

# REPORT ON OIL ENGINE MACHINERY.

No. 69090.

Received at London Office

of writing Report 7-12-1944 When handed in at Local Office 11.12.1944 Port of GLASGOW  
 in Survey held at GLASGOW Date, First Survey 8.11.43 Last Survey 7-12-1944  
 Book Single on the Tonnage Triple Screw vessel MOTOR VESSEL "EMPIRE WILSON" Tons Gross 991.6  
Quadruple Net 711.3  
 at GLASGOW By whom built CHAS. CONNELL & CO. LD. Yard No. 446 When built 1944  
 Lines made at GLASGOW By whom made BARCLAY CURRIE & CO. LD. Engine No. EW142 When made 1944  
 Boilers made at ANNAN By whom made COCHRAN & CO. ANNAN LD. Boiler No. 13353 When made 1936  
 Horse Power 6,800 Owners MINISTRY OF WAR TRANSPORT Port belonging to GLASGOW

orse Power as per Rule 1298 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted YES  
 or which vessel is intended 1291 263/8 91 5/16

GINES, &c. —Type of Engines OPPOSED PISTON 2 or 4 stroke cycle 2 Single or double acting SINGLE  
 m pressure in cylinders 690 LBS. Diameter of cylinders 670 7/8" Length of stroke 2320 7/8" No. of cylinders 6 No. of cranks 6  
 icated Pressure 88 1/4 LBS. CENTRES OF SIDE RODS Is there a bearing between each crank YES  
 bearings, adjacent to the crank, measured from inner edge to inner edge 1300 7/8" Kind of fuel used DIESEL  
 ions per minute 116 Flywheel dia. F56" H 8'0" Weight F. 4 TON Means of ignition COMP. Kind of fuel used DIESEL  
 Solid forged as per Rule APP. Mid. length breadth 754 7/8" Thickness parallel to axis 300 7/8"  
 Semi built dia. of journals as fitted 530 7/8" Crank pin dia. 530 7/8" Crank webs Mid. length thickness 300 7/8" Thickness around eye hole 221 7/8"  
 All built as fitted 530 7/8"

el Shaft, diameter as per Rule APP. Intermediate Shafts, diameter as per Rule APP. Thrust Shaft, diameter at collars as fitted APP.  
 as fitted 460 7/8" as fitted 16" as per Rule 500 7/8"  
 Shaft, diameter as per Rule APP. Screw Shaft, diameter as fitted 18" Is the tube shaft fitted with a continuous liner YES  
 as fitted 18" as fitted 18"

Liners, thickness in way of bushes as per Rule APP. Thickness between bushes as per Rule APP. Is the after end of the liner made watertight in the  
 as fitted 7/8" as fitted 2 1/32" er 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

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-  
 ve 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  
 ube shaft YES If so, state type YES Length of bearing in Stern Bush next to and supporting propeller 6'0"

ler, dia. 18'0" Pitch 146" No. of blades 4 Material BRONZE whether moveable NO Total developed surface 121 sq. feet  
 d of reversing Engines DIRECT Is a governor or other arrangement fitted to prevent racing of the engine when declutched YES Means of  
 tion FORCE Thickness of cylinder liners 25 7/8" Are the cylinders fitted with safety valves YES Are the exhaust pipes and silencers water cooled

ed with non-conducting material YES If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned  
 o the engine YES Cooling Water Pumps, No. 2 Is the sea suction provided with an efficient strainer which can be cleared within the vessel NO  
2 VALVE COOKING

Pumps worked from the Main Engines, No. NONE Diameter 1 @ 410 TONS/HR. Stroke 2 @ 100 TONS/HR. Can one be overhauled while the other is at work YES  
 s connected to the Main Bilge Line (No. and size 1 @ 410 TONS/HR. 2 @ 100 TONS/HR. How driven ELECTRIC MOTOR

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  
 ements YES

t Pumps, No. and size 1 @ 410 TONS/HR. Power Driven Lubricating Oil Pumps, including spare pump, No. and size 2 @ 68 TONS/HR.  
 vo independent means arranged for circulating water through the Oil Cooler YES Suctions, connected to both main bilge pumps and auxiliary

pumps, No. and size:—In machinery spaces 4 @ 3 1/2" 2 @ 2 1/2" IN C/OILS. 4 @ 2 1/2" OILY BILGE In pump room 1 @ 2 1/2" TUNNEL WELL  
 ds, &c. Nº1 HOLD 2 @ 3" Nº2 HOLD 2 @ 3" Nº3 HOLD 2 @ 3 1/2" Nº4 LOWER T.W. 2 @ 3" Nº5 HOLD 2 @ 3" Nº6 HOLD 2 @ 3" CARGO OIL TANKS 2 @ 6"

endent Power Pump Direct Suctions to the engine room bilges, No. and size 1 @ 10" 2 @ 6" 2 @ 2 1/2" OILY BILGE  
1 @ 2 1/2" PIPE PASSAGE

ll the bilge suction pipes in holds and tunnel well fitted with strum-boxes YES Are the bilge suction in the machinery spaces led from easily  
 ible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges YES

ll Sea Connections fitted direct on the skin of the Ship YES Are they fitted with valves or cocks BOTH Are they fixed  
 ently 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

hey 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 NONE How are they protected YES

pipes pass through the deep tanks NONE Have they been tested as per Rule YES  
 ll 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  
 s, or from one compartment to another YES Is the shaft tunnel watertight YES Is it fitted with a watertight door NO worked from YES

a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork YES  
 ain Air Compressors, No. NONE No. of stages 3 diameters 12 1/4" x 3" stroke 7 driven by ELECT. MOTOR

uxiliary Air Compressors, No. 2 No. of stages 3 diameters 12 1/4" - 10 1/2" stroke 7 driven by ELECT. MOTOR  
 small Auxiliary Air Compressors, No. 1 No. of stages 3 diameters 3" stroke 7 driven by ELECT. MOTOR

hat provision is made for first charging the air receivers SUPPLY TO GENERATOR STARTING AIR RECEIVERS FROM COMPRESSOR COUPLED TO EMERGENCY GENERATOR  
 avenging Air Pumps, No. ONE diameter 1852 7/8" stroke 1480 7/8" driven by MAIN ENGINE

uxiliary Engines crank shafts, diameter as per Rule APP. No. THREE Position STARBOARD BOTTOM PLATFORM  
 as fitted SEE MANCHESTER REPORT Nº 11842 Have the auxiliary engines been constructed under special survey YES Is a report sent herewith YES

1570-294710-15710



AIR RECEIVERS:—Have they been made under survey... YES ✓ State No. of report or certificate SEE MARKS BE...  
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. Two ✓ Total cubic capacity 350 f Internal diameter 5'0" thickness 1 5/16  
Seamless, lap welded or riveted longitudinal joint D.B.S. TR. R. Material S ✓ Range of tensile strength 26/33 10N Working pressure Actual 60 lb at 100 lb

IS A DONKEY BOILER FITTED YES If so, is a report now forwarded YES SEE ALSO GLASSGOW RPT. N° 57817  
Is the donkey boiler intended to be used for domestic purposes only YES ✓

PLANS. Are approved plans forwarded herewith for shafting YES (If not, state date of approval) Receivers YES Separate fuel tanks —  
Donkey boilers No General pumping arrangements YES Pumping arrangements in machinery space YES  
Oil fuel burning arrangements —

#### SPARE GEAR.

Has the spare gear required by the Rules been supplied LIST ATTACHED ✓  
State the principal additional spare gear supplied One bar & Iron propeller



The foregoing is a correct description, Alexander Macneil Manufacturer.

Dates of Survey while building  
During progress of work in shops - 1943 Nov 8 1944 Jan 14 17 Feb 8 11 14 16 17 24 Apr 4 11 12 17 26 27 28 May 5 8 10 11 12 14 18 22 23 24 25 26 27 28 Jun 2 5 8 11 12 14 18 22 23 24 25 26 27 28  
During erection on board vessel - 12 15 19 22 24 26 27 28 Aug 1 3 8 11 14 16 21 18 23 28 31 Sep 7 14 24 27 Oct 3 5 9 20 23 24 Nov 2 10 11 15 21 24 25 28 Dec 1 7  
Total No. of visits 78.

Dates of examination of principal parts—Cylinders — Covers — Pistons 5-6-44 5-6-44  
Crank shaft 31-5-44 Flywheel shaft 31-5-44 Thrust shaft 31-5-44 Intermediate shafts 29-5-44 Tube shaft —  
Screw shaft 22-6-44 Propeller 22-6-44 Stern tube 23-5-44 Engine seatings 14-8-44 Engine holding down bolts 14-9-44  
Completion of fitting sea connections 14-8-44 Completion of pumping arrangements 15-11-44 Engines tried under working conditions 1-12-44  
Crank shaft, material O.H.S. Identification mark NK 31-5-44 Flywheel shaft, material S Identification mark NK 31-5-44  
Thrust shaft, material O.H.S. Identification mark NK 31-5-44 Intermediate shafts, material O.H.S. Identification mark NK 29-5-44  
Tube shaft, material — Identification mark — Screw shaft, material O.H.S. Identification mark NK 22-6-44  
Identification marks on air receivers LLOYD'S TEST 800 LBS/SQ INCH W.P. 600 LBS/SQ INCH J.S. 27-7-44

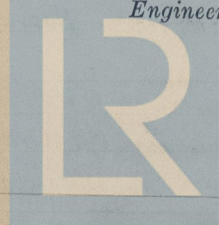
Is the flash point of the oil to be used over 150°F YES ✓  
Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with YES ✓  
Description of fire extinguishing apparatus fitted PERFORATED STEAM PIPE AT BOILER - FIRE HOSE CONNECTIONS - FOAMITE EXTINGUISHERS  
Is the vessel (not being an oil tanker) fitted for carrying oil as cargo DEEP TANK ONLY. If so, have the requirements of the Rules been complied with YES ✓  
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 JAVANESE PRINCE GLASSGOW RPT. N° 688

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. The materials and workmanship are good. The machinery has been satisfactorily installed in the vessel, tested under working conditions and found satisfactory and, in my opinion, is eligible to be classed with Record + LMC 12, 44 and notation D. B. 120 LBS. C.L.  
NOTE D. B. 1936.

The amount of Entry Fee ... £ 6 :  
Special ... £ 131 : 4 :  
WELDING ... 12 : 12 :  
Donkey Boiler Fee... £ — : — :  
AIR RECEIVERS ... 4 : 4 :  
Travelling Expenses (if any) £ — : — :  
When applied for 10-1-1945  
When received 19

(Committee's Minute) GLASGOW 16 JAN 1945  
Assigned -/- LMC 12, 44 all Eng 578  
56 120 lb

W. Russell  
Engineer Surveyor to Lloyd's Register of Shipping



Lloyd's Register  
Foundation