

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Date of writing Report 15-1-41 When handed in at Local Office 23 JAN 1941 Port of HULL
 No. in Survey held at Hull & Goole. Date, First Survey 7.6.40 Last Survey 14.1.1941
 Reg. Book. on the H.M.T. MACBETH. (Number of Visits 51)
 Built at Goole By whom built Goole S.B. & Repp Co. Ltd. Yard No. 355 Tons Gross 452
 Engines made at Hull. By whom made Amos & Smith & Co. Engine No. 681 When built 1941-1
 Boilers made at do By whom made do Boiler No. do When made do
 Registered Horse Power 156 Owners The Admiralty Port belonging to do
 Nom. Horse Power as per Rule 156 Is Refrigerating Machinery fitted for cargo purposes ✓ Is Electric Light fitted Yes
 Trade for which Vessel is intended ✓

ENGINES, &c.—Description of Engines Triple Expansion CONTRACT Revs. per minute 160
 Dia. of Cylinders 13 1/2 - 23 - 38 Length of Stroke 27 No. of Cylinders 3 No. of Cranks 3
 Crank shaft, dia. of journals 7.5" as per Rule 7.5" Crank pin dia. 7 1/8" Crank webs ✓ Mid. length breadth ✓ Thickness parallel to axis 4 13/16"
 as fitted 7 7/8" Mid. length thickness ✓ shrunk Thickness around eye-hole 3 15/16"
 Intermediate Shafts, diameter 7.15" as per Rule 7.15" Thrust shaft, diameter at collars 7 7/8" as per Rule 7.5"
 as fitted 7 1/4" as fitted 7 7/8"
 Tube Shafts, diameter ✓ as per Rule 8.2" Screw Shaft, diameter 8 1/4" as per Rule 8 1/4" Is the tube shaft fitted with a continuous liner ✓
 as fitted ✓ as fitted ✓
 Bronze Liners, thickness in way of bushes ✓ as per Rule ✓ Thickness between bushes ✓ as per Rule ✓ Is the after end of the liner made watertight in the propeller boss ✓
 If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner ✓
 If the liner does not fit tightly at the part between the bearings in the stern tube, is the space charged with a plastic material-insoluble in water and non-corrosive ✓
 If two liners are fitted, is the shaft lapped or protected between the liners ✓ Is an approved Oil Gland or other appliance fitted at the after end of the tube shaft ✓
 Length of Bearing in Stern Bush next to and supporting propeller 36"
 Propeller, dia. 105" Pitch 9'-4" No. of Blades 3 Material C.I. whether Moveable No Total Developed Surface 30 sq. feet
 Feed Pumps worked from the Main Engines, No. 2 Diameter 2 1/2" Stroke 15" Can one be overhauled while the other is at work Yes
 Bilge Pumps worked from the Main Engines, No. 2 Diameter 2 1/2" Stroke 15" Can one be overhauled while the other is at work Yes
 Feed Pumps { No. and size One 4 x 6 x 12 Weirs ✓ Pumps connected to the { No. and size One 6 x 5 1/2 x 15" Weirs ✓
 How driven Independent Steam Main Bilge Line How driven Independent Steam Downton
 Ballast Pumps, No. and size None Lubricating Oil Pumps, including Spare Pump, No. and size None
 Are two independent means arranged for circulating water through the Oil Cooler None Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge Pumps;—In Engine and Boiler Room Eng Room 2 @ 2" dia + one @ 2 3/4" dia Stokehold 2 @ 2" dia
 In Pump Room None In Holds, &c. One @ 2" dia in each of the following, Forepeak, Main Tank, Sordic Space, Magazine, Spirit Room, Bunkers, Shaft space & aft peak.
 Main Water Circulating Pump Direct Bilge Suctions, No. and size One - 5" Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size One @ 2 3/4" included above Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes Yes
 Are the Bilge Suctions in the Machinery Space led from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges Yes
 Are all Sea Connections fitted direct on the skin of the ship Yes Are they fitted with Valves or Cocks Yes
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Yes Are the Overboard Discharges above or below the deep water line At w.l.
 Are they each fitted with a Discharge Valve always accessible on the plating of the vessel Yes Are the Blow Off Cocks fitted with a spigot and brass covering plate No
 What Pipes pass through the bunkers Good Tank Suctions How are they protected Wood casing
 What pipes pass through the deep tanks None Have they been tested as per Rule ✓
 Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times Yes
 Is the arrangement of Valves and their connections such as to prevent the possibility of water passing from the sea or from water tanks into the cargo or machinery spaces, or from one compartment to another Yes Is the Shaft Space watertight Yes Is it fitted with a watertight door No worked from Access from flat above

MAIN BOILERS, &c.— (Letter for record 5) Total Heating Surface of Boilers 2650
 Which Boilers are fitted with Forced Draft ✓ Which Boilers are fitted with Superheaters None
 No. and Description of Boilers One S.B. Working Pressure 200 lbs/sq
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? Yes
 IS A DONKEY BOILER FITTED? No If so, is a report now forwarded? ✓
 Can the donkey boiler be used for domestic purposes only ✓

PLANS. Are approved plans forwarded herewith for Shafting 17.10.39 Main Boilers 17.10.39 Auxiliary Boilers ✓ Donkey Boilers ✓
 (If not state date of approval)
 Superheaters None General Pumping Arrangements 17.10.39 Oil fuel Burning Piping Arrangements None

SPARE GEAR.

Has the spare gear required by the Rules been supplied Yes
 State the principal additional spare gear supplied See attached list.

The foregoing is a correct description.

A. G. Newley

Manufacturer.



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007967-007976-0260

Macbells

1940. June 4, 18, July. 18, 22, 24, Aug. 2, 5, 6, 9, 14, 30, Sept. 6, 7, 11, 12, 13, 15, 17, 20, 26, 30, Oct. 2, 5, 9, 10, 11, 13, 14, 15, 16, 22, 25, 30, Nov. 4, 6, 11, 12, 13, 14, 27, Dec. 2, 3, 13, 21, 24, 1941. Jan 3, 8, 9, 10, 14.

Dates of Survey while building

During progress of work in shops - -

During erection on board vessel - - -

Total No. of visits 51.

Dates of Examination of principal parts—Cylinders 22.7.40 6.9.40 Slides 2/8/40 Covers 22/7/40 6.9.40.

Pistons 2/8/40 Piston Rods 2/8/40 Connecting rods 2/8/40.

Crank shaft 20.9.40 Thrust shaft 30.8.40 Intermediate shafts 4.26.9.40.

Tube shaft ✓ Screw shaft 18.7.40 Propeller 17.9.40.

Stern tube 15.9.40 Engine and boiler seatings 17.9.40 Engines holding down bolts 11.11.40.

Completion of fitting sea connections 17.9.40

Completion of pumping arrangements 24.12.40 Boilers fixed 25.10.40 Engines tried under steam 19.1.41.

Main boiler safety valves adjusted 24.12.40 Thickness of adjusting washers 3/8" both.

Crank shaft material Steel Identification Mark 343 W.K. 22.8.40 Thrust shaft material Steel Identification Mark W.N. 307.14.1.

Intermediate shafts, material Steel Identification Marks 343 W.K. 22.8.40 Tube shaft, material ✓ Identification Mark ✓

Screw shaft, material Steel Identification Mark 47. RE 9 23.4.40 Steam Pipes, material Steel Test pressure 600 lbs/sq Date of Test 14.10.40.

Is an installation fitted for burning oil fuel No. Is the flash point of the oil to be used over 150°F. ✓

Have the requirements of the Rules for the use of oil as fuel been complied with ✓

Is the vessel (not being an oil tanker) fitted for carrying oil as cargo No. If so, have the requirements of the Rules been complied with ✓

If the notation for Ice Strengthening is desired, state whether the requirements in this respect have been complied with ✓

Is this machinery duplicate of a previous case Yes If so, state name of vessel H.M.T. BIRCH. Rpt. No. 50672.

General Remarks (State quality of workmanship, opinions as to class, &c.)

The Machinery of this vessel has been constructed and fitted

on board in accordance with the approved Admiralty Plans. The specification

of the Society's Rules. The workmanship & materials are good & when tried

at as near full power as practicable in the basin it was found satisfactory

in every respect.

This Vessel is eligible, in my opinion, when classed to have the records

of L.M.C.1-41 & O.G. & the notation T. 2. Cy. 13 1/2, 23 & 38. 156 NHP.

2001b. 1. 53. 3cf. G. 9. 63. H. 3. 2650. F.D.

The amount of Entry Fee ... £ : : When applied for, 23 JAN 1941

Special ... £ 75 : 0 : When received,

Donkey Boiler Fee ... £ : : 19

Travelling Expenses (if any) £ : : 19

Committee's Minute TUE. 28 JAN 1941

Assigned 1.41

22. 09.

Engineer Surveyor to Lloyd's Register of Shipping.