

## REPORT ON STEAM RECIPROCATING ENGINE MACHINERY

No. 81352

Date of writing Report 14 May 1927 When handed in at Local Office 18/5/27 Port of NEWCASTLE ON TYNE Received at London Office 19 MAY 1927

No. in Survey held at Walker on Tyne Date, First Survey 10 May Last Survey 12 May 1927  
 Reg. Book. on the **STEEL SCREW STEAMER BRITISH COLONY.** (Number of Visits 88)

Built at Walker. By whom built Swan Hunter Wigham Richardson Ltd Yard No. 1224 Tons {Gross 6917.37  
 Engines made at Walker By whom made Swan Hunter W. Richardson Ltd Engine No. 1224 Net 4142.63  
 Boilers made at Walker By whom made Swan Hunter W. Richardson Ltd Boiler No. 1224 when built 1927-5  
 Registered Horse Power Owners British Tanker Co Ltd when made 1927-5  
 Nom. Horse Power as per Rule 585-584 Is Refrigerating Machinery fitted for cargo purposes no Port belonging to London  
 Trade for which Vessel is intended Carrying Petroleum in bulk Is Electric Light fitted yes

ENGINES, &c.—Description of Engines Triple Expansion ✓  
 Dia. of Cylinders 26 1/2, 44, 74 ✓ Length of Stroke 51 ✓ No. of Cylinders 3 ✓ Revs. per minute 22 1/8 ✓  
 Crank shaft, dia. of journals as per Rule 14.54 ✓ as fitted 14 7/8 ✓ Crank pin dia. 14 7/8 ✓ Crank webs Mid. length breadth 22 1/8 ✓ Thickness parallel to axis 93/8 ✓  
 Intermediate Shafts, diameter as per Rule 13.5 ✓ as fitted 14 1/8 ✓ Thrust shaft, diameter at collars as per Rule 14.54 ✓ as fitted 14 7/8 ✓  
 Tube Shafts, diameter as per Rule 16.43 ✓ as fitted 16 1/8 ✓ Is the shaft filled with a continuous liner yes ✓  
 Screw Shaft, diameter as per Rule 16 1/8 ✓ as fitted 16 1/8 ✓ Is the shaft filled with a continuous liner yes ✓  
 Bronze Liners, thickness in way of bushes as per Rule 13/16 ✓ as fitted 13/16 ✓ Thickness between bushes as per Rule 5/16 ✓ as fitted 3/4 ✓ 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 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 ✓  
 end of the tube shaft ✓ Is an approved Oil Gland or other appliance fitted at the after end of the tube shaft ✓  
 Propeller, dia. 19-0 ✓ Pitch 18-3 ✓ No. of Blades 4 ✓ Material Brass ✓ whether Movable yes ✓ Total Developed Surface 115 ✓ sq. feet  
 Feed Pumps worked from the Main Engines, No. 2 ✓ Diameter 4 1/4 ✓ Stroke 26 ✓ Can one be overhauled while the other is at work yes ✓  
 Bilge Pumps worked from the Main Engines, No. 2 ✓ Diameter 4 1/4 ✓ Stroke 26 ✓ Can one be overhauled while the other is at work yes ✓  
 Steam Pumps { No. and size 2 (Mains) 10 1/2 x 8 x 22 ✓  
 Pumps { (1) G.S. Duplex 6 x 4 1/2 x 6 ✓  
 How driven (1) mine. Harlow feed 6 x 4 x 12 ✓  
 Ballast Pumps, No. and size (1) Duplex 10 x 12 x 10 ✓  
 Pumps connected to the Main Bilge Line { No. and size (1) Ballast 10 x 12 x 10 (1) G.S. Pump 6 x 4 1/2 x 6 ✓  
 How driven oil fuel transfer pump 6 x 5 1/4 x 6 (Steam) ✓  
 Lubricating Oil Pumps, including Spare Pump, No. and size  
 Are two independent means arranged for circulating water through the Oil Cooler ✓  
 Bilge Pumps;—In Engine and Boiler Room (1) 3 1/2" off well ✓ 2 of 3 1/2" in Boiler Room ✓ Suctions, connected to both Main Bilge Pumps and Auxiliary  
 In Holds, &c. 2 of 2 1/2" ✓ one 3 1/2" Bilge Well on Port Side of Eng. Room ✓

Main Water Circulating Pump Direct Bilge Suctions, No. and size (1) 10" ✓ Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size one of 5" diameter ✓  
 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 Sea Connections fitted direct on the skin of the ship yes ✓ Are they fitted with 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 Overboard Discharges above or below the deep water line below ✓  
 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 ✓ 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 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 none ✓ Is it fitted with a watertight door ✓ worked from ✓

MAIN BOILERS, &c.—(Letter for record 5) Total Heating Surface of Boilers 8634 ✓  
 Is Forced Draft fitted yes ✓ No. and Description of Boilers 3 S.E. CYL. MULTI Working Pressure 200 lbs ✓  
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? yes ✓  
 IS A DONKEY BOILER FITTED? yes (1) S.E. CYL. MULTI If so, is a report now forwarded? yes ✓ See 1218 Boilers  
 PLANS. Are approved plans forwarded herewith for Shafting no ✓ Main Boilers yes ✓ See 1218 Engines ✓  
 (If not state date of approval) Auxiliary Boilers none ✓ Donkey Boilers yes ✓  
 Superheaters none ✓ General Pumping Arrangements yes ✓ Oil fuel Burning Piping Arrangements yes ✓

SPARE GEAR. State the articles supplied:—

Two top and bottom end bolts and nuts, 4 main bearing bolts and nuts, set of spare coupling bolts and nuts, 2 spare propeller blades, 1 set spare studs and nuts, 1 eccentric sheave and 2 shop complete one slide valve spindle, spare tail shaft (C.L.)—spare piston rings, spare feed and Bilge pumps valves, spare valves for auxiliary pumps, assorted iron bolts and nuts, assorted spare gear for forced draught and oil fuel installation, impeller shaft for Centrifugal Circulating pumps, General Engine Room Tools and Stores—1 ps crank pin bearings, 1 set pads for one face of Mitchell thrust block, 1 air pump rod, 1 set air pump valves, 1 set metallic packing (each size) piston & slide rods, spare boiler tubes, spare condenser tubes & ferrules, 1 doz gauge glasses, spare check valve lids (main & auxy). Safety valve spring for main & auxy boilers ✓

The foregoing is a correct description.

SWAN, HUNTER &amp; WIGHAM RICHARDSON, LTD.

G. J. Tweedy

DIRECTOR

Manufacturer.



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Lloyd's Register Foundation

W1124-0235



PILLAR

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Centre  
Stiffer

Platin

STRINGE  
Upper  
String

Thick

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of Strakes

BILGE PLAT

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Strakes

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UPPER DECK

strake in I

STRAKE BELO

strake in I

STRAKE BELO

strake in I

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1926  
May 10. 21. 26. 31. June 7. 8. 10. 11. 14. 16. 17. 29. July 5. 6. 13. 14. 20. 21. 27. Aug. 3. 6. 10. 13. 16. 17. 23.  
During progress of work in shops - - 26. 27. Sept. 6. 7. 8. 9. 13. 15. 17. 20. 21. 23. 24. 29. Oct. 1. 4. 5. 6. 7. 11. 13. 14. 15. 19. 20. 21. 23. 28. Nov. 2. 4.  
1927  
Dec. 2. 10. 14. 17. Jan. 26. 27. 31. Feb. 2. 7. 28. Mar. 9. 10. 11. 18. 24. 29. Apr. 1. 4. 5. 6. 7. 8. 20. 21. 22. 28.  
During erection on board vessel - - 12  
30. May 2. 4. 5. 6. 12.  
Total No. of visits 88.

Dates of Examination of principal parts—Cylinders 1. 10. 26. 27. 10. 26 Slides 7. 10. 26. 31. 1. 27 Covers 7. 10. 26. 24. 3. 27  
Pistons 1. 10. 26. 7. 10. 26. 24. 3. 27 Piston Rods 1. 10. 26. 24. 3. 27 Connecting rods 1. 10. 26. 24. 3. 27  
Crank shaft 1. 10. 26. 7. 10. 26. 13. 10. 26 Thrust shaft 24. 3. 27. 22. 4. 27 Intermediate shafts 24. 3. 27. 29. 3. 27. 27. 1. 27  
Tube shaft ✓ Screw shaft 1. 2. 27. 27. 1. 27 Propeller 4. 10. 26. 7. 2. 27. 29. 3. 27. 27. 1. 27  
Stern tube 24. 3. 27 Engine and boiler seatings 1. 4. 27. 22. 4. 27 Engines holding down bolts 21. 4. 27. 22. 4. 27  
Completion of pumping arrangements 5 May 1927 Boilers fixed 22. 4. 27 Engines tried under steam 5 May 1927  
Main boiler safety valves adjusted 5 May 1927 Thickness of adjusting washers P.B. 3/8 S.B. 3/8 F.B. 3/8 O.K. 13. 7 1/6 A.P.A.  
Crank shaft material Steel Identification Mark LLOYDS 7598 J.D. 15. 12. 26 Thrust shaft material Steel Identification Mark LLOYDS J.L.  
Intermediate shafts, material Steel Identification Marks LLOYDS J.L. 12. 5. 26. L.G.S. 27. 1. 27 Tube shaft, material Steel Identification Mark LLOYDS J.L.  
Screw shaft, material Steel Identification Mark LLOYDS J.L. 12. 5. 26. L.G.S. 27. 1. 27 Steam Pipes, material Steel Test pressure 600 lb Date of Test 28 April 27  
Is an installation fitted for burning oil fuel Yes. (See plans) 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 Sate. Vessel of British Governor of 1218, October, 1926. British Governor.

General Remarks (State quality of workmanship, opinions as to class, &c.)  
The machinery and Boilers built and fitted up on board the vessel under Special Survey - The material and workmanship found good and efficient -  
The machinery tested under working conditions, while at moorings and during sea trials before proceeding on the voyage, and found satisfactory -  
In my opinion this vessel is now eligible for the notation of + L.M.C. 5. 27 (IN RED) to be made in the Register Book -  
Fitted for burning oil fuel. Flash point above 150°F. - 5. 27.

It is submitted that  
this vessel is eligible for  
THE RECORD. + L.M.C. 5. 27. CL. F.D.  
Fitted for oil fuel 5. 27. F.P. above 150°F.

J.W.D.  
19/5/27.  
N.  
1/1

CERTIFICATE WRITTEN  
L. G. Shallcross.  
Engineer Surveyor to Lloyd's Register of Shipping.

The amount of Entry Fee ... £ 6 : : When applied for,  
Special ... £ 104 : : 18 MAY 1927  
Donkey Boiler Fee ... £ : :  
Travelling Expenses (if any) £ : : 19. 5. 27

Committee's Minute FRI. 20 MAY 1927  
Assigned + L.M.C. 5. 27 CL. F.D.  
Fitted for Oil Fuel 5. 27. F.P. above 150°F