

(Received at London Office

54105 on the Machinery of the ~~Wood, Iron or~~ Steel Screw Tanker "BRITISH COLONEL"

of Donkey Boilers—
Steam Pressure—	200
in Main Boilers	120

Donkey Boilers -
Report No. 11878

Port

FAL

Particulars of Examination and Repairs (if any)..... **REPAIRS H.P. ENGINE.**
 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 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.

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.....

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

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

"	"	Donkey	"	21	"	WETTED BY THE RAIN AND WIND
---	---	--------	---	----	---	-----------------------------

not, state for what reasons..... What parts of the Boilers could not be thus thoro

hat 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.....**SURVEY CONFINED TO ITEMS MENTIONED**.....P

Did the Surveyor examine the Safety Valves of the Main Boilers?.....To what pressure were they set?

Did the Surveyor examine the Safety Valves of the Donkey Boilers? To what pressure were they

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

Did the Surveyor examine the drain plugs of the Main Boilers?

Did the Surveyor examine all the mountings of the Main Boilers?.....

as the screw shaft now been drawn and examined? Has it a continuous liner? Is an approve

Has the shaft now fitted been previous

an approved oil retaining appliance fitted at the after end? State date of examination of Screw

Is electric light and/or power fitted?.....If so, did the Surveyor examine the g

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

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

... arrangements have been made for its completion and what remains to be done

NOW DONE :-

Attended on board to examine Michell thrust of Main H.P. turbine on account of damage to astern pads. The Chief Engineer stated that the astern pads of this H.P. thrust were renewed immediately prior to leaving an East African port on voyage to Suez (See photograph of pads removed).

The ship's spare pads fitted at the latter port, were again examined at Suez and found badly worn on their vertical edges. Pads and spherical cast iron holder were built up with welding and refitted before leaving Suez.

Upon examination at Alexandria the bronze of the astern pads was found to be again badly worn in way of their vertical edges, and lower circumferences, whilst the white metal showed little relative wear. The ahead pads and their cage were found in good condition.

P.T.O.

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, BS 9,11, B&MS 9,11, $\frac{1}{2}$ LMC 9,11 or $\frac{1}{2}$ LMC 140 lb., FD, &c.)

CS 3,34
safe working condition, and eligible in my opinion, to remain as classed without fresh record of survey, subject to renewal forward half H.P. turbine flexible coupling upon completion of present voyage via Eastern Mediterranean to a North Sea Port.

Survey Fee (per Section 23).....	£60.000
attendance	4.000
Special Damage or Repair Fee (if any)	£ : :
(per Section 23.)	5.400
Travelling expenses (if chargeable)	£ : :

Fees applied for,
31/3/1953

Received by me,

Committee's Minute

Assigned

Write Own.

As now, subject

30 APR 1953

Engineer Surveyor to Lloyd's Register of S

Engineer Surveyor to Lloyd's Register of Shipping

Lloyd's Register
Foundation

W1630-0122

In view of the vibration stated to have been experienced with this turbine, the gear cover was removed for examination of the H.P. pinion and it was found that this pinion had been fitted incorrectly at some time in the past, as the ends of pinion and reduction wheel shrouds were out of line at least half an inch, thereby reducing the fore and after movement of the claw coupling to a maximum of .125" in lieu of .375".

The claw coupling was found to be in a very badly worn condition and the teeth of the after section .250 inches slack.

REPAIRS NOW DONE:-

Thrust:- Bronze pads built up E.W. and re-white metalled. Spherical cast iron holder built up and re-machined and all clearances adjusted as original.

NB. As the pads are wedge shaped, and fitted into slots of similar pattern it is believed that wear on the lower circumferences of the pads, due to vibrations had caused upper pads to drop, and become jammed on their vertical edges.

H.P. pinion lifted and refitted in its correct position.

Claw coupling:- Ship's spare male and female pieces fitted in place of worn after sections. Forward sections dressed by hand as far as practicable, and refitted. The latter section of the coupling shows a minimum clearance of .062 inches and requires renewal, but there is no spare available, on board ship.

Upon assembly of the pinion and claw coupling, the pinion bobbin shaft was clock gauged from the rotor shaft and found out of alignment .025 inches, and its bearing has now been machined as necessary. It must be noted that the latter bearing had apparently been fitted .025" too high at some previous date.

The turbine and pinion journals were bridge gauged and found satisfactory.

Due to port regulations, it was not possible to carry out the necessary trial of main engines before vessel left, but a trial was made outside the port before leaving for Tripoli, and the Master has wireless engine trials satisfactory.

NOTE:-

A considerable quantity of powdered bronze is being removed at frequent intervals from the main oil filters.

From the appearance of the H.P. turbine forward journal, this is possibly slightly oval.

It is now recommended that the forward section of the H.P. claw coupling be renewed upon completion of present contemplated voyage via Eastern Mediterranean ports to a North Sea Port of Discharge.

SPARE GEAR:-

Vessel has on board only one half set of H.P. main turbine thrust pads.

L.P. Turbine:-

Thrust opened for examination and found in good condition.

W. Mapleson



© 2021

Lloyd's Register
Foundation