

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY

W.F.D. 12 MAR. 1924

Received at London Office

Date of writing Report March 11<sup>th</sup> 1924 When handed in at Local Office March 11<sup>th</sup> 1924 Port of NEWCASTLE-ON-TYNE

No. in Survey held at Newcastle-on-Tyne Date, First Survey October 11<sup>th</sup> 23 Last Survey March 7<sup>th</sup> 1924

Reg. Book. 403705 on the Steel Screw Steamer "Oriskany" (Number of Visits 33)

Built at Wallsend By whom built Swan Hunter & Wigham Richardson Ltd Yard No. 1127 Tons { Gross 1643.7 Net 838.14

Engines made at Walker By whom made Swan Hunter & Wigham Richardson Ltd Engine No. 1166 When built 1924

Boilers made at Walker By whom made Swan Hunter & Wigham Richardson Ltd Boiler No. 1166 when made 1924

Registered Horse Power \_\_\_\_\_ Owners Swan Hunter & Wigham Richardson Ltd Port belonging to Montreal

Nom. Horse Power as per Rule 305 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

## ENGINES, &c.—Description of Engines

Inverted Triple Expansion

Dia. of Cylinders 20-23-56 Length of Stroke 29 Revs. per minute 103 No. of Cylinders 3 No. of Cranks 3

Dia. of Crank shaft journals as per rule 11.125 Dia. of Crank pin 11.8 Crank webs 21.98 Mid. length breadth 7.8 Thickness parallel to axis 7.8

Diameter of Thrust shaft under collars as per rule 11.375 Diameter of Tunnel shaft as per rule 10.6 Diameter of Screw shaft as per rule 11.52 Is the Screw shaft fitted with a continuous liner the whole length of the stern tube Yes Is the after end of the liner made watertight in the propeller boss Yes

If the liner is in more than one length are the joints burned \_\_\_\_\_ 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 appliance fitted at the after end of the shaft to permit of its being efficiently lubricated No Length of Stern Bush 3-11 Diameter of Propeller 13-6

Pitch of Propeller 14-3 No. of Blades 4 State whether Moveable Yes Total Surface 56 square feet.

No. of Feed Pumps fitted to the Main Engines \_\_\_\_\_ Diameter of ditto \_\_\_\_\_ Stroke \_\_\_\_\_ Can one be overhauled while the other is at work \_\_\_\_\_

No. of Bilge Pumps fitted to the Main Engines 2 Diameter of ditto 3.5 Stroke 22 Can one be overhauled while the other is at work Yes

Total number and size of power driven Feed and Bilge Auxiliary Pumps one pair Lewis Feed pumps 9.5" x 7.5" x 21", one Diamond Feed pump 7" x 4.5" x 8", one Northington Ballast pump 7.5" x 8.5" x 10"

No. and size of Pumps connected to the Main Bilge Line one 7.5" x 8.5" x 10" Ballast donkey, and the 2 Engine Bilge pumps

No. and size of Ballast Pumps one 7.5" x 8.5" x 10" No. and size of Lubricating Oil Pumps, including Spare Pump \_\_\_\_\_

Are two independent means arranged for circulating water through the Oil Cooler \_\_\_\_\_ No. and size of suction connected to both Main Bilge Pumps and Auxiliary Bilge Pumps;—In Engine and Boiler Room 3-2.5" one 3" Cofferdam in E. Room and in Holds, &c. 2-3" Fore hold. 4-3" after hold

one 2.5" Tunnel well suction. Oil Fuel Transfer Pump draws Cofferdam in Boiler room - 1-3"

No. and size of Main Water Circulating Pump Bilge Suctions one 8" No. and size of Donkey Pump Direct Suctions \_\_\_\_\_

to the Engine Room Bilges one 3.5" Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes Yes

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 Yes

Are all connections with the sea direct on the skin of the ship Yes Are they Valves or Cocks Both

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Yes Are the Discharge Pipes above or below the deep water line max draft line

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 are carried through the bunkers no coal bunkers (oil only) How are they protected \_\_\_\_\_

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 Screw Shaft Tunnel watertight Yes Is it fitted with a watertight door Yes worked from upper deck

MAIN BOILERS, &c.—(Letter for record .5) Total Heating Surface of Boilers 4600 sq ft

Is Forced Draft fitted Yes No. and Description of Boilers 2 Horizontal cylindrical Multitubular Working Pressure 200 lbs

IS A REPORT ON MAIN BOILERS NOW FORWARDED? Yes

IS A DONKEY BOILER FITTED? No If so, is a report now forwarded? \_\_\_\_\_

PLANS. Are approved plans forwarded herewith for Shafting No Main Boilers Yes Auxiliary Boilers None Donkey Boilers None

General Pumping Arrangements No Oil fuel Burning Piping Arrangements Yes

SPARE GEAR. State the articles supplied:—3 main bearings, 2 top end, 2 bottom end bolts & nuts, 6 coupling bolts and nuts, assorted bolts and nuts, 20 condenser ferrules, 6 piston bolts and nuts, one set of springs for each piston, one solid cast iron propeller, 1 dozen each gauge glasses and rubber rings, 2 elbow valve lids, 2 each bilge pump valves and seats, 1 set each feed donkey, oil fuel transfer pump & ballast donkey valves, 1 set of filtering material for filter, Bars and plates of iron assorted, 1 propeller shaft complete, 1 pair of bottom end frames, 1 air pump bucket & rod, 1 air pump head valve, seat and guard, 6 boiler tubes, 12 brass bolts and nuts, 1 pair of top end bearings, 50 condenser tubes, 2 springs for safety valves, 3 springs for escape valves, 6 air pump valves, 100 sets of condenser tube packing, 1 set of metallic packing for HP piston rod, one set of metallic packing for slide rod, Spare gear for oil burning installation:—1 set each steamer bags for each suction and discharge strainer, 1 set of thermometers, 4 burner bodies, caps, 12 burner diaphragms, 1 set of fire brick gaskets for air distributors.

The foregoing is a correct description

G. F. Sweet Director

Manufacturer.



1923. Oct 11-12-19-23-25. Nov 8-10-21-22-23-26-27. Dec 3-13-28-1924 Jan 8-14-16-23-25  
 During progress of work in shops - - 1924. Feb 1-4-5-8  
 Dates of Survey while building }  
 During erection on board vessel - - - } 1924. Feb 11-14-19-20-26. March 1-3-4-7.  
 Total No. of visits 38

Dates of Examination of principal parts - Cylinders 28.12.23 + 16.1.24 Slides 19.10.23  
 Covers 19.10.23. Pistons 16.1.24 Rods 16.1.24  
 Connecting rods 16.1.24 Crank shaft 14.1.24 Thrust shaft 17.9.23.  
 Tunnel shafts 8.1.24. 14.9.23 Screw shaft 12.9.23 Propeller 8.1.24  
 Stern tube 16.1.24 Engine and boiler seatings 8.2.24 Engines holding down bolts 19.2.24  
 Completion of pumping arrangements Boilers fixed 19.2.24 Engines tried under steam 7.3.24  
 Completion of fitting sea connections 8.2.24 Stern tube 8.2.24 Screw shaft and propeller 8.2.24  
 Main boiler safety valves adjusted 7.3.24 Thickness of adjusting washers A = 3/8 F = 7/16 star "A" boiler " A = 3/16 F = 7/16  
 Material of Crank shaft steel Identification Mark on Do. 6698. MR. 14.1.24.  
 Material of Thrust shaft " Identification Mark on Do. 6698. JD. 17.9.23  
 Material of Tunnel shafts " Identification Marks on Do. 6636. MR. 8.1.24. 6698 JD. 14.9.23  
 Material of Screw shafts " Identification Marks on Do. 6698. JD. 12.9.23  
 Material of Steam Pipes steel Test pressure 600 lbs ✓ Date of Test 20.2.24  
 Is an installation fitted for burning oil fuel Yes ✓ Is the flash point of the oil to be used over 150°F. Yes ✓  
 Have the requirements of the Rules for carrying and burning oil fuel been complied with Yes ✓  
 Is this machinery duplicate of a previous case Yes ✓ If so, state name of vessel S.S. "Bradell" ✓

**General Remarks** (State quality of workmanship, opinions as to class, &c. This vessel's machinery has been examined during construction, and the materials and workmanship are good, and in accordance with the requirements of the rules and the approved plans.

On completion it was submitted to a steam trial with satisfactory results, when the safety valves were adjusted to the working pressure. It is therefore eligible in our opinion to be classed in the Register Book with the notation of + LMC 3.24. Fitted for oil fuel 3.24. F.P. above 150°F.

It is submitted that this vessel is eligible for THE RECORD. + LMC 3.24. FD. CL. Fitted for oil fuel 3.24. F.P. above 150°F.

*[Signature]*  
12/3/24

CERTIFICATE WRITTEN 12/3/24

The amount of Entry Fee ... £ 5 :  
 Special ... £ 70 : 15 :  
 Donkey Boiler Fee ... £ :  
 Travelling Expenses (if any) £ :  
 When applied for, 8/3/1924  
 When received, 10/3/1924

*[Signature]*  
Maurice Nelson & L. G. Shallerons  
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRIMAR 14 1924  
 Assigned + LMC 3.24  
 F. D. C. L.  
 Fitted for oil fuel 3.24  
 F.P. above 150°F.



NEWCASTLE-ON-TYNE

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