

# REPORT ON MACHINERY.

No. 76050

Received at London Office

TUE. OCT. 17 1922

Date of writing Report 30. 9 1922 When handed in at Local Office 16. 10 1922 Port of

No. in Survey held at WALKER, ON TYNE Date, First Survey 22. March Last Survey 13 October 1922

Reg. Book. on the STEEL SCREW STEAMER, BRITISH SCOUT. s/s. 1136

Master 83<sup>rd</sup> Built at WALKER By whom built SWAN HUNTER, WIGHAM RICHARDSON LD 1136 Tons } Gross } Net } When built 1922

Engines made at WALKER By whom made SWAN HUNTER, WIGHAM RICHARDSON LD 1136 when made 1922

Boilers made at WALKER By whom made SWAN HUNTER, WIGHAM RICHARDSON LD 1136 when made 1922

Registered Horse Power Owners BRITISH TANKER CO LD 1136 Port belonging to SWANSEA.

Nom. Horse Power as per Section 28 182 Is Refrigerating Machinery fitted for cargo purposes NO Is Electric Light fitted YES

ENGINES, &c.—Description of Engines VERTICAL TRIPLE EXPANSION No. of Cylinders 3 No. of Cranks 3

Dia. of Cylinders 17 1/2 - 29 - 48 Length of Stroke 33 Revs. per minute Dia. of Screw shaft as per rule 10. 16 Material of STEEL as fitted 10 3/8 screw shaft

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 water tight 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 --- Length of stern bush 3. 5 1/2

Dia. of Tunnel shaft as per rule 8. 84 Dia. of Crank shaft journals as per rule 9. 28 Dia. of Crank pin 9 1/2 Size of Crank webs BUILT Dia. of thrust shaft under collars 9 3/4 Dia. of screw 12. 9 Pitch of Screw 13. 3 No. of Blades 4 State whether moveable NO Total surface 53 9

No. of Feed pumps 2 Diameter of ditto 3 Stroke 18 Can one be overhauled while the other is at work YES

No. of Bilge pumps 2 Diameter of ditto 3 Stroke 18 Can one be overhauled while the other is at work YES

No. of Donkey Engines BALLAST. 8x8x10 CARGO OIL PUMP 14x12x18 No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room MICHY SPACE 2. 0 1/2 2. 9 2 OIL WELL In Holds, &c. 2. 0 1/4 PUMP ROOM - 1. 0 1/2 FORHOLD - 1. 0 2 BALLAST

1. 9 3 COFFERDAM No. of Bilge Injections 1 Connected to circulating pump YES Is a separate Donkey Suction fitted in Engine room & size YES. 2 1/2

Are all the bilge suction pipes fitted with roses YES Are the roses in Engine room always accessible YES Are the sluices on Engine room bulkheads always accessible ---

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 BOTH

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 ---

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

Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges YES

Is the Screw Shaft Tunnel watertight NONE Is it fitted with a watertight door --- worked from ---

BOILERS, &c.—(Letter for record 2 (7) Manufacturers of Steel J. Spence & Son Ltd of Newburn N Tyne

Total Heating Surface of Boilers 2664 Is Forced Draft fitted YES No. and Description of Boilers 2. S. E. CYL. MULTI

Working Pressure 180 lb. Tested by hydraulic pressure to 320 lb. Date of test 18. 8. 22 No. of Certificate 9683

Can each boiler be worked, separately YES Area of fire grate in each boiler OIL FUEL No. and Description of Safety Valves A. L

each boiler TWO. DIRECT SPRING Area of each valve 5. 93 Pressure to which they are adjusted 185 lb. Are they fitted with easing gear YES

Smallest distance between boilers or uptakes and bunkers or woodwork 6. 0 Mean dia. of boilers 11. 6 Length 11. 3 Material of shell plates STEEL

Thickness 29/32 Range of tensile strength 30/34 TONS Are the shell plates welded or flanged NO Descrip. of riveting: cir. seams D. R. L

long. seams D. B. S. TR Diameter of rivet holes in long. seams 15/16 Pitch of rivets 6 7/16 Lap of plates or width of butt straps 13 13/16

Per centages of strength of longitudinal joint rivets 85. 04 70 Working pressure of shell by rules 183 1/2 Size of manhole in shell 16 x 12

Size of compensating ring 3. 0 x 2. 8 No. and Description of Furnaces in each boiler 2 DEIGHTON Material STEEL Outside diameter 3. 6 1/8

Length of plain part top 7. 6 1/4 Thickness of plates crown 1/2 Description of longitudinal joint WELD No. of strengthening rings NONE

Working pressure of furnace by the rules 185 1/2 Combustion chamber plates: Material STEEL Thickness: Sides 11/16 Back 23/32 Top 11/16 Bottom 11/16

Pitch of stays to ditto: Sides 8 x 8 3/8 Back 8 x 8 Top 8 x 8 If stays are fitted with nuts or riveted heads SEE PLAN Working pressure by rules 186 1/2

Material of stays 20W Area at smallest part 1 1/2 Area supported by each stay 67 0 Working pressure by rules 187 1/2 End plates in steam space:

Material STEEL Thickness 1 1/2 Pitch of stays 14 x 18 1/2 How are stays secured D-N Working pressure by rules 182 1/2 Material of stays STEEL

Area at smallest part 2 9/8 Area supported by each stay 270 Working pressure by rules 184 1/2 Material of Front plates at bottom STEEL

Thickness 1 1/2 Material of Lower back plate STEEL Thickness 1 1/2 Greatest pitch of stays 13 1/2 x 8 Working pressure of plate by rules 190 1/2

Diameter of tubes 2 1/2 Pitch of tubes 3 3/4 x 3 3/4 Material of tube plates STEEL Thickness: Front 1 1/2 Back 3/4 Mean pitch of stays 9 3/8

Pitch across wide water spaces 13 1/2 Working pressures by rules B 226 Girders to Chamber tops: Material STEEL Depth and

thickness of girder at centre 8 1/4 x 1 1/4 Length as per rule 30. 53 Distance apart 8 Number and pitch of stays in each 3 9/8 pitch

Working pressure by rules 183 1/2 Steam dome: description of joint to shell NONE % of strength of joint

Diameter 2 Thickness of shell plates Material Description of longitudinal joint Diam. of rivet holes

Pitch of rivets Working pressure of shell by rules Crown plates Thickness How stayed

SUPERHEATER. Type NONE Date of Approval of Plan Tested by Hydraulic Pressure to

Date of Test Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler

Diameter of Safety Valve Pressure to which each is adjusted Is Easing Gear fitted

24. 11. 20. T Lloyd's Register Foundation

002174-002183-0094

IS A DONKEY BOILER FITTED? NO

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied four 10 1/2" end bolts & nuts, two bottom end bolts & nuts four bedplate bearing bolts & nuts. 1 set bottom end bearings - Spare coupling bolts & nuts, two eccentric shafts - one Valve spindle, 24 junk ring bolts - one air pump rod one set air pump valves two feed pump valves. 1 set Bilge pump valves & seats. 1 propeller shaft (C.L.) one spare propeller one relief valve spring for each side fitted - one main feed check valve one auxiliary feed check valve 2 manhole door dogs & nuts 12 stay nuts - 6 plain boiler tubes - one set of valves for wear pumps Spare tubes & flanges for Condenser. (24) - wanted iron bolts & nuts of general engine room stores & tools

The foregoing is a correct description,

FOR EWAN, HUNTER & WICHAM RICHARDSON, LTD.

L. J. Tweedy

Manufacturer.

Dates of Survey while building: During progress of work in shops - 1922 Mar. 22, Apr. 6, 25, May 2, 11, 16, June 1, 2, 7, 29, July 1, 12, 13, 24, 27, 28, Aug. 2, 4, 8, 10, 17, 18, 21, 22, 24, 25, 28, 29, 30, Sep. 1, 7, 13, 15, 20, 23, 25, 27. During erection on board vessel - Oct. 4, 6, 13. Total No. of visits 41. Is the approved plan of main boiler forwarded herewith YES

Engines tested M.P. 225 lb. M.P. 100 lb. L.P. 25 lb. 27.7.22 7.9.22 " " donkey " " 17.7.22 16.5.22 6.4.22  
Dates of Examination of principal parts - Cylinders 25.4.22 Slides 1.6.22 Covers 1.5.22 Pistons 2.5.22 Rods 1.4.22  
4/8/22 2.5.22 4.8.22 16.3.22 4.8.22 2.8.22 4.8.22  
Connecting rods 1.4.22 Crank shaft 29.6.22 Thrust shaft 25.4.22 Tunnel shafts \_\_\_\_\_ Screw shaft 27.7.22 Propeller 27.7.22  
4.8.22 27.9.22 \_\_\_\_\_  
Stern tube 27.7.22 Steam pipes tested 23.9.22 Engine and boiler seatings 29.8.22 Engines holding down bolts 25.9.22  
Completion of pumping arrangements 13.10.22 Boilers fixed 4.10.22 Engines tried under steam 4.10.22/3.10.22  
Completion of fitting sea connections 22.8.22 Stern tube 4/8/22 29.8.22 Screw shaft and propeller 25/9/22 - 25.9.22  
Main boiler safety valves adjusted 4.10.22 Thickness of adjusting washers PT.B. P 1/2" S 1/2" ST.B. P 3/8" S 3/8"  
Material of Crank shaft steel Identification Mark on Do. LCS 4/8/22 Material of Thrust shaft steel Identification Mark on Do. 4/8/22  
Material of Tunnel shafts \_\_\_\_\_ Identification Marks on Do. \_\_\_\_\_ Material of Screw shafts steel Identification Marks on Do. LCS  
Material of Steam Pipes SD. Copper Test pressure 400 lb

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 Section 49 of the Rules been complied with YES  
Is this machinery duplicate of a previous case NO If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, &c.)  
The machinery built under Special Survey the material and workmanship found good and efficient  
The Engines, and Boilers, with the auxiliary machinery satisfactorily fitted up on board the Vessel (AFT).  
The main cylinders, Condensers, feed Heaters, and various Stop Valves and pipes were tested under hydraulic pressure tests, with satisfactory results.  
The Engines and Boilers were tested under Steam, under working conditions (Vessel at moorings) and found satisfactory - 4.10.22  
The Vessel subsequently proceeded to sea for sea trials. The machinery working satisfactorily. The Vessel then proceeded on a voyage to London - 13.10.22.  
In my opinion the Vessel is now eligible for the notification of + L.M.C. 10.22 fitted up for burning oil fuel. 10.22. Flash point above 150° F. Boilers fitted with forced draught. Tail shaft (C.L.) to be recorded in the Register Book

Certificate (if required) to be sent to Newcastle (in duplicate)

The amount of Entry Fee ... £ 3 : : When applied for, 14/10/22  
Special ... £ 45 10 : :  
Donkey Boiler Fee ... £ : : When received, 17/10/22  
Travelling Expenses (if any) £ : : 12/6

L. G. Shallcross & Co.  
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute  
Assigned + Ldn. 10.22  
F. D. C. L.  
Listed for oil fuel 10.22  
F.P. above 150° F.

