

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

2 - APR 1949

(Received at London Office 20 APR 1949)

Port of NEWCASTLE-ON-TYNE

Date of writing Report... 19... When handed in at Local Office... 19...

No. in Survey held at Blyth Date. First Survey 18th Jan. 49 Last Survey 1st March 1949
g. Book. (No. of Visits... 24.30)

24.80 on the Machinery of the ~~Wood, Iron or Steel~~ S.S. LORD GLADSTONE.

Gross 4.51 Vessel built at W. Hartlepool By whom W. Gray & Co. Ltd When 1943-3.
Net 4.88 Engines made at W. Hartlepool By whom Central Mar Eng. Wks. When 1943
Nominal MN 50 Boilers, when made (Main) 1943 (Donkey) ✓
orse Power of Main Boilers 3 Owners Harwood S.S. Co. Ltd Owners' Address...
Donkey Boilers ✓ Managers Ship Finance & Management Co. Ltd (if not already recorded in Appendix to Register Book.)
n Pressure Port London Voyage
Main Boilers 220 LBS/sq. in If Surveyed Afloat or in Dry Dock Afloat - Blyth DO-SB Co. Particulars of Classification which must be inserted
Donkey Boilers ✓ (State name of Dock.) precisely as in Register Book & Supplements).

Report No. Port

Particulars of Examination and Repairs (if any) Damage & O.F. Conversion.

Special Surveys, when held, must be reported in detail and serially in the terms of the Rules. State clearly the cause of Repairs, if any, 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 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, not required.

Has a damage report made by anyone else? If so, by whom? Underwriter's Surveyors.

Has the Surveyor personally gone inside each Main Boiler separately and make a thorough examination at this time? No

Donkey

State for what reasons B.S. not due.

What parts of the Boilers could not be thus thoroughly examined? ✓

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

Present condition of funnel(s) ✓

Has the Surveyor examined the Safety Valves of the Main Boilers? No

To what pressure were they afterwards adjusted under steam? ✓

Has the Surveyor examined the Safety Valves of the Donkey Boilers? ✓

To what pressure were they afterwards adjusted under steam? ✓

Has the Surveyor examined all the manholes, doors and their fastenings of the Main Boilers? No

and of the Donkey Boilers? ✓

Has the Surveyor examined the drain plugs of the Main Boilers? ✓

and of the Donkey Boilers? ✓

Has the Surveyor examined all the mountings of the Main Boilers? No

and of the Donkey Boilers? ✓

Has the shaft now been drawn and examined? No

Has it a continuous liner? ✓

Is an approved oil retaining appliance fitted at the after end? ✓

Has the shaft been changed? ✓

If so, state reasons

Has the shaft now fitted been previously used? ✓

Has it a continuous liner? ✓

Is an oil retaining appliance fitted at the after end? ✓

State date of examination of Screw Shaft

State the wear down in the

Is electric light and/or power fitted? Yes

If so, did the Surveyor examine the generators, motors, switchgear, cables and fuses? No

Resistance of the generators, circuits and apparatus been tested and found to be not less than 100,000 ohms? No.

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

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

Damage stated to have been sustained on 18th February 1949 when heating H.P. cylinder for the purpose of fitting new cylinder liner, whilst vessel lay afloat at Wimbouene Jetty, (Blyth Drydock & Shipbuilding Co. Ltd) Blyth.

Work done - At the request of the Owner's Superintendent, examined the main engine H.P. cylinder casting & found the cylinder wall cracked at starboard side, through the full thickness of the casting, the crack extending approximately 14" vertically downwards from the top edge of cylinder & also through the top horizontal web. Three minor cracks were also noted in small bracket webs adjoining the H.P. & M.P. steam chest flanges.

Repairs. Owners new liner fitted into cylinder casting and a thin copper backing strip inserted between liner & cylinder in way of fracture. Cracks were cut & studded in preparation for welding. Electric welding of cracks carried out with copper-nickel electrodes, deposits being made intermittently, allowing

General Observations, Opinion, and Recommendation:— The machinery of this vessel, as far as now

(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 lb., FD, &c.) CS 3,34,

is eligible in my opinion to remain as classed without fresh record of survey subject to H.P. cylinder being further examined at the end of June 1949. The oil fuel installation been fitted & tested in accordance with the Rules and approved plans & is eligible in my opinion to have the record of "Fitted for oil fuel 3,49, F.P. above 150°F." Item re "Bessemer steam pipe", may now be deleted from S.R. list

Fee (per Section 29.) O.F. Conv. £ 21 : 0 : 0 Fees applied for
Aux feed pump 3 0 0
Damage & Repairs Fee (if any) £ 4 : 4 : 0
(per Section 29.)
Landing expenses (if chargeable) £ : 9 : 6

Received by me, J. Bowman.
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

TUES. 10 MAY 1949

Signed See No. 106061

frequent periods for cooling, and stress relieving of weld metal by peening. Completed repairs examined after engine had been warmed through and found satisfactory.

It is recommended that this repair be accepted as permanent subject to it being examined and found satisfactory at the end of a period of 3 months (i.e. at the end of June 1949).

NOTE:- DIA. OF H.P. CYLINDER Now $23\frac{1}{4}$ "

OIL FUEL CONVERSION.

Oil Fuel Settling tanks fitted in tween deck space (p+s) abeam engine room. Access doors in casing bulkhead provided.

Gutterways, overflow pipes, level indicators, suction spilling valves, fitted in accordance with the Rules.

Oil fuel heating & pumping unit (Todd's), satisfactorily installed. Identification marks:- T. 1535. LLOYDS TEST Body 500 LBS. COILS 500 LBS. 9.4.48. 211 N^B 236-7. E.M.S.

Oil fuel suction spilling pipes in machinery space tested to 50 lbs/sq"

Oil fuel discharge pipes tested to 400 lbs/sq", & placed in sight above the platform, in well lighted parts of the stokehold. Lighting up unit fitted.

Existing General Service pump - Suctions to Hotwell, & R.D.B. tanks & blanked off. Discharges to boiler & screw Fresh water service, blanked.

This pump can now only be used for bilge ballast purposes.

A second-hand Auxiliary feed pump has been installed, with sucs. sea, Hotwell, & Aft peak tank (F.W.) and discharges to boiler, (main). any

This pump, not built under Survey, opened out & examined, steam & water and hydraulically tested, & subsequently examined under working conditions & found in good order. Identif. marks - LLOYDS TEST. 400 LBS 22.2.49. J.B.

All lead pipes in machinery spaces removed & replaced by pipes of steel.

Steam fire extinguishing apparatus, fitted as per Rules, and tried out under working conditions.

Extended control rods to settling tank suction valves & control to steam for unit's transfer pump & fire extinguishing gear, fitted as per Rules & tried out under working conditions.

The original cross bunker, fore of boiler room, has been converted to a deep tank, intended for water ballast or dry cargo. Bilge ballast suction with suitable blank flanging arrangements have been installed (P+S).

The requirements of the Rules for the use of oil as fuel have been complied with.

Plan of pumping arrangement, as fitted, is forwarded herewith.

Plan of pumping arrangement, approved 20.1.49, is being retained for use on the "Lord Lloyd George" which is undergoing conversion to Oil Fuel at this port.

Special Reasons List - Steam pipes of Port Boiler, and from bulkhead stop valve to main engine have now been examined and tested in accordance with the Rules. & it is submitted that this item be now deleted from the S.R. list.