

REPORT ON OIL ENGINE MACHINERY.

No. 62686

Received at London Office AUG 21 1940

Date of writing Report

19... When handed in at Local Office

17. 8. 1940 Port of GLASGOW

No. in Survey held at

GLASGOW

Date, First Survey

(1939) Aug 23rd

Last Survey

8th Aug 1940

Reg. Book.

5176 on the ^{Single} ~~Double~~ ~~Triple~~ ~~Quadruple~~ Screw vessel

"TREVILLY"

Tons } Gross 5300
Net

Built at PT GLASGOW

By whom built LITHGOWS LTD.

Yard No. 928 When built 1940

Engines made at

GLASGOW

By whom made BARCLAY CURLE & CO. LD.

Engine No. EW188 When made 1940

Donkey Boilers made at

-DO-

By whom made

-DO-

Boiler No. NW184 When made 1940

Brake Horse Power

1660

Owners HAIN STEAMSHIP CO. LD.

Port belonging to LONDON

Nom. Horse Power as per Rule

449

Is Refrigerating Machinery fitted for cargo purposes

NO

Is Electric Light fitted

YES

Trade for which vessel is intended

OIL ENGINES, &c.—Type of Engines BARCLAY CURLE OPPOSED PISTON 2 or 4 stroke cycle 2 Single or double acting SINGLE

Maximum pressure in cylinders 600 lb. Mean Indicated Pressure 84.5 lb. Diameter of cylinders 560 mfm Length of stroke 2160 mfm No. of cylinders 3 No. of cranks 9

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 1120 mfm Is there a bearing between each crank NO

Revolutions per minute 95 Flywheel dia. 2220 mfm Weight 7.03 Tons Means of ignition COMP Kind of fuel used DIESEL OIL

Crank Shaft, Solid forged dia. of journals as per Rule App. as fitted 420 mfm Crank pin dia. 420 mfm Crank Webs Mid. length breadth 610 mfm Mid. length thickness 240 mfm Thickness parallel to axis 240 mfm Thickness around eyehole 193 mfm

Flywheel Shaft, diameter as per Rule - as fitted - Intermediate Shafts, diameter as per Rule App. as fitted 13" Thrust Shaft, diameter at collars as per Rule App. as fitted 420 mfm

Tube Shaft, diameter as per Rule - as fitted - Screw Shaft, diameter as per Rule App. as fitted 14 1/2" Is the shaft fitted with a continuous liner YES

Bronze Liners, thickness in way of bushes as per Rule App. as fitted 3/4" Thickness between bushes as per Rule App. as fitted 9/16" 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 -

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 NO If so, state type - Length of Bearing in Stern Bush next to and supporting propeller 4'-10"

Propeller, dia. 15'-0" Pitch 12'-0" No. of blades 4 Material BRONZE whether Moveable NO Total Developed Surface 85 sq. feet

Method of reversing Engines DIRECT Is a governor or other arrangement fitted to prevent racing of the engine when declutched YES Means of lubrication

FORCED Thickness of cylinder liners 23" Are the cylinders fitted with safety valves YES Are the exhaust pipes and silencers water-cooled or lagged with non-conducting material YES

Cooling Water Pumps, No. ONE M.E. DRIVEN ONE STANDBY-BALLAST Is the sea suction provided with an efficient strainer which can be cleared within the vessel YES

Bilge Pumps worked from the Main Engines, No. NONE Diameter - Stroke - Can one be overhauled while the other is at work -

Pumps connected to the Main Bilge Line No. and Size 1 @ 10 1/2" x 12" x 24" 2 @ 8" x 9" x 15" 1 @ 5" x 4 1/2" x 12" How driven STEAM

Is the cooling water led to the bilges NO If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping arrangements -

Ballast Pumps, No. and size 1 @ 10 1/2" x 12" x 24" Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size STEAM 6 1/2" x 7" x 15" M.E. 85 mfm x 540 mfm

Are two independent means arranged for circulating water through the Oil Cooler YES Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge Pumps, No. and size:—In Machinery Spaces 4 @ 3" in E.R. 1 @ 2" in B.R. 1 @ 2 1/2" in Tunnel Well In Pump Room -

In Holds, &c. P 4 @ 3" H 1 @ 3" N 2 @ 3 1/2" DEEP TANK 2 1/2" N 3 @ 3" N 4 @ 3" TUNNEL WELL 1 @ 2 1/2"

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 2 @ 5 1/2"; 2 @ 2" oily bilge Are the Bilge Suctions in the Machinery Spaces

Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes YES Are they fitted with Valves or Cocks BOTH

Are all Sea Connections fitted direct on the skin of the ship YES Are the Overboard Discharges above or below the deep water line BOTH

Are they fixed sufficiently high on the ship's side to be seen without lifting the platform plates YES Are the Blow Off Cocks fitted with a spigot and brass covering plate YES

Are they each fitted with a Discharge Valve always accessible on the plating of the vessel YES How are they protected -

What pipes pass through the bunkers None Have they been tested as per Rule -

What pipes pass through the deep tanks None

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 Bulkhead

If a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork -

Main Air Compressors, No. - No. of stages - Diameters - Stroke - Driven by -

Auxiliary Air Compressors, No. 2 No. of stages 3 Diameters 10 1/2" - 2 1/2" Stroke 6" Driven by Steam engine

Small Auxiliary Air Compressors, No. - No. of stages - Diameters - Stroke - Driven by -

What provision is made for first Charging the Air Receivers Steam driven compressors

Scavenging Air Pumps, No. ONE Diameter 1600 mfm Stroke 540 mfm Driven by Steam engine

Auxiliary Engines crank shafts, diameter as per Rule - as fitted - Position - Is a report sent herewith -



08
46
08
0-25
9

AIR RECEIVERS:—Have they been made under survey Yes State No. of Report or Certificate —

Is each receiver, which can be isolated, fitted with a safety valve as per Rule Yes

Can the internal surfaces of the receivers be examined and cleaned Yes Is a drain fitted at the lowest part of each receiver Yes

Injection Air Receivers, No. — Cubic capacity of each — Internal diameter — thickness —

Seamless, lap welded or riveted longitudinal joint — Material — Range of tensile strength — Working pressure —

Starting Air Receivers, No. 2 Total cubic capacity 250 cu. ft. Internal diameter 4'-1 1/2" thickness 1 3/8"

Seamless, lap welded or riveted longitudinal joint riveted Material stl Range of tensile strength 29/33 tons Working pressure 600 lb.

IS A DONKEY BOILER FITTED? Yes If so, is a report now forwarded? Yes

Are approved plans forwarded herewith for Shafting 18-5-39 Receivers Yes Separate Fuel Tanks —

Donkey Boilers Yes General Pumping Arrangements — Pumping Arrangements in Machinery Space Yes

Oil Fuel Burning Arrangements Yes

SPARE GEAR.

Has the spare gear required by the Rules been supplied Yes

State the principal additional spare gear supplied List attached



The foregoing is a correct description Barclay, Curle & Co. Ltd

Albion Macmillan Manufacturer.

Dates of Survey while building: During progress of work in shops— (1939) Aug. 23, Sept. 12, 29, Oct. 5, 19, 27, Nov. 6, 8, 10, 17, 20, Dec. 1, 8, (1940) Jan. 26, 30, Feb. 9, 12, 21, Mar. 4, 8, 15, 20, 26, Apr. 2, 8, 17, 19, May 1, 6, 7, 13, 28, June 5, 7, 17, 19, 26, July, 8, 23, Aug. 8. Total No. of visits 43

Dates of Examination of principal parts—Cylinders 8-11-39 Covers — Pistons 12-2-40 Rods 12-2-40 Connecting rods 2-4-40

Crank shaft 17-6-40 Flywheel shaft 17-6-40 Thrust shaft 17-6-40 Intermediate shafts 7-5-40 Tube shaft —

Screw shaft 26-3-40 Propeller 26-3-40 Stern tube 4-4-40 Engine seatings 4-4-40 Engines holding down bolts 8-7-40

Completion of fitting sea connections 19-4-40 Completion of pumping arrangements 23-7-40 Engines tried under working conditions 8-8-40

Crank shaft, Material S.M. Stl Identification Mark 1313-33HDB-ATB Flywheel shaft, Material S.M. Stl Identification Mark 1324HDB-ATB

Thrust shaft, Material S.M. Stl Identification Mark 1331.AJB.HDB Intermediate shafts, Material S.M. Stl Identification Marks 8692.AJB

Tube shaft, Material — Identification Mark — Screw shaft, Material S.M. Stl Identification Mark 8692.AJB

Identification Marks on Air Receivers LLOYD'S TEST 800LBS
WP 600LBS ATB 10-10-39

Is the flash point of the oil to be used over 150° F. Yes

Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with Yes

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 "TREVETHOE" GLS. RPT. N: 62435

General Remarks (State quality of workmanship, opinions as to class, &c. This machinery has been built under special survey in accordance with the Rules and approved plans and the materials and workmanship are good. It has been satisfactorily installed in the vessel, tested under working conditions and found efficient and, in my opinion, is eligible to be classed in the Register Book with record + LMC 8, 40 and notation CL 2 DB 120 lb.

Table with columns for Fee Type, Amount, and Date. Includes: The amount of Entry Fee (£ 5 -), Special WELDING FEE (£ 92 7), Donkey Boiler Fee (£ 12 12), AIR RECEIVERS (£ 4 4), Travelling Expenses (if any) (£ -). Date: 20 AUG 1940.

Signature: N. J. Brown
Engineer Surveyor to Lloyd's Register of Shipping



Committee's Minute GLASGOW 20 AUG 1940
Assigned 1- RMC 8.40 Air Eng
2 DB 120 lb.

Glasgow

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