

# REPORT ON OIL ENGINE MACHINERY.

No. 55588  
-5 JUN 1935  
10 APR 1935

Received at London Office

Date of writing Report 10 When handed in at Local Office 6.4.35 Port of Glasgow  
Date, First Survey 1.10.34 Last Survey 4th April 1935  
Number of Visits 27

No. in Survey held at Glasgow  
Reg. Book. Single on the Twin Triple Quadruple Screw vessel Josias Anderson Dockyard Ltd yard No. 357 M.V. PACIFIC COAST Tons Gross 1210  
Net 664

Built at Glasgow By whom built British Auxiliary Ltd. Yard No. 192-193 When built 1935  
Engines made at Glasgow By whom made British Auxiliary Ltd. Engine No. 1935 When made 1935  
Donkey Boilers made at Glasgow By whom made British Auxiliary Ltd. Boiler No. 1935 When made 1935  
Brake Horse Power 425 Ind. Engin. Owners British Auxiliary Ltd. Port belonging to Glasgow  
Nom. Horse Power as per Rule 312 Is Refrigerating Machinery fitted for cargo purposes Yes Is Electric Light fitted Yes  
Trade for which vessel is intended Coastal

OIL ENGINES, &c. Type of Engines British Patent 2 or 4 stroke cycle 2 Single or double acting Single  
Maximum pressure in cylinders 400 lb. Diameter of cylinders 340 Length of stroke 22 1/2 No. of cylinders 5 No. of cranks 5  
Mean Indicated Pressure 100 lb.

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 48 1/2 Is there a bearing between each crank Yes  
Revolutions per minute 250 Flywheel dia. 1550 Weight 262 Means of ignition Comp. Kind of fuel used Diesel oil  
Crank Shaft, dia. of journals as per Rule 216 Crank pin dia. 200 Crank Webs as per Rule 147 Mid. length breadth 308 Thickness parallel to axis shrunk  
as fitted 220 Mid. length thickness 122 Thickness around eye-hole shrunk

Flywheel Shaft, diameter as per Rule 216 Intermediate Shafts, diameter as per Rule 147 Thrust Shaft, diameter at collars as per Rule 155  
as fitted 220 as fitted as fitted 220  
Tube Shaft, diameter as per Rule Screw Shaft, diameter as per Rule Is the tube shrunk shaft fitted with a continuous liner Yes  
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 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 Yes  
shaft Yes Length of Bearing in Stern Bush next to and supporting propeller 11 1/4

Propeller, dia. 35 Pitch 35 No. of blades 3 Material Cast Iron whether Moveable Yes Total Developed Surface 114 sq. feet  
Method of reversing Engines Comp. Air Drive Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes Means of lubrication Oil

Thickness of cylinder liners 25.5 Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with  
Yes non-conducting material Yes If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine Yes  
Cooling Water Pumps, No. 2 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 None Stroke None Can one be overhauled while the other is at work Yes  
Pumps connected to the Main Bilge Line { No. and Size None  
How driven None

Is the cooling water led to the bilges Yes If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping  
arrangements None  
Ballast Pumps, No. and size None Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size None  
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 None In Pump Room None  
In Holds, &c. None

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size None  
Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes Yes Are the Bilge Suctions in the Machinery Spaces  
led from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges Yes

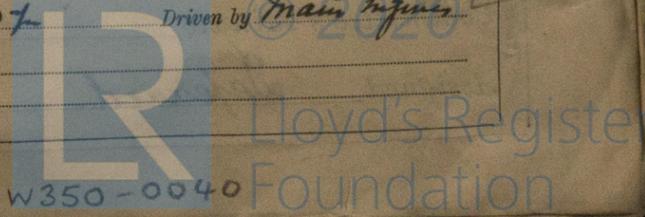
Are all Sea Connections fitted direct on the skin of the ship Yes Are they fitted with Valves or Cocks Yes  
Are they fixed sufficiently high on the ship's side to be seen without lifting the platform plates Yes Are the Overboard Discharges above or below the deep water line Yes  
Are they each fitted 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 None  
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 Yes worked from None  
If a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork None

Main Air Compressors, No. None No. of stages None Diameters None Stroke None Driven by None  
Auxiliary Air Compressors, No. None No. of stages None Diameters None Stroke None Driven by None  
Small Auxiliary Air Compressors, No. None No. of stages None Diameters None Stroke None Driven by None  
Scavenging Air Pumps, No. One DA on each Eng. Diameter 850 Stroke 350 Driven by Main Engines

Auxiliary Engines crank shafts, diameter as per Rule  
as fitted



**AIR RECEIVERS:**—Is each receiver, which can be isolated, fitted with a safety valve as per Rule *Yps* ✓  
 Can the internal surfaces of the receivers be examined and cleaned *Yps* ✓ Is a drain fitted at the lowest part of each receiver *Yps* ✓  
**High Pressure Air Receivers, No.** ..... Cubic capacity of each ..... Internal diameter ..... thickness .....  
 Seamless, lap welded or riveted longitudinal joint ..... Material ..... Range of tensile strength ..... Working pressure *by Rules* ..... *Actual* .....  
**Starting Air Receivers, No.** *Two* ✓ Total cubic capacity *127 ft.* ✓ Internal diameter *800 1/2* ✓ thickness *17 1/2* ✓  
 Seamless, lap welded or riveted longitudinal joint *Welded* ✓ Material *S* ✓ Range of tensile strength *28-32 Ton* ✓ Working pressure *by Rules* *365* ✓ *Actual* *355* ✓

**IS A DONKEY BOILER FITTED?** ..... 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 *4-14-33 & 22-5-33* Receivers *Yps* ✓ Separate Tanks .....  
 Donkey Boilers ..... General Pumping Arrangements ..... Oil Fuel Burning Arrangements .....

**SPARE GEAR.**

Has the spare gear required by the Rules been supplied *Yps* ✓  
 State the principal additional spare gear supplied .....  
*As per list attached.*

The foregoing is a correct description,  
**For BRITISH AUXILIARIES, LIMITED,**  
*John Rogers* Manufacturer.  
*April 5<sup>th</sup> 1935*

**DATES**  
 During progress of work in shops - - - 1934 Oct: 1 Nov: 2, 13, 21 Dec: 4, 11, 26, 28 (1935) Jan: 8, 15, 18, 19, 29, 30 Feb: 1, 4, 8, 12, 13  
 During erection on board vessel - - - 25 Mar: 1, 6, 11, 19, 25 Apr: 1, 4  
 Total No. of visits *28*  
**DATES OF EXAMINATION OF PRINCIPAL PARTS**—Cylinders *1-3-35* Covers *20-2-35* Pistons *20-2-35* Rods ..... Connecting rods *28-12-34*  
 Crank shaft *25-10-34* Flywheel shaft *and* Thrust shaft *15-1-35* Intermediate shafts ..... Tube shaft .....  
 Screw shaft ..... Propeller ..... Stern tube ..... Engine seatings ..... Engines holding down bolts .....  
 Completion of fitting sea connections ..... Completion of pumping arrangements ..... Engines tried under working conditions .....  
 Crank shaft, Material *17 light steel* Identification Mark *9276-9277-PK-25-10-34-21-10-34* Flywheel shaft, Material *and* Identification Mark .....  
 Thrust shaft, Material *do.* Identification Mark *9288-9289-PK-11-10-34* Intermediate shafts, Material ..... Identification Marks .....  
 Tube shaft, Material ..... Identification Mark ..... Screw shaft, Material ..... Identification Mark .....  
 Is the flash point of the oil to be used over 150° F. *Yps* ✓  
 Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with .....  
 Is the vessel (not being an oil tanker) fitted for carrying oil as cargo ..... 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 *Yps* ✓ If so, state name of vessel *"BREEZE" Yps Report No 53980.*

**General Remarks** (State quality of workmanship, opinions as to class, &c.)  
*This machinery has been built under special Survey and in accordance with the Rules. The materials and workmanship are good. It has been tried on the bench at full power and found satisfactory.*  
*This machinery is eligible, in my opinion, to be classed in the Register Book, when it has been satisfactorily fitted on board and tried under working conditions, with notation of + L.M.C. with date.*  
*JG 6/4/35*

Certificate (if required) 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 .. £ 5 : - :  
 Special *27-10-3* £ 5 : - :  
 Donkey Boiler Fee ... £ : :  
 Travelling Expenses (if any) £ : :  
 When applied for, **8 - APR 1935**  
 When received, *24/4/35*  
 Committee's Minute **GLASGOW 9 - APR 1935**  
 Assigned *Deferred.*  
 Engineer Surveyor to Lloyd's Register of Shipping.  
 See G.S. Rpt. No. 55801  
 © 2020 Lloyd's Register Foundation