

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Date of writing Report 13/12/45 When handed in at Local Office 14/11/45 Port of Belfast
 No. in Survey held at Belfast Date, First Survey 7 June 1945 Last Survey 12 Nov 1945
 Reg. Book S.S. "EMPIRE BELLA" (Number of Visits 46)
 on the Glasgow By whom built Harland & Wolff Yard No. 1318G Tons Gross 980 Net 350
 Engines made at Belfast By whom made Messrs. Harland & Wolff Ltd Engine No. 1318G When made 1945
 Boilers made at Belfast By whom made Messrs. Harland & Wolff Ltd Boiler No. 1318G When made 1945
 Registered Horse Power Owners The Admiralty Knowl Port belonging to Glasgow
 Nom. Horse Power as per Rule 144 145 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes
 Trade for which vessel is intended

ENGINES, &c.—Description of Engines Three Cylinder Triple Expansion Revs. per minute 130
 Dia. of Cylinders 13 1/2" - 22 3/4" - 38" Length of Stroke 27" No. of Cylinders 3 No. of Cranks 3
 Crank shaft, dia. of journals as per Rule 7 3/8" Crank pin dia. 7 3/8" Mid. length breadth Thickness parallel to axis 4 1/2"
 as fitted 7 3/8" Crank webs shrunk Thickness around eye-hole 3 1/2"
 Intermediate Shafts, diameter as per Rule 7 1/4" Thrust shaft, diameter at collars as per Rule 7 3/8"
 as fitted 7 1/4" as fitted 7 3/8"
 Tube Shafts, diameter as per Rule Screw Shaft, diameter as per Rule 8 1/2" - 7 3/8" at foot end Is the shaft fitted with a continuous liner? No
 as fitted 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
 at If so, state type Newark Length of Bearing in Stern Bush next to and supporting propeller 31 1/2"
 Propeller, dia. 9'-0" Pitch 10'-0" No. of Blades 4 Material Man Iron whether Moveable Solid Total Developed Surface 32.6 sq. feet
 Feed Pumps worked from the Main Engines, No. Diameter Stroke Can one be overhauled while the other is at work
 Bilge Pumps worked from the Main Engines, No. Diameter Stroke Can one be overhauled while the other is at work
 Feed Pumps No. and size How driven Pumps connected to the Main Bilge Line No. and size How driven
 Ballast Pumps, No. and size 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
 Bilge Pumps:—In Engine and Boiler Room In Pump Room In Holds, &c.

Main Water Circulating Pump Direct Bilge Suctions, No. and size Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size
 Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes
 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
 Are all Sea Connections fitted direct on the skin of the ship Are they fitted with Valves or Cocks
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Are the Overboard Discharges above or below the deep water line
 Are they each fitted with a Discharge Valve always accessible on the plating of the vessel Are the Blow Off Cocks fitted with a spigot and brass covering plate
 What Pipes pass through the bunkers How are they protected
 What pipes pass through the deep tanks 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
 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 Is the Shaft Tunnel watertight Is it fitted with a watertight door worked from

MAIN BOILERS, &c.—(Letter for record 5) Total Heating Surface of Boilers 2370 4/ ✓
 Which Boilers are fitted with Forced Draft Yes Which Boilers are fitted with Superheaters
 No. and Description of Boilers Two Multitubular Cylindrical Working Pressure 200 lbs/sq. ✓
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? Yes
 IS A DONKEY BOILER FITTED? 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 6.4.45. Main Boilers 23.5.45. 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

The foregoing is a correct description.

By HARLAND & WOLFE, LIMITED

Manufacturer.

1945
During progress of work in shops - - June 7, 12, 14, 25, 28 July 6 Aug 2, 6, 8, 9, 14, 17, 18, 22, 23 Sept 3, 5, 6, 7, 8, 10, 11, 12, 18, 16, 19, 20, 21, 24, 26, 27, 28, 29 Oct 3, 4, 5, 9, 12, 16, 17, 23, 25, 26, 29 Nov 12 = 46
Dates of Survey while building
During erection on board vessel - - -
Total No. of visits

Dates of Examination of principal parts - Cylinders 14.8.45, 18.8.45, 28.8.45 Slides 4.10.45 Covers 28.8.45/18.8.45
Pistons 4.10.45 Piston Rods 1.8.45 & 15.9.45 Connecting rods 17.8.45 & 18.8.45
Crank shaft 1.9.45 Thrust shaft 17.9.45 Intermediate shafts 28.9.45
Tube shaft - Screw shaft 10.9.45 Propeller 24.9.45
Stern tube Engine and boiler seatings Engines holding down bolts

Completion of fitting sea connections

Completion of pumping arrangements

Boilers fixed

Engines tried under steam

Main boiler safety valves adjusted

Thickness of adjusting washers

Crank shaft material Steel 28/32 Tm Identification Mark LLOYD No 1119 857 R/M Thrust shaft material Steel 28/32 Tm Identification Mark LLOYD T915 857

Intermediate shafts, material Steel 28/32 Tm Identification Marks LLOYD No 483 857 Tube shaft, material - Identification Mark -

Screw shaft, material Steel 28/32 Tm Identification Mark LLOYD No 483 857 Steam Pipes, material - Test pressure - Date of Test -

Is an installation fitted for burning oil fuel

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

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 A.M. Yacht 1317 G.

General Remarks (State quality of workmanship, opinions as to class, &c.) These engines have been constructed

under Special Survey in accordance with the Rules. The materials & workmanship are good. The terms of the Admiralty Machinery Specification have been complied with. This machinery has now been dispatched to Glasgow.

The amount of Entry Fee ... £ : : When applied for, 14/11/19 45
Special (Classification + 25%) £ 18 : - :
Donkey Boiler Fee ... £ : : When received,
Travelling Expenses (if any) £ : : 19

Committee's Minute GLASGOW 19 FEB 1946

Assigned SEE ACCOMPANYING MACHINERY REPORT.

Engineer Surveyor to Lloyd's Register of Shipping.



© 2021

Lloyd's Register Foundation