

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 13 MAY 1942

Date of writing Report 10 When handed in at Local Office 10 Port of Liverpool

No. in Survey held at Lytham & Preston Date, First Survey 28/5/41 Last Survey 20/4 1942
 Reg. Book. on the Steel Screw "FRESHBROOK" (Number of Visits 41) Tons { Gross 278 1/4
 Net 98 69

Built at Lytham By whom built Lytham S.B. & E. Co. Ltd Yard No. 868 When built 1942

Engines made at do By whom made do Engine No. 547 When made do

Boilers made at do By whom made do Boiler No. 546 When made do

Registered Horse Power ✓ Owners The Admiralty Port belonging to London

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 Government Service"

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 3/8" Thickness around eye-hole 3"

Intermediate Shafts, diameter as per Rule 5.514" Thrust shaft, diameter at collars as per Rule 5.79"
as fitted 5 3/4" as fitted 6 1/4" 6 1/2" flange

Tube Shafts, diameter as per Rule 6.334" Screw Shaft, diameter as per Rule 6 1/2" Is the shaft fitted with a continuous liner No
as fitted as fitted

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 ✓ 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. & E. Co. Type Length of Bearing in Stern Bush next to and supporting propeller 27"

Propeller, dia. 6'-10" Pitch 7'-0" No. of Blades 4 Material C.I. whether Movable 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 4" x 12" Simplex Pumps connected to the { No. and size Two M.E. Pumps & One 6 1/2" x 6" x 12" Simplex
 How driven Steam Main Bilge Line { How driven G.S. pumps, Steam Driven.

Ballast Pumps, No. and size One 10 1/2" x 12" x 24" 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
stokehold One P.S. at Centre, all 2 1/2" dia. In Holds, &c. 2" dia suction in forepeak, chain locker, store, crew
space, gland compartment & aft peak; connected to salvage pump & 2 Downston Pumps.

Main Water Circulating Pump Direct Bilge Suctions, No. and size One 4" dia Independent Power Pump Direct Suctions to the Engine Room Bilges,
one 2 1/2" dia in E.R., one 2 1/2" " " Stokehold Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-bones 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 ✓

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. ft.

Is Forced Draft fitted Yes. No. and Description of Boilers One Single Ended Multitubular (Scotch) type Working Pressure 180 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 ✓ 22/4/41.

PLANS. Are approved plans forwarded herewith for Shafting No Main Boiler No Auxiliary Boilers ✓ Donkey Boilers ✓
 (If not state date of approval) 22/4/41 22/4/41.

Superheaters ✓ 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

main bearing bolts & nuts (2). Studs & nuts for M.E. cylinder covers, (6). Studs & nuts for fund rings (6).
Pump lent brasses (1 set). Eccentric shaft coupler. Set of metallic for M.E. valve spindle. Condenser
tubes & ferrules (12+24). Boiler safety valve spring (1). Boiler smoke tubes (6). Set of piston & bucket
ring to each independent pump. Steering engine 1 set of main & top & bottom brasses. Fens & salvage
pump 1 impeller & shaft, engine - main top & bottom brasses (1 set each), piston rod, spindle, eccentric rod &
strap, metallic packing (1 set), lub oil pump. Fan Engine:—Piston rings, main bearing & con rod bolts.
Electric Generator:—armature & bearings, 1 set field coils, 1 set interpole coils, brushes & holder.
Electric engine:—top, bottom & main brasses, piston valve & spindle, gov spring, shock absorbers & assistant
parts. Mindless:—bearing, top & bottom brasses, piston rod, eccentrics, rock shaft, slide rod & valve, reversing valve.

The foregoing is a correct description,

THE LYTHAM SHIPBUILDING and
 ENGINEERING COMPANY, LIMITED

Manufacturer.

Lloyd's Register
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Dates
of Survey
while
building

During progress of
work in shop - -
During erection on
board vessel - -

Total No. of visits

May 28. June 10. 19. 25. July 8. 15. 24. 31. Aug 8. 21. Sept 10. 17. 23. 30. Oct 10. 24. 28. Nov 3. 14. 18. 28. Dec 5. 12. 23. Jan 2. 9. 15. 28.
Feb 13. 20. Mar 5. 20. 24. 27. 30. Apr 7. 11. 15. 17. 20.

Dates of Examination of principal parts—Cylinders 15/7/41 & 21/8/41 Slides 18/11/41 Covers 10/9/41

Pistons 10/9/41 Piston Rods 8/8/41 Connecting rods 21/8/41

Crank shaft 8/8/41 & 10/9/41 Thrust shaft 8/7/41 Intermediate shafts 8/7/41

Tube shaft - Screw shaft 8/7/41 Propeller 10/9/41 & 23/9/41

Stern tube 23/9/41 Engine and boiler seatings 18/11/41 Engines holding down bolts 2/1/42

Completion of fitting sea connections 3/11/41

Completion of pumping arrangements 20/3/42 Boilers fixed 12/12/41 Engines tried under steam 24/3/42. Trial 11/4/42

Main boiler safety valves adjusted 27/3/42. Thickness of adjusting washers Stb Valve 7/16" Port Valve 7/16"

Crank shaft material Steel. Identification Mark ²²¹² AE 10.9.41 Thrust shaft material Steel Identification Mark ²²¹³ AE 8.7.41

Intermediate shafts, material Steel Identification Marks ^{2214/A/B} AE 8.7.41 Tube shaft, material - Identification Mark -

Screw shaft, material Steel Identification Mark ²²¹⁵ AE 8.7.41 Steam Pipes, material SD Copper Test pressure 450 lb Date of Test 10/2/42

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 "Frochet" & "Frochwater"

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 materials and workmanship are sound and good. It has been satisfactorily fitted on board, tried under steam under full working conditions and found satisfactory.

It is eligible in my opinion to be classed in the Register Book with notation + LMC 4.42-TS-06-1 SB 180 lb

The amount of Entry Fee ... £ 2 : 0 : 0
Special ... £ 22 : 10 : 0
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) £ 10 : 2/10

When applied for,

9 MAY 1942

When received,

19...

W.B. Edwards & H. Lindley
Engineer Surveyors to Lloyd's Register of Shipping.

Committee's Minute

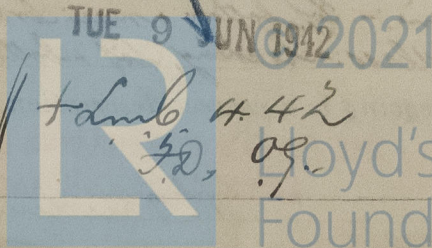
LIVERPOOL

12 MAY 1942

Assigned

Transit to London.

Amel + Lamb 4.42
30.09.



Lloyd's Register
Foundation