

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

(Received at London Office) AUG 10 1937

Date of writing Report 6/8 37 When handed in at Local Office 6/8 3 Port of Oslo

No. in Reg. Book. Survey held at Oslo Date, First Survey 15/4 Last Survey 24/7 1937

21236 on the Machinery of the Wood, Iron or Steel Twin screw motor ship " BENJAMIN FRANKLIN " (No. of Vessels) 37

Age { Gross 1034 Vessel built at St. Nazaire By whom Ch. & Atel de St. Nazaire When 1927 6
 { Net 3960 Engines made at St. Nazaire By whom C. & Atel de St. Nazaire When 1927

ominal { 984 Boilers when made (Main) (Donkey) 1927
 rse Power {
 of Main Boilers 1 Owners A/S Ganger Rolf Owners' Address Oslo
 of Donkey Boilers 1 Managers Fred Olsen & Co. (if not already recorded in Appendix to Register Book)
 am Pressure— Main Boilers 114 Port Oslo Voyage U.S.A. Pacific Coast
 Donkey Boilers 114 If Surveyed Afloat or in Dry Dock fl. dock. (State name of Dock.) Akers mek. Verksted A/S

st Report No. Port

Particulars of Examination and Repairs (if any)

Periodical Surveys, when held, must be reported in detail and serially 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 details being detailed in the body of the report, should be briefly summarised at the end of the report. State also the names 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

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

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

" " Donkey " " " " Yes

was not done, state for what reasons?

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

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?

latest date of internal examination of each boiler

19/7/37

Present condition of funnel(s)

the Surveyor examine the Safety Valves of the Main Boiler?

To what pressure were they afterwards adjusted under steam?

the Surveyor examine the Safety Valves of Donkey Boiler?

To what pressure were they afterwards adjusted under steam?

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

, and of the Donkey Boilers?

the Surveyor examine the drain plugs of the Main Boilers?

, and of the Donkey Boiler?

the Surveyor examine all the mountings of the Main Boilers?

, and of the Donkey Boiler?

crew shaft now been drawn and examined? Yes, both

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? Yes

shaft now been changed? Yes If so, state reasons

the shaft now fitted been previously used? Yes

Has it a continuous liner? Yes

Is an approved appliance fitted at the after end of the shaft to permit of it being efficiently lubricated? Yes

date of examination of Screw Shaft 13/7/37

State the distance between lignum vitae or bearing metal of stern bush and top of after bearing of screw shaft 1/16" +

Engine parts, when referred to by numbers, should be counted from forward.

Is electric light and/or power fitted? Yes

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

main engines of this vessel were now completely repaired (see Limit List).

main engines were completely dismantled and all parts removed ashore for a close examination or thorough cleaning.

engines were re-erected in the engine shops and were subsequently refitted on board. The tail shafts were drawn in and examined with intermediate and thrust shafting and the whole length of shafting early lined up. Stern bushes were re-wooded.

main engine seatings were in the meantime renewed, in accordance with the approved plan (Secretary's Minute M 30/10/36) see hull report.

completion of the repair the main engines were tested, firstly alongside the repairers' quay for 2 days and subsequently a 3 hours full speed trial was carried out, during which the whole of the machinery worked satisfactory.

the same time as the repairs the engines were now converted to the airless injection system.

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.S.M.S. 9, 11, & L.M.C. 9, 11, or L.M.C. 140 lb., F.D., &c.)

It is recommended that this vessel's machinery remain as now classed in the Society's Register Book

record of Tail shaft seen 7.37 and +LMC CS 7.37. Engines rebuilt 7.37. DBS 7.37

Fee (per Section 29) 1482:-

Damage or Repair Fee (if any) (per Section 29.) 18:-

Expenses (if chargeable) 40:-

Committee's Minute

ended

VESEL

Fr.

1482:-

18:-

40:-

FRI 20 AUG 1937

+ dm. 7.37

DBS 7.37

Fees applied for

30/7 1937

Received by me,

1.9 1937

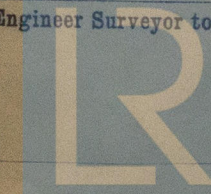
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Without

CERTIFICATE WRITTEN

Per G. R. R.

Engineer Surveyor to Lloyd's Register of Shipping.



Lloyd's Register

Foundation

W340-0060(112)

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

M/S " BENJAMIN FRANKLIN"

The fuel pumps were supplied complete by Messrs. Burmeister & Wain, Copenhagen.

The oil fuel pipes were examined and tested by hydraulic pressure, before fitting.

The following actual renewals were now effected:-

Both bedplates, supplied by N.V. Wilton-Fyenoord, Schiedam,

Both crankshafts, supplied by Messrs. Burmeister & Wain, the forging report is enclosed herewith.

All main bearings were re-metalled, Both flywheels renewed.

Thrust shafts skimmed off in lathe over coupling flanges.

All cylinder covers and all cooling water jackets renewed.

4 pistons renewed, 9 pistons repaired, plugs being fitted in the top of same.

44 top end brasses and 6 guide shoes re-metalled.

4 bottom-end brasses re-metalled, 1 crosshead pin renewed, all pins skimmed up in lathe.

Both chains for cam shaft drive renewed. Both chain wheels were renewed. Valve gear overhauled.

1 main engine vertical stay bolt renewed, being cracked at bottom end.

Further all piston rings renewed.

Cooling water and lubricating oil piping and fittings were overhauled and refitted.

The sea connections were opened up and examined.

Further examined all auxiliary engines, all on port side, complete with compressors and air bottles, all pumps and pumping arrangements, manoeuvring compressor, both starting air receivers, daily service tanks, and electric fittings.

The electric fittings, cables, control gear, generators and motors were tested for insulation resistance and found satisfactory.

Repairs:- No. 1 auxiliary engine crank shaft journals skimmed up in lathe, 2 gudgeon pins re-ground. Compressor cooling water coils annealed and tested. Valve gear on all engines repaired. A number of minor repairs to the auxiliary engines were also effected. Pumps overhauled, Cooling water, ballast and daily oil pump repaired.

On the conversion of the machinery to the mechanical injection the injection air receivers were now removed, except two which are used as emergency starting air receivers for the auxiliary engines.