

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

DEC - 2 1916

Received at London Office

pt. 4.

Date of writing Report

When handed in at Local Office 30. 11. 1916 Port of Belfast

Date, First Survey 2nd Jan. 1916 Last Survey 18. Nov. 1916

(Number of Visits 103)

in Survey held at

Belfast

on the

STEEL S.S.

By whom built

Belfast Harland & Wolff Ltd

Yard No. 1074

Gross Tons 724.47

Net Tons 265.49

When built 1916

By whom made

Belfast Harland & Wolff Ltd

Engine No. 1074

When made 1916

By whom made

Belfast Harland & Wolff Ltd

Boiler No. 1074

When made 1916

Registered Horse Power

Owners The Admiralty

Port belonging to

nom. Horse Power as per Rule

409

Is Refrigerating Machinery fitted for cargo purposes

No

Is Electric Light fitted

Yes

Trade for which Vessel is intended

Admiralty Service

ENGINES, &c.—Description of Engines Four Cylinder Trussed Triple Expansion Revs. per minute 185

Dia. of Cylinders 18 1/2" x 31" x 38 1/2" x 38 1/2" Length of Stroke 30" No. of Cylinders 4 No. of Cranks 4

Crank shaft, dia. of journals as per Rule 10.035" Crank pin dia. 10 1/2" Crank webs Mid. length breadth 16 3/4" Thickness parallel to axis 6 1/2"

Intermediate Shafts, diameter as per Rule 10 1/2" at ends increased to 15 1/4" in body Thrust shaft, diameter at collars as per Rule 10.035" as fitted 10 1/2"

Tube Shafts, diameter as per Rule 10.432" Screw Shaft, diameter as per Rule 10 7/8" Is the tube shaft fitted with a continuous liner Yes

Bronze Liners, thickness in way of bushes as per Rule 19.68/32" Thickness between bushes as per Rule 19 1/2" Is the after end of the liner made watertight in the propeller boss Yes

If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner One length

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

Propeller, dia. 10-6" Pitch 10-8" No. of Blades 3 Material Blau Bronze Whether Moveable Solid Total Developed Surface 31 sq. feet

Can one be overhauled while the other is at work

Can one be overhauled while the other is at work

Feed Pumps No. and size 2 of 8 1/2" x 6 x 18" Main Aux. Pumps connected to the Main Bilge Line No. and size 2 of 50 tons per each One 5" Donkey Pump

How driven Steam Main Bilge Line How driven Steam

Lubricating Oil Pumps, including Spare Pump, No. and size

Are two independent means arranged for circulating water through the Oil Cooler

Suctions, connected to both Main Bilge Pumps and Auxiliary

In Engine and Boiler Room ENG ROOM 2 @ 3" BOILER ROOM 4 @ 3" including 3 direct suctions

In Pump Room In Holds, &c. 12 @ 2"

Main Water Circulating Pump Direct Bilge Suctions, No. and size One @ 9 1/2"

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size One @ 3" in ER, one @ 3" in each B.L.P. ROOM

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 stowage plates Yes Are the Overboard Discharges above or below the deep water line At water line

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

What Pipes pass through the bunkers none (Leaking coils only) How are they protected

That pipes pass through the deep tanks Have they been tested as per Rule Yes

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 Tunnel watertight Is it fitted with a watertight door worked from

MAIN BOILERS, &c.—(Letter for record S) Total Heating Surface of Boilers 7080 sq. ft.

Is Forced Draft fitted Yes No. and Description of Boilers Two S.F. Multitubular Working Pressure 225 lbs/sq. in.

IS A REPORT ON MAIN BOILERS NOW FORWARDED? Yes

IS A DONKEY BOILER FITTED? No. If so, is a report now forwarded?

Is the donkey boiler intended to be used for domestic purposes only

PLANS. Are approved plans forwarded herewith for Shafting Main Boilers Plans approved London Auxiliary Boilers Donkey Boilers

(If not state date of approval)

Superheaters General Pumping Arrangements Oil fuel Burning Piping Arrangements

SPARE GEAR.

Has the spare gear required by the Rules been supplied Yes

State the principal additional spare gear supplied Please see attached list.

Water Capacity. Tons. 16.5. 8.5.

The foregoing is a correct description, For HARLAND AND WOLFF, LIMITED.

A. G. Marshall Secretary

Manufacturer.



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Lloyd's Register Foundation

1991-0324

42.

1940
 Jan. 28 Mar 22 27 29 Apr 1 9 12 16 20 26 29 May 6 8 9 16 17 27 June 3 6 7 13 14 20 29 July 1 3 4 9 10 16 19 20 22 23 24 26 29 30 31 Aug 1 2 5 7 8 9 12 13 14 15 16 17 18 19 20 21 22 23 25 26 28 29 Sept 3 4 6 9 10 11 12 13 16 19 20 23 24 25 26 27 28 30 Oct 1 2 4 5 10 11 16 19 21 22 23 24 25 28 30 Nov 4 5 6 7 8 9 11 12 13 15 18
 During progress of work in shops - -
 During erection on board vessel - - -
 Total No. of visits 103

Dates of Examination of principal parts—Cylinders 20.6.40 to 29.7.40 Slides 6.6.40 to 4.10.40 Covers 20.6.40 to 29.7.40
 Pistons 24.9.40 Piston Rods 24.9.40 Connecting rods 21.10.40
 Crank shaft 16.9.40 Thrust shaft 4.7.40 Intermediate shafts 24.9.40
 Tube shaft ✓ Screw shaft 24.9.40 Propeller 21.8.40
 Stern tube 26.9.40 Engine and boiler seatings 3.10.40 Engines holding down bolts 22.10.40
 Completion of fitting sea connections 3.10.40
 Completion of pumping arrangements 6.11.40 Boilers fixed 10.10.40 Engines tried under steam 7.11.40, 16.11.40
 Main boiler safety valves adjusted 7.11.40 Thickness of adjusting washers Ford B.L. P 3/8" S 1/2" Alfa B.L. P 1/2" S 3/4"
 Crank shaft material Steel Identification Mark LLOYD No 1012 RLA 16.9.40 Thrust shaft material Steel Identification Mark LLOYD No 359 R.S. 26.9.40
 Intermediate shafts, material Steel Identification Marks LLOYD No 359 R.S. 26.9.40 Tube shaft, material ✓ Identification Mark
 Screw shaft, material Steel Identification Mark LLOYD No 359 R.S. 26.9.40 Steam Pipes, material S.D. Steel Test pressure 675 lb Date of Test 25.12.39 / 5.11.40
 Is an installation fitted for burning oil fuel Yes Is the flash point of the oil to be used over 150°F. Yes
 Have the requirements of the Rules for the use of oil as fuel been complied with Yes
 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 "ARABIS" etc BEL. Reg. No 1259

General Remarks (State quality of workmanship, opinions as to class, &c.) These engines have been constructed under Special Survey in accordance with the Rules, approved plans. The materials and workmanship are good. This machinery has been efficiently installed aboard the vessel and tried out under full working conditions at sea, with satisfactory results.

In our opinion the vessel is eligible for the notations, in the Society's Register Book, of
 F LMC 11.40 CL 2 SB 225 hp FD

The amount of Entry Fee ... £ : : When applied for,
 Special ... £ 170 : - : 30.11.19
 Donkey Boiler Fee ... £ : :
 Travelling Expenses (if any) £ : :
 When received, 11.12.19
 R. Lee James, Engineer Surveyor to Lloyd's Register of Shipping, Gen. S. Thomas

Committee's Minute
 Assigned 57 LMC 11.40
 Fitted for oil fuel etc 22, CL.



The Surveyors are requested not to write on or below the space for Committee's Minute.