

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office. 6-9 OCT 1946

Date of writing Report 9-9-46 When handed in at Local Office 19 Port of Liverpool
 No. in Survey held at Birkenhead Date, First Survey 15/5/45 Last Survey 6/9/1946
 Reg. Book AS JOHN HOLT (Number of Visits 128) Tons {Gross 3818
 on the AS JOHN HOLT Net 1946
 Built at Birkenhead By whom built Cammell Laird Works Yard No. 1171 When built 1946
 Engines made at Birkenhead By whom made Cammell Laird Works Engine No. 1171 When made 1946
Bauer Wash Turb. at Swan Hunter, Newcastle
 Boilers made at Birkenhead By whom made Cammell Laird Works Boiler No. 1171 When made 1946
 Registered Horse Power 471 Owners John Holt Ltd Port belonging to Liverpool
 Nom. Horse Power as per Rule 471 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes
 Trade for which vessel is intended MN = 564 ?

ENGINES, &c. Description of Engines Triple expansion with Bauer Wash turb. Turbine Revs. per minute 80
 Dia. of Cylinder 23-38 1/2 x 64 Length of Stroke 45 No. of Cylinders 3 No. of Cranks 3
 as per Rule 13.126 as fitted 13.75 Crank pin dia. 14 Crank webs Mid. length breadth 26.5 Thickness parallel to axis 8.625
 Intermediate Shafts, diameter as per Rule 12.497 as fitted 12.875 Thrust shaft, diameter at collars as per Rule 13.126 as fitted 13.75
 Tube Shafts, diameter as per Rule 13.89 as fitted 14.5 Is the tube shaft fitted with a continuous liner yes
 Screw Shaft, diameter as per Rule 17.5 as fitted 13/16 Thickness between bushes as per Rule 9/16 as fitted 11/16 Is the after end of the liner made watertight in the propeller boss yes
 Bronze Liners, thickness in way of bushes as per Rule 13/16 as fitted 11/16 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 a plastic material insoluble in water and non-corrosive no
 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 yes
 If so, state type at 17/6 Length of Bearing in Stern Bush next to and supporting propeller 5'-2"
 Propeller, dia 17-11 Pitch 16-0 No. of Blades 4 Material Brass whether Moveable no Total Developed Surface 109.5 sq. feet
 Feed Pumps worked from the Main Engines, No. none Diameter 4 1/2 Stroke 26 Can one be overhauled while the other is at work yes
 Bilge Pumps worked from the Main Engines, No. 2 Diameter 4 1/2 Stroke 26 Can one be overhauled while the other is at work yes
 Feed Pumps { No. and size 3 @ 7" x 9 1/2" x 21" Pumps connected to the Main Bilge Line { No. and size 1 @ 9" x 10" x 10" 1 @ 7" x 9 1/2" x 21"
 How driven Steam How driven Steam + M.E.
 Ballast Pumps, No. and size 1 @ 9" x 10" x 10" Lubricating Oil Pumps, including Spare Pump, No. and size 2 @ 8" x 9" x 18"
 Are two independent means arranged for circulating water through the Oil Cooler yes Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge Pumps:—In Engine and Boiler Room 3 @ 3" 4 @ 2"
 In Pump Room 2 @ 3" N5, 1 @ 2 1/2" Tunnel Well In Holds, &c. 2 @ 3" N1, 2 @ 3" N2, 2 @ 3" N3, 2 @ 3" N4
 Main Water Circulating Pump Direct Bilge Suctions, No. and size 1 @ 10" Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1 @ 5"
 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 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 both
 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 yes
 What pipes pass through the deep tanks none 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 yes Is it fitted with a watertight door yes worked from upper deck

MAIN BOILERS, &c.—(Letter for record A) Total Heating Surface of Boilers 5700 sq ft + 2060 = 7760 sq ft
 Which Boilers are fitted with Forced Draft both Which Boilers are fitted with Superheaters Both Working Pressure 220 lb. sq. in.
 No. and Description of Boilers 2 Single ended
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? yes
 IS A DONKEY BOILER FITTED? no If so, is a report now forwarded? yes
 Can the donkey boiler be used for domestic purposes only yes

PLANS. Are approved plans forwarded herewith for Shafting 14-6-45 Main Boilers 22-3-46 Auxiliary Boilers yes Donkey Boilers yes
 (If not state date of approval)
 Superheaters NWC CERTS 22040, 21863 General Pumping Arrangements 11-3-46 Oil fuel Burning Piping Arrangements yes

SPARE GEAR.
 Has the spare gear required by the Rules been supplied yes
 State the principal additional spare gear supplied See attached list

The foregoing is a correct description on behalf of
CAMMELL LAIRD & Co. LIMITED
 J. Davey
 Manufacturer.



154547

During progress of work in shops - - 15/5/45
 Dates of Survey while building 19/10
 During erection on board vessel - - - 6/9/46
 Total No. of visits 128

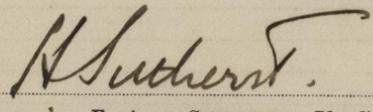
Dates of Examination of principal parts—Cylinders 18-2-46 Various Slides 18-2-46 Covers 29-11-45
 Pistons 14-2-46 Piston Rods 14-2-46 Connecting rods 26-11-45
 Crank shaft 12-2-46 Various Thrust shaft 12-2-46 Intermediate shafts 12-2-46 Various
 Tube shaft ✓ Screw shaft 12-2-46 Propeller 10-5-46
 Stern tube 29-11-45 Engine and boiler seatings 28-3-46 Engines holding down bolts 15-7-46
 Completion of fitting sea connections 28-3-46
 Completion of pumping arrangements 6-9-46 Boilers fixed 22-5-46 Engines tried under steam 6-9-46
 Main boiler safety valves adjusted 23-7-46 Thickness of adjusting washers 5/16 Both. Supt 3/8 11/32 Sft 13/32
 Crank shaft material Steel Identification Mark 52558-59-61 Thrust shaft material Steel Identification Mark HS 4692
 Intermediate shafts, material Steel Identification Marks 36880-81, 39721-22 Tube shaft, material ✓ Identification Mark 36884 HS
 Screw shaft, material Steel Identification Mark 39686 HS Steam Pipes, material Steel SD Test pressure 660 lb. Date of Test 10-5-46
 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 yes If so, have the requirements of the Rules been complied with yes
 If the notation for Ice Strengthening is desired, state whether the requirements in this respect have been complied with yes
 Is this machinery duplicate of a previous case yes If so, state name of vessel Jonathan Holt, 120251, 146

General Remarks (State quality of workmanship, opinions as to class, &c.) The machinery of this vessel has been built under special survey, to approved plans in accordance with the Society's Rules. Materials & workmanship are good. It is fitted in the SS John Holt, tried under working conditions & found eligible to be classed with record A + LMC 9.46. L.P. Turbine with D.R. gearing & hydraulic coupling. Fitted for oil fuel 9.46 F.P. above 150° F. Shaft C.L.

The amount of Entry Fee ... £ 5 : :
 Special ... £ 83 + 9 : :
 Donkey Boiler Fee ... £ : :
 Travelling Expenses (if any) £ : :

When applied for, 30/9/46
 When received, 19


 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute LIVERPOOL - 8 OCT 1946

Assigned + LMC 9.46 C.L. F.O.
Fitted for oil fuel 9.46 F.P. above 150° F.
L.P. turbine with D.R. gearing and hydraulic coupling.



Certificate to be sent to
 (The Surveyors are requested not to write on or below the space for Committee's Minute.)
 ML-10