

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office.

Date of writing Report 4-1 1945 When handed in at Local Office 5 JAN 1945 Port of Liverpool
 No. in Survey held at Clytham & Preston Date, First Survey 18/10/43 Last Survey 21/12/1944
 Reg. Book 100 (Number of Visits 51) Tons { Gross 282.91 Net 92.82
 on the Steel Screw FRESH TARN
 Built at Clytham By whom built The Clytham Ship Co Ltd Yard No. 846 When built 1944
 Engines made at -do- By whom made -do- Engine No. 555 When made 1944
 Boilers made at -do- By whom made -do- Boiler No. 534 When made 1944
 Registered Horse Power 90 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 Admiralty Tender Services

ENGINES, &c.—Description of Engines Triple Expansion Inverted Revs. per minute 180
 Dia. of Cylinders 11" x 18" x 30" Length of Stroke 21" No. of Cylinders 3 No. of Cranks 3
 Crank shaft, dia. of journals as per Rule 5.49 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" shrunk Thickness around eye-hole 3"
 Intermediate Shafts, diameter as per Rule 5.54 Thrust shaft, diameter at collars as per Rule 5.49
as fitted 5 3/4" as fitted 6 1/4"
 Tube Shafts, diameter as per Rule Screw Shaft, diameter as per Rule 6.334 Is the tube shaft fitted with a continuous liner No.
as fitted as fitted 6 1/8" 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 yes 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 yes Is an approved Oil Gland or other appliance fitted at the after end of the tube
 at yes If so, state type Clytham S.H. Co Length of Bearing in Stern Bush next to and supporting propeller 24"
 Propeller, dia. 640" Pitch 450" 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 4" x 18" simplex Pumps connected to the Main Bilge Line { No. and size Two 1 1/2" pumps one 6 1/2" x 6 1/2" x 18" simplex
 How driven steam How driven St. pump steam driven

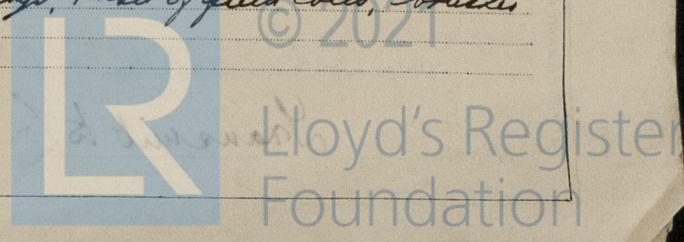
Ballast Pumps, No. and size One 10 1/2" x 13" x 24" simplex Lubricating Oil Pumps, including Spare Pump, No. and size —
 Are two independent means arranged for circulating water through the Oil Cooler yes Suctions, connected both to Main Bilge Pumps and Auxiliary
 Bilge Pumps:—In Engine and Boiler Room One P.S. at fore end of ER, one at aft end of ER, one at 2 1/2" dia. condenser suction in ER, 2 1/2" dia.
 In Pump Room One P.S. + Centre, one 2 1/2" dia. In Holds, &c. 2 1/2" dia. sea in chain locker, crew stow, glass compartment,
connected to salvage pump, 2 pumps, + 1 Daverton Pump.
 Main Water Circulating Pump Direct Bilge Suctions, No. and size One 4" dia. Independent Power Pump Direct Suctions to the Engine and/or Boiler Room Bilges,
 No. and size One 2 1/2" in ER, one 2 1/2" in stokehold 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 No worked from —

MAIN BOILERS, &c.—(Letter for record 'S') Total Heating Surface of Boilers 1600 sq ft
 Which Boilers are fitted with Forced Draft All (one) Which Boilers are fitted with Superheaters None
 No. and Description of Boilers One single ended multilateral scotch Working Pressure 180 lb/sq in
 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 other than domestic purposes 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.
 Is the spare gear required by the Rules been supplied yes
 Are the principal additional spare gear supplied 2 main bearings balls, 6 main cap cover studs + nuts, 6 main junk ring studs, Pump lock
 frames, 1 set each main piston rings, 1 set 1 1/2" eccentric + valve ring packing, 20 Condenser ferrules + plugs,
 set of pump + bucket rings for each independent pump, 2 each top bottom + main bearing balls,
 2 main bearings:—1 set each main top bottom end brasses, piston rod, eccentric rod, steam + strap, 2 central
 valves, 1 distributing valve, 2 main + scavage pumps:—1 set of main top + bottom brasses, piston rod
 valves packing, 1 set of suction + delivery valves for each independent pump,
 2 main bearings:—1 set connecting rod bolt + valve rings, Dynamo engine:—1 set piston rings main top
 bottom brasses, governor springs, Generator:—Armature wind bearings, 1 set of field coils, brushes
 + springs, Wheelless:—1 set piston rings, 1 set main bearings.

The foregoing is a correct description.
 THE CLYTHAM SHIP BUILDING and
 ENGINEERING COMPANY, LIMITED.
 R. Freedenthal
 Manufacturer.



2700-228800-218800

18/10/43 to 21/12/44

Dates of Survey while building
During progress of work in shops - -
During erection on board vessel - - -
Total No. of visits 51

Dates of Examination of principal parts—Cylinders 10-2-44, 16-6-44, 30-6-44 Slides 10-5-44, 30-6-44 Covers 16-6-44 30-6-44
Pistons 5-5-44, 30-6-44 Piston Rods 10-5-44 10-10-44 Connecting rods 30-6-44, 10-10-44
Crank shaft 19-5-44, 10-5-44, 16-6-44 Thrust shaft 5-5-44, 16-6-44, 31-7-44 Intermediate shafts 19-5-44, 16-6-44, 31-7-44
Tube shaft ✓ Screw shaft 19-5-44, 16-6-44, 31-7-44 Propeller 18-8-44
Stern tube 18-8-44 Engine and boiler seatings 25-8-44, 15-9-44 Engines holding down bolts 2-10-44
Completion of fitting sea connections 18-8-44
Completion of pumping arrangements 23-11-44 Boilers fixed 15-9-44 Engines tried under steam 19-12-44
Main boiler safety valves adjusted 19-12-44 Thickness of adjusting washers 12y. 3/8" S.V. 11/32.
Crank shaft material Steel Identification Mark 16-6-44 FAF Thrust shaft material Steel Identification Mark 31-7-44 FAF
Intermediate shafts, material Steel Identification Marks No 2453, 2454 31-7-44 FAF Tube shaft, material ✓ Identification Mark ✓
Screw shaft, material Steel Identification Mark No 2454 31-7-44 FAF Steam Pipes, material Steel Test pressure 540 lb/in² Date of Test 30-10-44
Is an installation fitted for burning oil fuel ✓ 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 "Greenford" with VV. Dykes.

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 + 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 12-44. - TS(OG). - 1513. - 180 lb/in².

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

The amount of Entry Fee	£ 2 : 0	When applied for, 19
Special	£ 22 : 10	When received, 19
Donkey Boiler Fee	£ :	
Travelling Expenses (if any)	£ 17 : 8/6	

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

Date LIVERPOOL - 9 JAN 1945
Committee's Minute Transmit to London

