

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

12 MAR 1942

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19 MAR 1942

Date of writing Report 27. 2. 1942 When handed in at Local Office 27. 2. 1942
 No. in Survey held at HULL Date, First Survey 27. 3. 41. Last Survey 1. 3. 1942
 Reg. Book. on the STEAM TUG. **ADEPT** (Number of Visits 54.)

Built at SELBY. By whom built Cochran & Sons, Ltd. Yard No. 1237. When built 1942. 2
 Engines made at HULL. By whom made Chas. D. Holmes & Co. Ltd. Engine No. 1596 When made do
 Boilers made at HULL. By whom made Chas. D. Holmes & Co. Ltd. Boiler No. 1596. When made do
 Registered Horse Power Owners The Admiralty Port belonging to
 Nom. Horse Power as per Rule 222 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes
 Trade for which Vessel is intended **Voicing**

ENGINES, &c.—Description of Engines **Triple Expansion**. Revs. per minute 122.
 Dia. of Cylinders 17" x 28" x 46". Length of Stroke 33". No. of Cylinders 3. No. of Cranks 3.
 Crank shaft, dia. of journals as per Rule 9.46. Crank pin dia. 9 5/8". Crank webs Mid. length breadth. Thickness parallel to axis 6 1/8".
 as fitted 9 5/8". Mid. length thickness. shrunk Thickness around eye-hole 4 7/16".
 Intermediate Shafts, diameter as per Rule 9.01. Thrust shaft, diameter at collars as per Rule 9.46.
 as fitted 9 1/4". Is the tube screw shaft fitted with a continuous liner? Yes.
 Tube Shafts, diameter as per Rule None. Screw Shaft, diameter as per Rule 9.99".
 as fitted None. as fitted 10 1/4". Is the after end of the liner made watertight in the propeller boss? Yes.
 Bronze Liners, thickness in way of bushes as per Rule 601. Thickness between bushes as per Rule 45".
 as fitted 2 1/2". as fitted 1 3/4".

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 shaft? No. If so, state type —

Propeller, dia. 11'-9". Pitch 12'-0". No. of Blades 4. Material C.I. whether Moveable **Slid.** Length of Bearing in Stern Bush next to and supporting propeller 4 1/2".
 Feed Pumps worked from the Main Engines, No. 2. Diameter 3". Stroke 18". Can one be overhauled while the other is at work? Yes.
 Bilge Pumps worked from the Main Engines, No. 2. Diameter 3". Stroke 18". Can one be overhauled while the other is at work? Yes.
 Feed Pumps { No. and size One 7" x 5" x 6" Duplex. Pumps connected to the { No. and size 2 @ 3" x 18" One 7" x 7" x 8" Steam Hand pump
 How driven Independent Steam. Main Bilge Line { How driven Main Eng. 1st Steam Ejector. 1st 2nd Steam Ejector. 1st 2nd Hand pump

Ballast Pumps, No. and size One 7" x 7" x 8". Lubricating Oil Pumps, including Spare Pump, No. and size
 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 2 @ 2 1/2" & 3" Steam Ejector. & 4, 1 1/2" dia suction in gutterways.
 In Pump Room Cofferdam 1 @ 2". In Holds, &c. One each of the following @ 2" Dia:—Fore Peak;
 (Water Ballast Port & Star. Apr Peak).

Main Water Circulating Pump Direct Bilge Suctions, No. and size One @ 6" dia Independent Power Pump Direct Suctions to the Engine Room Bilges,
 No. and size 3" Steam Ejector. 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? 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? 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 Tunnel watertight? None. Is it fitted with a watertight door? — worked from? —

MAIN BOILERS, &c.—(Letter for record 5) Total Heating Surface of Boilers 3550 sq. ft.
 Is Forced Draft fitted All. No. and Description of Boilers One S.B. Working Pressure 210 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 10-1-40. Main Boilers 20-10-39 Auxiliary Boilers — Donkey Boilers —
 (If not state date of approval)
 Superheaters — General Pumping Arrangements 13-5-40. Oil fuel Burning Piping Arrangements 26-4-40.

SPARE GEAR.
 Has the spare gear required by the Rules been supplied? Yes.
 State the principal additional spare gear supplied.
 2 Top end bolts & nuts 1 Set Lockwood & Colville rings & springs
 2 Bottom end do for Pistons & Piston Valves.
 2 Main Bearing do. 4 Boiler Stay Tube.
 1 Set Coupling bolts 12 " Plain "
 2 Safety Valve Springs 1 Piston Rod
 Condenser Tubes. 1 Valve Rod
 1 Main 1 Aux Check Valve
 1 Set Feed & bilge pump Valve 1 propeller.
 1 Set Air pump Valve. 1 propeller shaft.

The foregoing is a correct description.
 FOR CHARLES D. HOLMES & CO., LTD.
 W.R. Evans Manufacturer.



Dates of Survey while building
 During progress of work in shops - - 1941. Jan 27. July 29, Aug. 5, 6, 16, 21, 22, 29. Oct. 10, 11, 24, 31. Nov. 6, 7, 10, 11, 12, 14, 15, 17, 18, 20, 21, 26
 During erection on board vessel - - - Dec. 1, 5, 10, 12, 15, 16, 18, 19, 28, 29. 1942. Jan. 1, 2, 7, 15, 16, 17, 20, 21, 22, 29, 24. Feb. 2, 3, 4, 6.
 Total No. of visits 57.

Dates of Examination of principal parts - Cylinders 11/11/41, 15/11/41, 17/11/41 Slides 12/12/41. Covers 11/11/41, 15/11/41, 17/11/41.
 Pistons 3/10/41, 7/11/41. Piston Rods 2/10/41. Connecting rods 2/10/41, 2/11/41.
 Crank shaft 17/11/41. Thrust shaft 6/11/41. Intermediate shafts 14/11/41.
 Tube shaft NONE. Screw shaft 27/3/41. Propeller 16/8/41.

Stern tube 16/8/41. Engine and boiler seatings 1-1-42. Engines holding down bolts 25-1-42
 Completion of fitting sea connections 2/4/41.

Completion of pumping arrangements 6-2-42. Boilers fixed 23-1-42. Engines tried under steam 6-2-42

Main boiler safety valves adjusted 6-2-42. Thickness of adjusting washers F 1/32" A. 3/8"
 Crank shaft material M.S. Identification Mark 5959. Jammals. 5960. AEG. 2/8/41. Thrust shaft material M.S. Identification Mark 5957. AEG. 2-8-41.

Intermediate shafts, material M.S. Identification Marks 5958. AEG. 2-8-41. Tube shaft, material NONE. Identification Mark ✓
 Screw shaft, material M.S. Identification Mark 5495. AEG. 16-7-41. Steam Pipes, material Steel. Test pressure 630 lb Date of Test 22/1/42.

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 No.

Is this machinery duplicate of a previous case Yes. If so, state name of vessel "ASSURANCE" with minor modifications

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

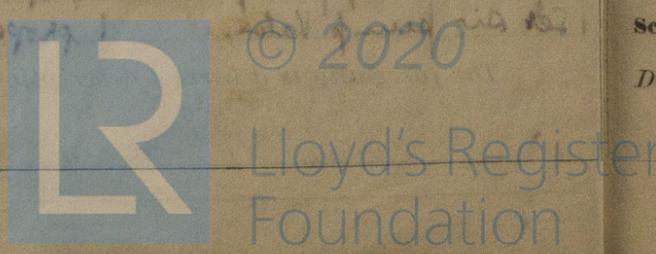
The Machinery of this vessel has been fitted on board under Special Survey, in accordance with the approved plans, the Rules & the Specification. The workmanship & materials are good & when tried under steam it was found satisfactory in every respect.

It is eligible, in our opinion, to have the record of 459 L.M.C. 2-42. C.L. & the notations of T. 3 cy. 17", 28" 46" - 33. 210 lbs 222 HP. 1.5B. 3 cf. H.S. 3550 F.D.

The amount of Entry Fee ... £ : : When applied for, 13 MAR 1942
 Special ... £ 120: 0 :
 Donkey Boiler Fee ... £ : : When received,
 Travelling Expenses (if any) £ : : 19

Committee's Minute TUE 24 MAR 1942
 Assigned Fitt for al jelloz J.D. C.L.

Engineer Surveyor to Lloyd's Register of Shipping, [Signature]



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