

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Date of writing Report 2-2-1938 When handed in at Local Office 8-2-1938 Port of West Hartlepool
 No. in Survey held at Hartlepool Date, First Survey 13th April, 1937 Last Survey 27th January 1938
 Reg. Book. on the SS "Chubmleigh" (Number of Visits 87)
 Built at Sunderland By whom built W. Pickersgill & Sons Ltd. Yard No. 238 Tons 1938
 Engines made at Hartlepool By whom made Richardsons Westgarth & Co. Ltd. Engine No. 2687 When made 1938
 Boilers made at Hartlepool By whom made Richardsons Westgarth & Co. Ltd. Boiler No. 2687 When made 1938
 Registered Horse Power 502 Owners W. J. Tatem Ltd. Port belonging to London
 Nom. Horse Power as per Rule 502 Is Refrigerating Machinery fitted for cargo purposes No. Is Electric Light fitted Yes.
 Trade for which Vessel is intended Ocean going.

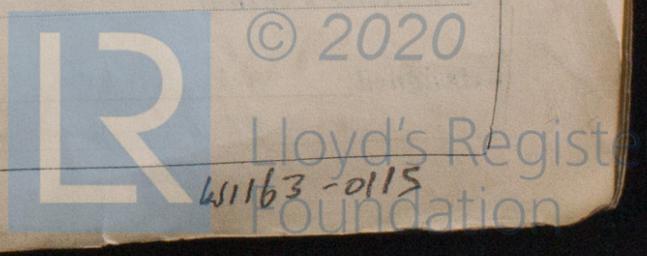
ENGINES, &c.—Description of Engines Triple Expansion, inverted direct acting surface condensing Revs. per minute 59
 Dia. of Cylinders 24", 40", 69" Length of Stroke 48" No. of Cylinders 3 No. of Cranks 3
 Crank shaft, dia. of journals as per Rule 13.82" Crank pin dia. 14 1/2" Crank webs Mid. length breadth 20 1/2" Thickness parallel to axis 8 3/4"
 as fitted 14" Mid. length thickness 8 3/4" shrunk Thickness around eye-hole 6 1/8"
 Intermediate Shafts, diameter as per Rule 13.16" Thrust shaft, diameter at collars as per Rule 13.82"
 as fitted 13.25" as fitted 14"
 Tube Shafts, diameter as per Rule 14.66" Screw Shaft, diameter as per Rule 14.75" Is the tube shaft fitted with a continuous liner Yes
 as fitted 7.5" as fitted 7.5" Is the screw shaft fitted with a continuous liner Yes
 Bronze Liners, thickness in way of bushes as per Rule 7.5" Thickness between bushes as per Rule 9/16" Is the after end of the liner made watertight in the propeller boss Yes
 as fitted 7.5" as fitted 9/16" If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner Yes
 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 Yes
 If two liners are fitted, is the shaft lapped or protected between the liners Yes Is an approved Oil Gland or other appliance fitted at the after end of the tube shaft Yes
 Propeller, dia. 18'0" Pitch 18'6" No. of Blades 4 Material Bronze whether Moveable No Total Developed Surface 107 sq. feet
 Feed Pumps worked from the Main Engines, No. 2 Diameter 4" Stroke 27" Can one be overhauled while the other is at work Yes
 Bilge Pumps worked from the Main Engines, No. 2 Diameter 4" Stroke 27" Can one be overhauled while the other is at work Yes
 Feed Pumps { No. and size Two 9 1/2" x 7" x 21" Pumps connected to the Main Bilge Line { No. and size Two 4" x 27" stroke — One 9" x 11" x 10"
 How driven Steam How driven Main Engines — Steam
 Ballast Pumps, No. and size One 9" x 11" x 10" 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 1, 3" Engine Room port; 2, 3" Boiler Room; 1, 2" Dry Tank; 1, 2 1/2" Engine Room direct. Star.
 In Pump Room ✓ In Holds, &c. No. 1 Hold, 2-3"; No. 2 Hold 2-3 1/2"; No. 3 Hold, 2-2 1/2"; Tunnel 1-4" No. 3 Hold 2-3"; Tunnel Well 1-2 1/2" No. 4 Hold, 2-3" 2-3" in No. 4
 Main Water Circulating Pump Direct Bilge Suctions, No. and size One, 7 1/2" Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1-5" Star side. 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 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 Both
 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 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
 What Pipes pass through the bunkers None 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 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 Yes Is it fitted with a watertight door Yes worked from Engine room top.

MAIN BOILERS, &c.—(Letter for record S) Total Heating Surface of Boilers 4225 sq. ft.
 Is Forced Draft fitted Yes No. and Description of Boilers 2 Main & 1 Auxiliary Working Pressure 220 lbs.
 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 Yes Main Boilers Yes Auxiliary Boilers Yes Donkey Boilers ✓
 Superheaters Yes General Pumping Arrangements Yes 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 One propeller shaft.

The foregoing is a correct description.
 For RICHARDSONS, WESTGARTH & CO. LIMITED.

W. J. Tatem
 Manufacturer.



1937 April 13-30 May 3 June 4 11-15-22-24-29-30 July 7-14-19-20-25-30 Aug 10-16-24-27-31 Sept 1-2-6-9-14-16-17-22-30 Oct 1-4-5-6-7-12-13-15-21-22-25-26-29 Nov 1-3-5-10-12-15-22-24-25-27-29-30 Dec 2-10-13-15-16-20-22-24-28-31 1938 Jan 5-7-11-12-13-17-18-19-24-25

Dates of Survey while building
 During progress of work in shops - -
 During erection on board vessel - - -
 Total No. of visits **87**

Dates of Examination of principal parts—Cylinders 16-7-37, 14-9-37, 30-9-37, 5-10-37, 1-11-37 Slides 20-12-37 Covers 10-11-37, 20-12-37
 Pistons 26-10-37, 20-12-37 Piston Rods 7-10-37, 20-12-37 Connecting rods 12-11-37, 20-12-37
 Crank shaft 30-4-37, 9-9-37, 22-9-37, 21-10-37 Thrust shaft 12-10-37 Intermediate shafts 6-10-37, 14-10-37, 25-10-37
 Tube shaft ✓ Screw shaft 1-10-37, 25-10-37, 3-11-37, 24-11-37 Propeller 5-1-38
 Stern tube 12-11-37, 15-11-37 Engine and boiler seatings 5-1-38 Engines holding down bolts 13-1-38, 21-1-38
 Completion of fitting sea connections 16-12-37
 Completion of pumping arrangements 26-1-38 Boilers fixed 13-1-38, 18-1-38 Engines tried under steam 27-1-38
 Main boiler safety valves adjusted 26-1-38 Thickness of adjusting washers Port Btr. 7/16" S 5/16" Centre Btr. 7/16" S 1/2" Stan. Btr. 7/16" S 5/16"
 Crank shaft material Steel Identification Mark 6760 HAI Thrust shaft material Steel Identification Mark 7173 HAI
 Intermediate shafts, material Steel Identification Marks 7173 HAI Tube shaft, material - Identification Mark -
 Screw shaft, material Steel Identification Mark 7173 HAI Steam Pipes, material Steel Test pressure 660 lbs. Date of Test 24-1-38
 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 "Northleigh" W. H. R. Pt No 17738

General Remarks (State quality of workmanship, opinions as to class, &c.) The Engines & Boilers have been constructed under Special Survey and in accordance with the approved plans. The materials and workmanship have been found good. Upon completion and after installation in the vessel the Engines & Boilers were examined under full working conditions and found satisfactory. It is Recommended that the machinery of this vessel be classed in the Register Book + LMC 1.38. 2 S.B. (Spt) & 1 Aux S.B. F.D. C.L.

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

The amount of Entry Fee ... £ 6 : 0 :
 Special ... £ 100 : 2 :
 Donkey Boiler Fee ... £ : :
 Travelling Expenses (if any) £ : :
 When applied for, 9-2-1938
 When received, 15/2 1938
 JMK 22/2

J. D. Brooke Smith
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute
 Assigned + LMC 5.38
 2 SB (Spt) J & CL
 1 Aux SB

