

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY

Received at London Office

28 JUL 1943

Date of writing Report 17-7-43, When handed in at Local Office 28 JUL 1943, Port of LYTHAM
 No. in Survey held at Lytham & Preston, Date, First Survey 3/11/41, Last Survey 5/7/1943
 Reg. Book. on the Steel screw, "FRESHPOOL" (Number of Visits 54) Tons {Gross 278.14, Net 98.69.
 Built at Lytham By whom built Lytham S.B. & C. Co. Ltd. Yard No. 842 When built 1943
 Engines made at - do - By whom made - do - Engine No. 551 When made 1943
 Boilers made at - do - By whom made - do - Boiler No. 550 When made 1945
 Registered Horse Power Owners The Admiralty Port belonging to
 Nom. Horse Power as per Rule 90 Is Refrigerating Machinery fitted for cargo purposes No. Is Electric Light fitted yes
 Trade for which Vessel is intended For Admiralty Tender Services

Engines, &c.—Description of Engines Triple Expansion Inverted Revs. per minute 180
 Dia. of Cylinders 11"-18"-30" Length of Stroke 21" No. of Cylinders 3 No. of Cranks 3
 Crank shaft, dia. of journals as per Rule 5.79 Crank pin dia. 6" Crank webs Mid. length breadth 10" Thickness parallel to axis 3 3/8"
 as fitted 6" Mid. length thickness 3 5/8" Thickness around eye-hole 3"
 Intermediate Shafts, diameter as per Rule 5.514" Thrust shaft, diameter at collars as per Rule 6 1/4"
 as fitted 5 3/4" as fitted
 Tube Shafts, diameter as per Rule 6.334" Is the {tube} shaft fitted with a continuous liner {No.
 as fitted 6 1/2" as fitted {screw}
 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
 as fitted ✓ as fitted ✓ 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 yes Is an approved Oil Gland or other appliance fitted at the after end of the tube
 shaft yes If so, state type Lytham S.B. & C. Co. type Length of Bearing in Stern Bush next to and supporting propeller 24"
 Propeller, dia. 6'10" Pitch 4'0" No. of Blades 4 Material CI whether Moveable No. Total Developed Surface 13 sq. feet
 Feed Pumps worked from the Main Engines, No. Two Diameter 2" Stroke 10 1/2" Can one be overhauled while the other is at work yes
 Bilge Pumps worked from the Main Engines, No. Two Diameter 2" Stroke 10 1/2" Can one be overhauled while the other is at work yes
 Feed Pumps {No. and size One 6' x 12" simplex Pumps connected to the {No. and size Two M.E. pumps + one 6' x 12" simplex
 How driven steam Main Bilge Line How driven G.S. pump (steam driven)
 Ballast Pumps, No. and size One 10' x 12" simplex 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 One P.S. at fore end of E.R. One at aft end of E.R. all 2 1/2" dia. One direct suction on E.R. 2 1/2" dia.
 In STOKEHOLD One P.S. + centre all 2 1/2" dia. In Holds, &c. 2" dia. sections in chain locker, store, crew's space,
and compartment connected to salvage pump G.S. pump + 1-Downton Pump.
 Main Water Circulating Pump Direct Bilge Suctions, No. and size One 4" dia. Independent Power Pump Direct Suctions to the Engine Room Bilges,
 No. and size One 2 1/2" in E.R. One 2 1/2" in B.R. 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 Valves
 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 done How are they protected ✓
 What pipes pass through the deep tanks done 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 No. worked from ✓

MAIN BOILERS, &c.—(Letter for record S) Total Heating Surface of Boilers 1600 sq
 Is Forced Draft fitted yes No. and Description of Boilers One single ended multi-tubular Working Pressure 180 lbs/sq"
 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 18-4-41 Main Boilers 8-4-41 Auxiliary Boilers ✓ Donkey Boilers ✓
 (If not state date of approval)
 Superheaters ✓ General Pumping Arrangements 24-9-42 Oil fuel Burning Piping Arrangements ✓

SPARE GEAR.

Has the spare gear required by the Rules been supplied.

State the principal additional spare gear supplied 2 main bearing Bolts, 6 M.E. CYLINDER studs + nuts, 6 M.E. fuel pump studs + nuts,
1-Complete lock with brasses, M.E. eccentric strap, 1-set of valve rod packing, Condenser ferrules + plugs (2000)
1- Supply valve spring, 1-set of piston + bucket rings for each independent pump,
steering Eng:- 1-set of main top + bottom brasses, 2 pin + salvage pump:- 1 propeller + shaft, Eng:-
main top + bottom brasses, piston rod guide, eccentric rod + strap, valve, spindle + metallic
packing, piston, lub oil pump and plunger.
F.P. Fan Engine:- main bearing + connecting rod bolts.
Dynamo:- 1-set main top + bottom brasses, valve + spindle, governor springs.
Electric Generator - Armature with bearings, 1-set of field coils.
Mendlass:- 1-Each main top + bottom brasses, piston, eccentric rod + strap, valve + spindle.

The foregoing is a correct description.

THE LYTHAM SHIPBUILDING and
ENGINEERING COMPANY, LIMITED

Manufacturer.

R. Friedenthal

008812 - 008822 - 0305

1941 Nov 3, 15, 28 Dec 5, 23
 1941 Jan 2, 9, Feb 13, 20, Apr 17, 24, May 15, 26, July 15, Aug 7, 21, Sept 4, 16, 18, 25
 1943 Jan 11, 15, 21, Feb 4, 10, 19, 26, Mar 5, 11, 18, 25, Apr 2, 15, 21, 25, 30, May 7, 12, 19, June 8, 11, 25, 29
 July 15
 During progress of work in shops - -
 During erection on board vessel - - -
 Total No. of visits 54

Dates of Examination of principal parts—Cylinders 4-9-42 Slides 4-9-42 Covers 4-9-42
 Pistons 4-9-42 Piston Rods 4-9-42, 19-2-43 Connecting rods 4-9-42, 19-2-43
 Crank shaft 23-12-42, 11-1-43, 19-2-43 Thrust shaft 21-8-42 Intermediate shafts 21-8-42
 Tube shaft ✓ Screw shaft 21-8-42 Propeller 21-8-42
 Stern tube 25-4-42 Engine and boiler seatings 18-3-43, 25-8-43 Engines holding down bolts 15-4-43
 Completion of fitting sea connections 11-3-43
 Completion of pumping arrangements 25-6-43 Boilers fixed 2-4-43 Engines tried under steam 25-6-43, 29-6-43
 Main boiler safety valves adjusted 25-6-43 Thickness of adjusting washers P.V. $\frac{3}{8}$ " S.V. $\frac{3}{8}$ " F.
 Crank shaft material Steel Identification Mark No 2240 Thrust shaft material Steel Identification Mark No 2252
 Intermediate shafts, material Steel Identification Marks No 2247, No 2246 Tube shaft, material ✓ Identification Mark ✓
 Screw shaft, material Steel Identification Mark No 2248 Steam Pipes, material S.D. Copper Test pressure 360 lb/sq. in. Date of Test 4-5-43
 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 FRESHMERE.
 General Remarks (State quality of workmanship, opinions as to class, &c.)

The machinery of this vessel has been constructed under special survey in accordance with the approved plans and the Society's Rules. The material and workmanship are sound and good. It has been satisfactorily fitted on board, tried under steam and full working conditions and found satisfactory.

It is eligible in my opinion to be classed in the Register Book with notation:—

+ LMC 4-43 - TS(03) - 15B - 180 lb/sq. in.

The amount of Entry Fee ... £ 2 : 0 : 0 When applied for, 23 JUL 1943
 Special ... £ 22 : 10 : 0
 Donkey Boiler Fee ... £ : : When received, 19
 Travelling Expenses (if any) £ 11 : 9 : 6 19

Committee's Minute

Assigned

Transmit to London

Engineer Surveyor to Lloyd's Register of Shipping.

+ LMC 7.43
 7.20.09