they afterwards adjusted under steam?Did the Surveyor examine the Safety Valves of the Donkey Boilers? no
Did the Surveyor examine all the manholes, doors and their fastenings of the Main Boilers? yes, and of the Donkey BoilersDid the Surveyor examine the drain pipes of the Main Boilers? yes
and of the Donkey Boilers?Has the screw shaft now been drawn and examined? yes Has it a continuous liner? yes Is an approved oil retaining appliance fitted at the after end? 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 oil retaining appliance fitted at the after end? State date of examination of screw shaft 22.5.52 and if so, state the wear down in the stern bush 3.3 mm

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

Engine parts, when referred to by numbers, should be counted from forward. Auxiliary machinery should be referred to by position in Machinery Space.

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

NOW DONE FOR LMC: Vessel placed in dry-dock, examined propeller and outside fastenings, ship's side blow down cock (opened), screw shaft (drawn), stern bush.

Examined main engine cylinders, pistons, covers, valves and chests, rods, crank, thrust and intermediate shafts and bearings, attached and auxiliary pumps and pumping arrangements, condensers (tested), holding-down bolts, steering engine, windlass, steam pipes (steel) tested and examined as per Rule requirements, fan and both dynamo engines.

All boilers examined in their entirety with their superheaters, mountings, doors and fastenings. Safety valves adjusted under steam to 220 lbs. Boiler front O.F. pressure pipes under working conditions, steam smothering and fire extinguishing apparatus, deck controls to O.F. and steam valves examined.

SRL: Specially examined port boiler furnaces and starboard boiler centre furnace and found or made satisfactory.

Repairs: Stern bush rewooded. Screw shaft/intern. shaft coupling bolt holes reamed and four bolts renewed (slack).

Turning gear wheel chain main engine shaft renewed (fractured) and fitted satisfactorily. Main engine bearings adjusted.

Attached sanitary pump air vessel renewed in fabricated steel (cast iron, fractured).

The machinery of

General Observations, Opinion, and Recommendation. This vessel is in good order and eligible in my opinion to

(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, BS 9,11, B&MS 9,11, LMC 9,11 or LMC 140 lbs, ED, &c.)

Remain as classed in the Register Book with fresh record of LMC 3952, (as on 31st Mar 1952) as follows:-

The item regarding "Boiler furnace" may be deleted.

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ROYAL WILLIAM

2.

G.S. pump renewed (Weirs, No.256466, LLOYDS 18.10.51) (pump end corroded). Ballast pump replaced by 100 tons capacity Simplex pump. Simplex pump previously used now opened in shop, steam cylinder rebored, piston renewed and pump overhauled. Pump examined opened up and found or made satisfactory. Pump satisfactorily installed and connected to steam and water lines, on new seating welded to tank top and aft bulkhead of engine-room. Pump tested under working conditions and found satisfactory. (Position of pump altered to give headroom for overhaul).

One length of discharge pipe from ballast pump to main condenser and one length of pipe from main condenser to port well renewed (corrosion and cracked).

Main circ. pump crosshead pin renewed and bearings re-white metalled. Aux. condenser end division plate renewed (corrosion). Steering gear engine piston and valve rods, control valve renewed (wear). Fan engine rebored and piston renewed. Rods skinned and glands rebushed. Both dynamo engine cylinders rebored, pistons renewed. One piston rod renewed and other piston rod skinned. Valve rods renewed, metallic packing glands replaced by adjustable type glands. Spare piston rods, valve rod, set of bearings placed on board for fan, dynamo and circ. pump engines.

Port boiler: A few c.c. back stays renewed (corrosion).

End plate in way of main feed orifice built up by electric welding (corrosion). Superheat elements renewed (corrosion and leaking) (tested).

Centre boiler: Port furnace jacked back satisfactory and bridge in way of No.6 corrugation from front fitted and secured by electric welding.

Starboard boiler: Weld at bottom of starboard furnace found opened slightly at 2nd corrugation (fire side) from front weed out to clean metal and satisfactorily repaired by electric welding. All boiler furnaces examined in way of weld and found satisfactory. All furnaces gauged and copy of gauge readings placed on board (copy attached).

O.F. Alterations: Port and starboard deep tanks aft of engine-room bulkhead arranged to carry oil fuel or ballast.

4" Filling lines and suction lines fitted and tested satisfactorily as per Rule requirements. Filling lines connected to existing common overflow pipe. Filling lines fitted with spectacle blank flanges. Existing suction

box port and starboard connected to ballast and oil fuel lines and arranged with change-over device. O.F. suction valves fitted with extended spindles to above main deck level. Deep tanks fitted with heating coils, tested and found satisfactory. Oily bilge formed by closing off one frame space, port and starboard, aft of deep tank aft bulkhead and oily bilge suction port and starboard fitted and connected to oily bilge line to transfer pump.

The main engines and auxiliaries examined under working conditions at quayside on completion of repairs and found or made satisfactory.

ELECTRICAL INSTALLATION

Both dynamos and switchboard cleaned and tested and made satisfactory. (The electrical light cables in domestic refrigerator spaces renewed. Deck light circuits cables part renewed and minor repairs made to lighting fittings. The installation resistance tested and found or made satisfactory. Both dynamos tested and examined under load, the governing tested and found satisfactory.

Damage stated sustained as a result of (a) heavy weather encountered from December 23rd to 30th, 1951, and February 1st, 1952, voyage from Glasgow to Port au Prince, and (b) grounding on February 18th and 19th, 1952, at Port au Prince. For further particulars, see the vessel's log-books.

Now done on account of Damage (a): Screw shaft coupling bolts renewed (slack), steering gear engine opened up, examined and overhauled. The turning gear wheel on main shaft renewed (fractured). Attached sanitary pump air vessel renewed (fractured).

Now done on account of damage (b) (grounding and refloating): Vessel placed in dry-dock, screw shaft (drawn) renewed (part). Main engine bearings adjusted. Main circulating pump overhauled. Both condensers cleaned and tested.

