

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

(Received at London Office.)

Date of writing Report 31/10 19 44 When handed in at Local Office Oslo
 in Survey held at Sandefjord. Date, First Survey 16/4/43 Last Survey 4/8 1944
 19 on the Machinery of the Wood Iron or Steel screw steamer "FJELD" (No. of Visits 24)

Gross 2960 Vessel built Osaka By whom Osaka Iron Works Ltd. When 1916 5
 Net 1834 Engines made at Osaka By whom Osaka Iron Works Ltd. When 1916
 Minimal 288 Boilers, when made (Main) 1916 (Donkey) ---
 se Power of Main Boilers 2 Owners A/S D/S Fjeld Owners' Address Bergen.
 of Donkey Boilers 180 Managers A.Meidell. Port Bergen. Voyage ---
 Main Boilers 180 If Surveyed Afloat or in Dry-Dock floating dock.
 Donkey Boilers --- (State name of Dock.) Framnæs mek.Verksted A/S.

Report No. --- Port ---

Particulars of Examination and Repairs (if any) L.M.C.

Periodical Surveys, when held, must be reported in detail and seriatim in the terms of the Rules. State clearly the nature 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 sides 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.

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

as a damage report made by anyone else? If so, by whom? the ins. repr.

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

" " Donkey " " " "

this was not done, state for what reasons?

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

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

ate latest date of internal examination of each boiler 17.44 Present condition of funnel(s) good

and the Surveyor examine the Safety Valves of the Main Boiler? yes To what pressure were they afterwards adjusted under steam? 180 lb.

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

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

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

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

as 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?

as shaft now been changed? If so, state reasons

as 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?

ate date of examination of Screw Shaft 18/4.44 State the distance between lignum vitæ or bearing metal of stern bush and top of after bearing of screw shaft 1/8

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

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

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

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

The vessel was placed in floating dock, the screw shaft drawn in, the sea cocks and valves opened,

and the screw shaft, stern tube, propeller and sea cocks and valves examined.

The whole of the main and auxiliary machinery opened up and examined all cylinders, covers, pistons,

slide valves and faces, top and bottom end bearings and brasses, main bearings and brasses, crank

shaft, thrust shaft and intermediate shafts and bearings.

Examined condensers, all main and auxiliary pumps and pumping arrangements and piping.

The electric installation examined and tested.

The boilers opened, cleaned and carefully examined internally and externally with manholes, doors,

, safety valves and all mountings.

The boilers examined under steam and the safety valves set to 180 lb. per sq. inch.

General Observations, Opinion, and Recommendation:—

(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 L.M.C. 140 lb., F.D., &c.)

This vessel's machinery is in good condition in my opinion eligible to remain as now classed in the

Register Book with notation of +LMC 8,44 and screw shaft seen 4.44.

Survey Fee (per Section 29) Kr. 750.- Fees applied for 21/7 44

Special Damage or Repair Fee (if any) 1 500.- Received by me, 22/7 44

Travelling expenses (if chargeable) £ : :

Committee's Minute FRI. 24 AUG 1945

Assigned + LMC 8,44

S(C.L) 4,44

Perforin Røer
 Engineer Surveyor to Lloyd's Register of Shipping.

Lloyd's Register
 Foundation
 012096-012101-0064 1/3

S/S FJELD* Machinery .

Repairs now done due to damage:-

The main engine opened up, crank shaft lifted. The thrust shaft examined in lathe and skimmed off. The shafting lined in.

Main steam pipes taken ashore, annealed, tested and replaced,

Engine holding down bolts overhauled.

The steam turning engine opened up and piston rod, cross pins and slide renewed.

The cylinder bored up and piston and springs renewed.

Electric light engine:- piston and springs renewed. Slide rod skimmed off.

All intermediate shafts and propellershaft examined in lathe and the flanges skimmed off, also skimmed off in way of bearings.

4 intermediate shaft bearings retalled and 4 coupling bolts renewed.

The electric light arrangement in engine space partly renewed.

One bilge valve chest for tunnel bearings partly renewed.

Cooling water pipes in tunnel renewed,

All sea cocks and valves ground in.

Piping in engine and boiler space tested.

I.P. piston skimmed off in lathe and springs renewed.

H.P. and I.P. crosshead pins skimmed off.

H.P. and L.P. piston rods skimmed off, new liners.

All slide rods skimmed off, new liners.

L.P. crosspin renewed.

All guide faces dressed up,

The insulation of cylinders renewed.

The propeller renewed. The stern tube gland re-packed.

I.P. slide and slide face planed off.

Main bearings no. 3 & 4 and I.P. crank bearing re-metalled.

L.P. crosshead bearing re-metalled.

Main condenser cleaned, re-packed and tested. The inlet tube for the condenser repaired.

Centrifugal pump overhauled, piston springs renewed and 2 liners for the shaft renewed.

Ballast pump overhauled, bolts for rods and 1 piston spring renewed. The pistons skimmed off, new liners. Piston rods skimmed off, new liners.

Circulating pump:- The cylinders bored up and piston renewed.

Winch condenser:- 40 pipes renewed.

2 steel plunges for feed pump skimmed off, new liners.

Pump for auxiliary condenser:- Cylinder bored up, piston renewed. Springs for slide renewed.

Fan engine:- Piston rod and slide rod skimmed off, new liners. The shaft faired.

I.P. forward excentric ring re-metalled.

Air pump piston rod skimmed off, new liners.

The chest for feed pump bored up and liner fitted.

Boilers:- The insulation removed, the boilers externally cleaned and painted and the insulation renewed.

Stb. Boiler:- One stay bolt in centre and 1 do. in stb. combustion chamber renewed.

Port combustion chamber backplates partly renewed and 15 stay bolts

S/S " FJELD" Machinery.

Stb.boiler:- continued:

renewed and 9 welded over.

Port furnace faired and 3 dogs welded on.

Centre furnace renewed and stb. furnace partly renewed.

One crack in front end plate made good by welding.

Port boiler:- The combustion chambers' backplates partly renewed and 51 stay bolts renewed and 15 welded over.

All insulation of boilers renewed.

Z.B.R.