

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

(Received at London Office)

Date of writing Report. 10<sup>th</sup> Jan. 1943 When handed in at Local Office. 12 JAN 1943 Port of NEWPORT, MON.Survey held at NEWPORT, MON. Date. First Survey 23<sup>rd</sup> May. Last Survey 8<sup>th</sup> June 1943 (No. of Visits 26)on the Machinery of the ~~Wood, Iron or Steel~~ S.S. "EMPIRE TOWER" (EX "TOWER FIELD")

Gross Tonnage 4378 Vessel built at Burntisland By whom Burntisland S.B. Co. Ltd. When 1935 3

Net Tonnage 2632 Engines made at Newcastle By whom N.E. Marine Eng. Co. Ltd. When " "

Boilers, when made (Main) 1935 (Donkey) ✓

Owners Ministry of War Transport Owners' Address (If not already recorded in Appendix to Register Book.) ✓

Managers. ~~London Ship Management Co. Ltd.~~ Port London Voyage ✓If Surveyed Afloat or in Dry Dock Eastern D.D. also D<sup>o</sup> Particulars of Classification which must be inserted precisely as in Register Book & Supplements.

Report No. Port

Particulars of Examination and Repairs (if any) Damage &amp; L.M.C.

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. Not required.

Has a damage report been made by anyone else? If so, by whom? None Made

Has the Surveyor personally gone inside each Main Boiler separately and made a thorough examination at this time? Yes

" Donkey " " " " "

State for what reasons? 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 M. Baker 1.12.42 Present condition of funnel (S) efficient.

Surveyor examine the Safety Valves of the Main Boilers? Yes To what pressure were they afterwards adjusted under steam? 210 lbs. ✓

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

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

Surveyor examine the drain plugs of the Main Boilers? ✓ and of the Donkey Boilers? ✓

Surveyor examine all the mountings of the Main Boilers? Yes and of the Donkey Boilers? ✓

Screw shaft now been drawn and examined? Yes Has it a continuous liner? Yes Is an approved oil retaining appliance fitted at the after end? ✓

Shaft now been changed? No If so, state reasons ✓ Has the shaft now fitted been previously used? ✓ Has it a continuous liner? ✓

Approved oil retaining appliance fitted at the after end? ✓ State date of examination of Screw Shaft 4.11.42 State the wear down in the bush 1/8" Is electric light and/or power fitted? Yes If so, did the Surveyor examine the generators, motors, switchgear, cables and fuses? Yes

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

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

On account of damage stated to have been sustained by grounding when entering Washington Harbour.

Vessel placed in dry dock, Propeller, Propeller shaft stem bush &amp; gland examined, all sea Cocks &amp; Valves opened out and examined also

all outside fastenings &amp; found or put in good Condition.

H.P. M.P. &amp; L.P. Cylinders, pistons, Valves &amp; Chests, Aque, Thrust and

cannal shafting, with bearings opened out and examined, all Holding

down bolts, Soleplate, Columns, Main &amp; Auxiliary pumps and

pumping arrangements, Condensers, Windlass &amp; Steering engine.

opened out and examined &amp; found or put in good Condition.

Electric installation examined Throughout; Thoroughly overhauled

Meggers Tested, as per rule &amp; tried under full working Conditions

found satisfactory. Main Boilers opened out and examined P.T.O.

General Observations, Opinion, and Recommendation: The Machinery of this vessel is 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, &amp;c.; thus, for example, BS 9,11, B&amp;MS 9,11 or LMC 9,11 or LMC 140 lb., FD, &amp;c.)

eligible to remain as classed with Records of L.M.C. 12.42

and Tail shaft over 11.42.

L.M.C.

Fees applied for 12<sup>th</sup> Jan 1943

Damage or Repair Fee (if any) £15:15:0 Received by me, 19

Expenses (if chargeable) £

Surveyor's Minute

d

FRI. 29 JAN 1943

+ L.M.C. 12.42

CERTIFICATE WRITTEN

Lloyd's Register Foundation



S/S. "Empire Tower" in Towerfield.

examined in their entirety & found or put in good order.

Repairs now done, —

H.P. M.P. & L.P. piston rods & valve spindles tested in lathe skimmed up & new Metallic packing fitted. all Cylinders and valve chests cleaned out for examination & found in order.

H.P. M.P. & L.P. Aoud & Thrust shafts tested in lathe & found in order. L.P. after Coupling & Thrust shaft forward Coupling faces machined. Thrust block cleaned out and examined & Top half of Cover & oil gland renewed.

Propeller shaft drawn & examined & found in order, stem bush good. Holding down bolts tested, 8 renewed.

All Main & Auxiliary steam pipes tested to twice the working pressure & found good.

Main & Auxiliary Condensers tested, all Tubes drawn, cleaned & tested, 20 tubes in Main & 6 in Aux. Condenser renewed.

The General services pump renewed complete.

Tuning & Reversing engine overhauled & as now in order. Main repairs.

Dynamo engine opened out & thoroughly overhauled. Armature & field Coils rewound.

D. G. Dynamo removed, sent to Maker for overhaul.

Steering engine & winches, Thoroughly overhauled.

Main Boiler blanked off & tested to twice the working pressure & found in good order, with regard to shell etc. wear & tear repairs as stated below.

L.M.C. — Vessel in dry dock, Propeller, Propeller shaft, Stem bush and gland all sea Coals & valves and outside fastenings examined & are now in order. All Cylinders, pistons, valves & chests, Aoud, Thrust and Tunnel shafting, all bearings & top & bottom ends, Soleplate and Condensers examined & are now in order. (Condensers tested)

Main & Auxiliary pumps & pumping arrangements, winches & steering engine opened out and examined & are now in order.

Electric installation examined Thoroughly; Meters tested as per rule & tried under full working conditions & found satisfactory.

Main Boiler opened out and examined together with their safety valves & other mountings & found or put in good condition.

Main & Aux. steam pipes tested to twice the working pressure.

Repair, Main Boiler, all furnaces cut out and new furnaces fitted. (6 in all). furnaces found badly distorted.

P. Boiler, furnace N° 1 F. 344. W. J. F. - 2. Off. C. Boiler, furnace N° 384. W. J. F. 2. Off S. - N° F. 344. W. J. F. Port wing, N° 344. W. J. F. St. wing.

70 Screwed Staps renewed. All Superheating elements cleaned & tested. Boiler tested by Hyd. pressure on Completion & found good.