

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

JUL 31 1940

(Received at London Office)

Date of writing Report 29.7.40 When handed in at Local Office 30.7.40 Port of Falmouth

No. in Survey held at Falmouth Date, First Survey 5.4.40 Last Survey 13.7.40 19  
eg. Book. 9496 on the Machinery of the Wood, Iron or Steel. S.S. "MIDDLESEX" (No. of Visits 24)

Gross 9583 Vessel built at Newcastle By whom Suan Hunt, Wigham, Newcastle Year. Month. 1920 9  
Net 6049 Engines made at Do By whom Do When 1920  
Nominal Horse Power 1222 Boilers, when made (Main) 1920 (Donkey) -  
No. of Main Boilers 5 Owners Federal Steam Nav Co. Ltd. Owners' Address London Voyage -  
No. of Donkey Boilers - Managers - (If not already recorded in Appendix to Register Book.)  
Steam Pressure in Main Boilers 180 lbs If Surveyed Afloat or in Dry Dock N<sup>o</sup> 3 Dry Dock Port London Voyage -  
No. of Donkey Boilers - Particulars of Classification (which must be inserted precisely as in Register Book & Supplements).

Last Report No. - Port Docking L.M.C.T.S

Particulars of Examination and Repairs (if any) Newspaper Damage

Medical 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 details 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.

Where 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, not required

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

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

Did the Surveyor personally go inside each Donkey Boiler separately and make a thorough examination at this time? no

Was this 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? -

What is the latest date of internal examination of each boiler? Per S. J. A. 23/4/40 look aft 2/5/40 Port aft 16/4/40

Did the Surveyor examine the Safety Valves of the Main Boiler? yes Present condition of funnel? good

To what pressure were they afterwards adjusted under steam? not adjusted

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

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

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

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

Has the 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? no

Has the 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 appliance fitted at the after end of the shaft to permit of it being efficiently lubricated? -

What is the date of examination of Screw Shaft? 27/6/40 State the distance between lignum vitae or bearing metal of stern bush and top of after bearing of screw shaft One

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

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

If the survey is not complete, state what arrangements have been made for its completion and what remains to be done. To complete the survey the boiler safety valves require to be adjusted under steam. It is stated this will be done at New York.

Damage stated to have been caused through heavy weather on various passages between 10<sup>th</sup> January 1940 and 13<sup>th</sup> February 1940

Vessel placed in dry dock. The propeller, after end of stern bush & outside fastenings of sea connection examined.

M.C. Vessel placed in dry dock. The propeller, screw shaft, stern bush, sea connections & fastenings, all pumps, pumping arrangements, condensers examined and put in order. Steam pipes examined and tested as required by the Rules and made satisfactory. Electric installation examined throughout and all circuits megger tested. Dynamo engine examined & found in working condition.

General Observations, Opinion, and Recommendation:— The machinery of this vessel is in good working condition and eligible in my opinion to remain as classed and to have need of +N.E. 7.40; +L.M.C. 7.40 on completion of the survey, and T.S. sec 6.40 C.L.

Survey Fee (per Section 29)..... L.M.C. £ 15 0 0  
Special Damage or Repair Fee (if any)..... £ 3 0 0  
(per Section 29.) Electric light  
Selling expenses (if chargeable)..... £ : :  
Received by me, 8<sup>th</sup> August 1940

Fees applied for 30<sup>th</sup> July 1940  
Received by me, 8<sup>th</sup> August 1940

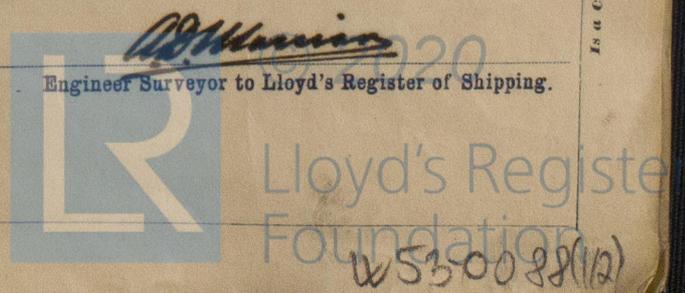
Committee's Minute FRI 9 AUG 1940  
Signed Referreed  
+L.M.C. 7.40  
+N.E. 7.40

| CHARACTER. For Special Survey Date of last Survey and of Periodical Surveys. | Years assigned or not assigned. | Machinery and Boiler Surveys (including date of N.B., if any). |
|--|---------------------------------|--|
| <u>+100A1</u>  |                                 | <u>+L.M.C. 1.37</u>  |
| <u>Shifter etc with</u>  |                                 | <u>B.S. 3.39</u>   |
| <u>fuelboard 10.39</u>   |                                 | <u>+Lloyd R.M.C</u>  |
| <u>S.S. 7al N<sup>o</sup> 3-1.33</u>   |                                 | <u>7.40 10.39</u>  |
| <u>S.S. 7al N<sup>o</sup> 1-37</u>   |                                 | <u>7.5.1.38 P.L</u>  |
| <u>Fitted for oil fuel 4.25 F.P. above</u>                                   |                                 |  |
| <u>150F</u>  |                                 |  |

Insert Character of Ship and Machinery precisely as in the Register Book

Machinery complete

Is a Certificate required? If so, to be sent to



W530088(12)

S.S. "MIDDLESEX"L.M.C. Continued

Main turbine and gears removed from vessel and new turbine and gears (See Glasgow 1<sup>st</sup> Entry Ref No 60730) fitted on board and satisfactorily lined up to existing shafting.

Intermediate & Thrust shafts & bearings examined. Machining tried under working conditions and found satisfactory.

Bolts examined internally & externally together with mountings doors and fastenings and either found or put in order.

Oil fuel unit pumps examined. Oil fuel installation examined under working conditions, fuel tank valves, deck control gear, oil discharge pipes between pumps & furnaces found satisfactory.

Wear & Tear Repairs

Lower half of stern bulk wood renewed.

Port oil fuel pump chambers bored out & new buckets fitted.

Main condenser tubes removed, cleaned, tested & refitted. Condenser tested. Minor repairs carried out to all pumps.

A number of boiler tubes expanded. Fire flues tubes renewed.

Boiler mountings overhauled & put in order.

Electric installation overhauled & put in order.

One length of main steam pipe renewed & tested, S.D. steel 8" dia, .375" thick, to suit new machinery.

A.D. Morris