

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

Date of writing Report **28.11.1942** When handed in at Local Office **3.12.42** Port of **PLYMOUTH**

No. in Survey held at **BURY** Date, First Survey **5th March, '42** Last Survey **27th Nov: 1942**
Reg. Book. on the **EMPIRE OBERON** ADMIRALTY NO. **A/MS/M.248** **E. OBERON** (Number of Visits **17**)

Built at **DONCASTER** By whom built **Richard Dunstan Ltd.** Yard No. **A/MS.331** When built **1942**

Engines made at **BURY** By whom made **Walmsleys (Bury) Ltd.** Engine No. **5959/2** when made **1942**

Boilers made at **-** By whom made **-** Boiler No. **-** when made **-**

Indicated Horse Power **1150** Owners **Admiralty** Port belonging to **-**

Nom. Horse Power as per Rule **185** Is Refrigerating Machinery fitted for cargo purposes **-** Is Electric Light fitted **-**

Trade for which Vessel is intended **"WARRIOR" TYPE TUG.**

ENGINES, &c.—Description of Engines **Triple Expansion Steam Reciprocating** Revs. per minute **114**
 Dia. of Cylinders **16.5" x 27" x 46"** Length of Stroke **30"** No. of Cylinders **3** No. of Cranks **3**
 Crank shaft, dia. of journals **9.25** as per Rule **Approved.** Crank pin dia. **9.375** Mid. length breadth **17.5"** Thickness parallel to axis **6"**
 as fitted **9.25** Crank webs **6"** shrunk Thickness around eye-hole **4"**
 Intermediate Shafts, diameter as per Rule **-** Thrust shaft, diameter at collars as per Rule **-**
 as fitted **-** as fitted **-**
 Tube Shafts, diameter as per Rule **-** Screw Shaft, diameter as per Rule **-** Is the { tube } shaft fitted with a continuous liner { **-** }
 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 **-** If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner **-**
 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 **-** If so, state type **-** Length of Bearing in Stern Bush next to and supporting propeller **-**
 Propeller, dia. **-** Pitch **-** No. of Blades **-** Material **-** whether Moveable **-** Total Developed Surface **-** sq. feet **-**
 Feed Pumps worked from the Main Engines, No. **2** Diameter **3"** Stroke **15"** Can one be overhauled while the other is at work **Yes.**
 Bilge Pumps worked from the Main Engines, No. **2** Diameter **3"** Stroke **15"** Can one be overhauled while the other is at work **Yes.**
 Feed Pumps { No. and size **-** Pumps connected to the { No. and size **-** }
 { How driven **-** Main Bilge Line { How driven **-** }
 Ballast Pumps, No. and size **-** Lubricating Oil Pumps, including Spare Pump, No. and size **-**
 Are two independent means arranged for circulating water through the Oil Cooler **-** Suctions, connected to both Main Bilge Pumps and Auxiliary
 Bilge Pumps;—In Engine and Boiler Room **-**
 In Holds, &c. **-**

Main Water Circulating Pump Direct Bilge Suctions, No. and size **-** Independent Power Pump Direct Suctions to the Engine Room Bilges,
 No. and size **-** Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes **-**
 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 **-**
 Are all Sea Connections fitted direct on the skin of the ship **-** Are they fitted with Valves or Cocks **-**
 Are they sized sufficiently high on the ship's side to be seen without lifting the stokehold plates **-** Are the Overboard Discharges above or below the deep water line **-**
 Are they each fitted with a Discharge Valve always accessible on the plating of the vessel **-** Are the Blow Off Cocks fitted with a spigot and brass covering plate **-**
 What Pipes pass through the bunkers **-** How are they protected **-**
 What pipes pass through the deep tanks **-** Have they been tested as per Rule **-**
 Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times **-**
 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 **-** Is the Shaft Tunnel watertight **-** Is it fitted with a watertight door **-** worked from **-**

MAIN BOILERS; &c.—(Letter for record **-**) Total Heating Surface of Boilers **-**
 Is Forced Draft fitted **-** No. and Description of Boilers **-** Working Pressure **-**
IS A REPORT ON MAIN BOILERS NOW FORWARDED? **-**
IS A DONKEY BOILER FITTED? **-** If so, is a report now forwarded? **-**
PLANS. Are approved plans forwarded herewith for Shafting **28.11.41** Main Boilers **-** Auxiliary Boilers **-** Donkey Boilers **-**
 (If not state date of approval)
 Superheaters **-** General Pumping Arrangements **-** Oil fuel Burning Piping Arrangements **-**
SPARE GEAR. State the articles supplied:—

The foregoing is a correct description,

For WALMSLEYS (BURY) LIMITED
Gwinetburn
DIRECTOR

Manufacturer.



002568-002576-0177

NOTE.—The words which do not apply should be deleted.

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7/12/42

1942. March 5, 31. June 22. July 20, 23, 27. Aug: 6, 22, 27. Sept. 14, 18.
 During progress of work in shops - - Oct. 1, 6, 17, 29. Nov. 11, 27.
 Dates of Survey while building {
 During erection on board vessel - -
 Total No. of visits 17.

Dates of Examination of principal parts—Cylinders 23, 27.7.42. & 6.10.42. Slides 22.8.42. Covers 23.7.42. & 6.10.42.
 Pistons 22.8.42. Piston Rods 23.7.42. Connecting rods 23.7.42.
 Crank shaft 20.7.42. Thrust shaft - Intermediate shafts -
 Tube shaft - Screw shaft - Propeller -
 Stern tube - Engine and boiler seatings - Engines holding down bolts -
 Completion of fitting sea connections
 Completion of pumping arrangements Boilers fixed Engines tried under steam -
 Main boiler safety valves adjusted Thickness of adjusting washers -
 Crank shaft material O.H. Ingot Steel Identification Mark JFC 10.2.42 Thrust shaft material - Identification Mark -
 Intermediate shafts, material - Identification Marks - Tube shaft, material - Identification Mark -
 Screw shaft, material - Identification Mark - Steam Pipes, material - Test pressure - Date of Test -
 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 - If so, have the requirements of the Rules been complied with -
 Is this machinery duplicate of a previous case Yes. If so, state name of vessel Mch: Rpt. 11, 226.

General Remarks (State quality of workmanship, opinions as to class, &c. **THIS ENGINE HAS BEEN CONSTRUCTED UNDER SPECIAL SURVEY OF TESTED MATERIALS AND IS IN ACCORDANCE WITH THE SECRETARY'S LETTERS, APPROVED PLANS AND RULE REQUIREMENTS.**

THE MATERIAL AND WORKMANSHIP ARE OF A GOOD QUALITY AND THE ENGINE, ON COMPLETION OF ERECTION, HAS BEEN EXAMINED IN SHOP AND FOUND SATISFACTORY. IN MY OPINION THIS ENGINE IS SUITABLE FOR THE PURPOSE INTENDED AND, WHEN INSTALLED ON BOARD AND SATISFACTORILY REPORTED UPON BY THE SOCIETY'S SURVEYORS, WILL BE ELIGIBLE FOR THE NOTATION OF:-

LLOYD'S MACHINERY CERTIFICATE (WITH DATE).

THIS ENGINE HAS BEEN DESPATCHED TO:- RICHARD DUNSTAN, LTD., DONCASTER.

This Engine has been installed on board "EMPIRE OBERON" at Hesse & Hull - see continuation rpt. no 4. attached herewith. to S Shields

HESSE

The amount of Entry Fee ... £ 3 : - : When applied for,
 2/5 Special + 25% ... £ 27 : 12 6 3.12. 19. 42.
 Donkey Boiler Fee ... £ : : When received,
 Travelling Expenses (if any) £ 2 : 15 : 19.

[Signature]
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUE 16 FEB 1943

Assigned See Incl. J.E. 51888

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