

4b.

REPORT ON OIL ENGINE MACHINERY.

No. 65550

Received at London Office 7 JUN 1942

Writing Report 19 When handed in at Local Office 1: 6: 1942 Port of Glasgow

Survey held at Glasgow Date, First Survey 16/1/41 Last Survey 26/5/1942
 Number of Visits 58

on the Single Screw vessel "BRITISH VIGILANCE"
 Tons { Gross 8093
 Net 4575

at Glasgow By whom built Harland & Wolff, Ltd. Yard No. 11166 When built 1942-5

es made at Glasgow By whom made Harland & Wolff, Ltd. Engine No. 11166 When made 1942

y Boilers made at Hyde By whom made J. Adamson & Co. Ltd. Boiler No. 967 When made 1942

Horse Power 3200 Owners British Tanker Co. Ltd. Port belonging to London

Horse Power as per Rule 490 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes

for which vessel is intended Tanker

ENGINES, &c. Type of Engines Heavy oil. Airless injection 2 or 4 stroke cycle 4 Single or double acting S.A.

m pressure in cylinders 700 lb Diameter of cylinders 29 1/8 Length of stroke 59 1/16 No. of cylinders 6 No. of cranks 6

icated Pressure 128 lb Diameter of cylinders 740 mm Length of stroke 1500 mm No. of cylinders 6 No. of cranks 6

bearings, adjacent to the Crank, measured from inner edge to inner edge 972 mm Is there a bearing between each crank yes

ons per minute 110 Flywheel dia. 2489 mm Weight 2590 Kgs Means of ignition Compression Kind of fuel used Diesel oil

dia. of journals as per Rule 490 mm Crank pin dia. 505 mm Crank Webs Mid. length breadth 980 mm Thickness parallel to axis 310 mm
 as fitted 505 mm Bored 230 mm Mid. length thickness 310 mm Thickness around eyehole 292.5 mm
 All built Bored 115 mm

el Shaft, diameter as per Rule 13.15" Intermediate Shafts, diameter as per Rule 18" Thrust Shaft, diameter at collar as per Rule 351 mm
 as fitted 13.15" as fitted 18" as fitted 351 mm

Shaft, diameter as per Rule 14.48" Screw Shaft, diameter as per Rule 16" Is the hate shaft fitted with a continuous liner yes
 as fitted 14.48" as fitted 16" screw

Liners, thickness in way of bushes as per Rule 3/4 Thickness between bushes as per Rule 9/16 Is the after end of the liner made watertight in the yes
 as fitted 3/4 as fitted 13/16 as fitted 9/16 as fitted 21/32

r 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

iner 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 no

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 no

If so, state type 11-6" Length of Bearing in Stern Bush next to and supporting propeller 5'-0"

ler, dia. 16'-0" Pitch 9'-6" No. of blades 4 Material Brnze whether Moveable no Total Developed Surface 81 sq. feet

d of reversing Engines Direct Is a governor or other arrangement fitted to prevent racing of the engine when disclutched yes Means of lubrication oil

Thickness of cylinder liners 53 t Are the cylinders fitted with safety valves yes Are the exhaust pipes and silencers water cooled or lagged with lagged

ducting material lagged If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine yes

g Water Pumps, No. 1 at 170 tons/hr; 2 at 130 tons/hr each. Is the sea suction provided with an efficient strainer which can be cleared within the vessel yes

Pumps worked from the Main Engines, No. One Diameter 80 tons/hr Stroke Stroke Can one be perhauled while the other is at work no

s connected to the Main Bilge Line { No. and Size One Bilge & Sanitary, 80 tons/hr. Standby Bilge & Sanitary, 80 tons per hour Ballast, 120 tons per hour
 How driven Main engine Steam Steam.

ooling 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 no

at Pumps, No. and size One 120 tons/hour Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size 2 each 100 tons/hour

o independent means arranged for circulating water through the Oil Cooler yes Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge yes

, No. and size:—In Machinery Spaces Port 3 1/2"; Starb 3 1/2"; aft. well 3 1/2." In Pump Room yes

ds, &c. yes

endent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 3 at 6" dia. O.F. Transfer pump suction from guttering, 2", P+S
O.F. " " " Coffenden, 2 1/2"

l the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes yes Are the Bilge Suctions in the Machinery Spaces yes

m easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges yes

Sea Connections fitted direct on the skin of the ship Steel struts Are they fitted with Valves or Cocks both

y 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 below.

y 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

pipes pass through the bunkers yes How are they protected yes

pipes pass through the deep tanks yes Have they been tested as per Rule yes

l Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times yes

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 yes

partment to another yes Is the Shaft Tunnel watertight yes Is it fitted with a watertight door yes worked from yes

ood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork yes

Air Compressors, No. 2 No. of stages 2 Diameters 280 + 245 Stroke 130 mm Driven by Steam engine

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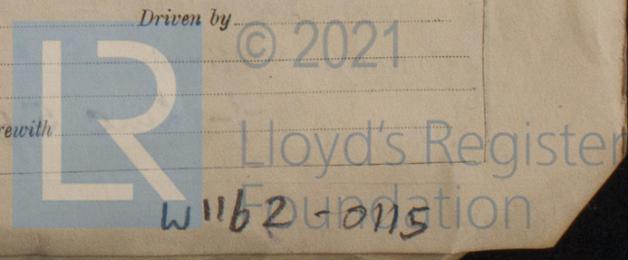
Auxiliary Air Compressors, No. 2 No. of stages 2 Diameters 280 + 245 Stroke 130 Driven by Steam engine

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

nging Air Pumps, No. 2 Diameter 280 + 245 Stroke 130 Driven by Steam engine

ary Engines crank shafts, diameter as per Rule all auxiliaries steam driven. Position all auxiliaries steam driven.

the Auxiliary Engines been constructed under special survey yes Is a report sent herewith yes



AIR RECEIVERS:—Have they been made under survey *yes* State No. of Report or Certificate **C.44790**
 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 *900 Cu. ft.* Internal diameter *6'-0 5/16"* Working pressure _____
 Seamless, lap welded or riveted longitudinal joint *Riveted* Material *Steel* Range of tensile strength *Ends 26/32 tons* Working pressure _____
 by Rules _____ Actual _____
 Thickness *Ends 1 1/2"* by Rules *356* Actual *356*

IS A DONKEY BOILER FITTED? *yes* If so, is a report now forwarded? *Yes. Manchester Rpt. No.*
 Is the donkey boiler intended to be used for domestic purposes only *no*

PLANS. Are approved plans forwarded herewith for Shafting *Inter + Screw 10-1-41* Receivers *23-12-40* Separate Fuel Tanks *16-1-42*
 (If not, state date of approval)
 Donkey Boilers *✓* General Pumping Arrangements *30-4-41* Pumping Arrangements in Machinery Space *15-12-41*
 Oil Fuel Burning Arrangements *15-1-42*

SPARE GEAR.

Has the spare gear required by the Rules been supplied *yes*
 State the principal additional spare gear supplied *as per attached list.*

The foregoing is a correct description,

Wm. J. Wright Manufacturer.

Dates of Survey while building
 During progress of work in shops--
 During erection on board vessel--
 Total No. of visits *58*
 Dates of Examination of principal parts—Cylinders *23-12-41* Covers *23-12-41* Pistons *13-1-42* Rods *17-1-42* Connecting rods *19-1-42*
 Crank shaft *16-12-41* Flywheel shaft _____ Thrust shaft *8-1-42* Intermediate shafts *27-1-42* Tube shaft _____
 Screw shaft *26-3-42* Propeller *26-3-42* Stern tube *26-3-42* Engine seatings *15-1-42* Engines holding down bolts *21-4-42*
 Completion of fitting sea connections *15-1-42* Completion of pumping arrangements *19-5-42* Engines tried under working conditions *21-5-42*
 Crank shaft, Material *Steel* Identification Mark *1116 P 7* Flywheel shaft, Material _____ Identification Mark _____
 Thrust shaft, Material *Steel* Identification Mark *S. 1437 N.K.* Intermediate shafts, Material *Steel* Identification Marks *S. 2931*
 Tube shaft, Material _____ Identification Mark _____ Screw shaft, Material *Steel* Identification Mark *S. 2932*
 Identification Marks on Air Receivers *44790 Lloyd's list 585 lb. WP 356 lb. J.S.C. 16-12-41.*

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 _____ 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 *✓* If so, state name of vessel *Engines similar to "British Power"*

General Remarks (State quality of workmanship, opinions as to class, &c.)

The machinery of this vessel has been built under Special Survey and in accord with the approved plans and the Rules of this Society.
 The materials and workmanship are good.
 The machinery has been efficiently secured in position on board the vessel and afterwards tried under full working conditions with satisfactory results.
 The machinery is shigible in my opinion to be classed in the Register Book with notation of *1-LME 5,42 C.L. 2 DB WP 150 lb.*

The amount of Entry Fee	£ 5 : -	When applied for,
Special	£ 93 : 10	2 JUN 1942
Donkey Boiler Fee	£ :	When received,
Travelling Expenses (if any)	£ :	19

P. Fitzgerald & G. E. Murdoch
 Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute **GLASGOW** 2 JUN 1942
 Assigned *1-LME 5.42 oil eng. 2 DB 150 lb.*



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