

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 11 OCT 1924

of writing Report 19 When handed in at Local Office 9.10 1924 Port of Middlesbrough
 in Survey held at Stockton-on-Tees Date, First Survey 5.6.24 Last Survey 4.10.1924
 7. Book. on the Steel screw steamer SOUTHBOROUGH (Number of Visits 34)
 Tons } Gross
 Net
 built at Stockton By whom built Messrs Richardson Duck & Co Ltd Yard No. 689 When built 1924
 Engines made at Stockton By whom made Messrs Blair & Co Ltd Engine No. 1954 when made 1924
 Boilers made at Stockton By whom made Messrs Blair & Co Ltd Boiler No. 1954 when made 1924
 Registered Horse Power Owners Messrs Harland & Wolff Ltd Port belonging to Cardiff
 Net Horse Power as per Rule 417 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes

GINES, &c.—Description of Engines Triple Expansion
 No. of Cylinders 2 5/2 - 42.70 Length of Stroke 48 Revs. per minute _____ No. of Cranks 3
 Dia. of Crank shaft journals as per rule 13.52 as fitted 14 1/2 Dia. of Crank pin 14 3/4 Crank webs Mid. length breadth 24 Thickness parallel to axis 9 1/2
 as per rule 12.876 as fitted 13 3/4 Diameter of Tunnel shaft as per rule 14.41 as fitted 15 1/2 Diameter of Screw shaft as per rule _____ as fitted _____ Is the Screw shaft

Is the after end of the liner made watertight in the propeller boss yes
 If the liner does not fit tightly at the part between the bearings in the stern tube, is the space charged with plastic material insoluble in water and non-corrosive tight fit
 Is an approved appliance fitted at the after end of the shaft to permit oil being efficiently lubricated no Length of Stern Bush 5'-4" Diameter of Propeller 17'-6"
 Diameter of Propeller 17'-6" No. of Blades 4 State whether Moveable no Total Surface 98 sq square feet.
 No. of Feed Pumps fitted to the Main Engines 2 Diameter of ditto 3 1/2 Stroke 34 Can one be overhauled while the other is at work yes
 No. of Bilge Pumps fitted to the Main Engines 2 Diameter of ditto 5" Stroke 34 Can one be overhauled while the other is at work yes

Total number and size of power driven Feed and Bilge Auxiliary Pumps 1 @ 10" x 11" x 10" + 1 @ 7" x 5" x 8" Duplex + 1 @ 7" x 9 1/2" x 21"
 No. and size of Pumps connected to the Main Bilge Line One 10" x 11" x 10" Duplex
 No. and size of Ballast Pumps one 10" x 11" x 10" No. and size of Lubricating Oil Pumps, including Spare Pump none
 Are two independent means arranged for circulating water through the Oil Cooler _____ No. and size of suction connected to both Main Bilge Pumps and Auxiliary
 Bilge Pumps;—In Engine and Boiler Room 3 @ 3" + Dry Tank 1 @ 3 1/2" and in Holds, &c. 2 @ 3" in nos 1-3 + 4 holds
2 @ 3 1/2" in nos 2 hold. Tunnel well one @ 2 1/4"

No. and size of Main Water Circulating Pump Bilge Suctions one @ 6 3/4" No. and size of Donkey Pump Direct Suctions
 the Engine Room Bilges one @ 4 1/2" 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 connections with the sea direct on the skin of the ship yes Are they Valves or Cocks both
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates yes Are the Discharge Pipes above or below the deep water line above
 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 yes
 How are they protected _____

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 Screw Shaft Tunnel watertight one hull Rft Is it fitted with a watertight door yes worked from top platform

MAIN BOILERS, &c.—(Letter for record (S)) Total Heating Surface of Boilers 7080
 Is Forced Draft fitted no No. and Description of Boilers 3 SB 3 single ended Working Pressure 180 lbs
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? yes
 IS A DONKEY BOILER FITTED? no If so, is a report now forwarded? _____

PLANS. Are approved plans forwarded herewith for Shafting _____ Main Boilers yes Auxiliary Boilers _____ Donkey Boilers _____
 (If not state date of approval)
 General Pumping Arrangements yes Oil fuel Burning Piping Arrangements _____

SPARE GEAR. State the articles supplied:— Two each of connecting rod top-end, bottom-end and main bearing bolts and nuts; One set of coupling bolts and nuts; one set each of feed and bilge pump valves; assorted bolts and nuts; iron of various sizes; one propeller; one tail-end shaft; Two safety valve springs; one main + one donkey feed check valve + minor gear

The foregoing is a correct description,
BLAIR & CO., LIMITED.

H. P. Hamilton

Manufacturer.



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Lloyd's Register Foundation

1924 June 3 30 July 1 4 10 11 14 16 18 22 24 28 30 Aug 1 6 8 12 15 21 24 29 Sep 1 3 6 4

Dates of Survey while building

During progress of work in shops --

During erection on board vessel --

Total No. of visits 34

Dates of Examination of principal parts - Cylinders 6.8.24 Slides 29.8.24

Covers 6.8.24 Pistons 15.8.24 Rods 15.8.24

Connecting rods 15.8.24 Crank shaft 15.8.24 Thrust shaft 8.8.24

Tunnel shafts 1.8.24 & 6.8.24 Screw shaft 5.9.24 Propeller 12.9.24 & 15.9.24

Stern tube 24.7.24 Engine and boiler seatings 15.8.24 Engines holding down bolts 1.10.29

Completion of pumping arrangements 7.10.24 Boilers fixed 3.10.24 Engines tried under steam 3.10.24

Completion of fitting sea connections 15.8.24 Stern tube 15.8.24 Screw shaft and propeller 17.9.24

Main boiler safety valves adjusted 3.10.24 Thickness of adjusting washers P.B S-3/8 P-3/8 C.B S-1/2 S-B S-1/2

Material of Crank shaft Ingot steel Identification Mark on Do. 6959-N

Material of Thrust shaft Ingot steel Identification Mark on Do. 6959-N

Material of Tunnel shafts Ingot steel Identification Marks on Do. 6959-N

Material of Screw shafts Ingot steel Identification Marks on Do. 6959-N

Material of Steam Pipes Lap welded steel Test pressure 540 lb ✓ Date of Test Glasgow 27.8.24

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 carrying and burning oil fuel been complied with ✓

Is this ^{main engine} machinery duplicate of a previous case yes ✓ If so, state name of vessel S.S. Pontyfridd ✓

General Remarks (State quality of workmanship, opinions as to class, &c. The machinery of this vessel has been built under special survey: The materials and workmanship are sound and good. The boilers were tested by hydraulic pressure and the engines and boilers examined under steam and all found satisfactory.

The machinery is now in a good and safe working condition and renders the vessel eligible, in my opinion to have the notation of **⊕ LMC-10.24** in the Register Book

Note: - This vessel is fitted with Electric Light and Wireless

It is submitted that this vessel is eligible for THE RECORD. + LMC 10.24. CL

JWD CWS
14/10/24

CERTIFICATE WRITTEN

W Morrison
Engineer Surveyor to Lloyd's Register of Shipping.

The amount of Entry Fee ... £ 5-0-0 When applied for,
Special ... £ 87-11-0 10.10.1924
Donkey Boiler Fee ... £ ✓ : When received,
Travelling Expenses (if any) £ ✓ : 21.10.24

Committee's Minute TUE. 14 OCT. 1924
Assigned + LMC 10.24
CL

