

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 29 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 Lo. 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 5/8"
 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 _____ Screw Shaft, diameter as per Rule 6.334" Is the { tube } shaft fitted with a continuous liner { Lo. }
 as fitted _____ as fitted 6 1/2" { 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 propeller boss yes
 as fitted _____ as fitted _____ 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 _____ 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 Lo. 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 Main Bilge Line { No. and size Two M.E. pumps + one 6 1/2" x 12" simplex
 How driven Steam How driven G.S. pump (steam driven)

Ballast Pumps, No. and size One 10 1/2" 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 in E.R. 2 1/2" dia.
 In STOKEHOLD One P.S. + centre all 2 1/2" dia. In Holds, &c. 2" dia. suction in chain locker, store, crew's space.

Hand 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 S.B. 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 None How are they protected _____

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 Lo. worked from _____

MAIN BOILERS, &c.—(Letter for record S) Total Heating Surface of Boilers 1600 sq ft

Is Forced Draft fitted yes No. and Description of Boilers One single ended, multi-tubular (scotch type) Working Pressure 180 lbs/sq in

IS A REPORT ON MAIN BOILERS NOW FORWARDED? yes

IS A DONKEY BOILER FITTED? Lo. If so, is a report now forwarded? yes

Is the donkey boiler intended to be used for domestic purposes only yes

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. GY COVER studs & nuts, 6 M.E. fork king studs & nuts, 1-Complete lock wind braces, M.E. eccentric strap, 1-set of valve rod packing, Condenser ferrules & plugs (2000), 1- Safety valve spring, 1-set of piston & bucket rings for each independent pump, Steering Eng.:- 1-set of main top & bottom braces, Fore & Salvage Pump:- 1 Impeller & shaft, Eng.:- main top & bottom braces, piston rod guide, eccentric rod & strap, valve, spindle & metallic packing, piston, lub. oil pump and blunger, F.P. Fan Engine:- main bearing & connecting rod bolts, Dynamo:- 1-set main top & bottom braces, valve & spindle, governor springs, Electric Generator - Armature with bearings, 1-set of field coils, Mendlass:- 1-Each main top & bottom braces, piston, eccentric rod & strap, valve & spindle.

The foregoing is a correct description.
THE LYTHAM SHIPBUILDING and ENGINEERING COMPANY, LIMITED
 R. Friedenthal

Manufacturer.

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 Oct 2, 9, 16, 24, 30, Dec 4, 11, 18, 23
 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
 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. 3/8" S.V. 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 **FORD Nº 2247, AFT 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 **7-5-43**
 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 the 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 7-43 - TS(03) - 15B - 180-11/12"

The amount of Entry Fee ... £ **2 : 00** When applied for, **23 JUL 1943**
 Special ... £ **22 : 10** 19...
 Donkey Boiler Fee ... £ : : When received, 19...
 Travelling Expenses (if any) £ **11 : 9 1/2** 19...

J.A. Hendley
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute **27 JUL 1943**
 Assigned **Transmit to London** J.A.H.



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