

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 20 NOV 1942

Port of Hull

When handed in at Local Office 20 NOV 1942

Survey held at Hessle & Hull Date, First Survey 23. 5. 42 Last Survey 8. 10. 1942

Reg. Book Empire Titan (Number of Visits 29)

Tons { Gross 242.33
Net Nil

Built at HESSLE By whom built HENRY SCARR Yard No. 10 When built 1942

Engines made at TROON By whom made AILSA SHIPBUILDING Co. Engine No. 185 When made 10

Boilers made at HULL By whom made B.D. Holmes & Co. Ltd Boiler No. 1603 When made 10

Registered Horse Power 1150 Owners Ministry of War Transport Port belonging to Hull

Nom. Horse Power as per Rule 177 Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted yes

Trade for which vessel is intended Merchant

ENGINES, &c.—Description of Engines Steam reciprocating Sale No. 65630 Revs. per minute 130

Dia. of Cylinders 16" 26" x 43" Length of Stroke 30" No. of Cylinders 3 No. of Cranks 3

Crank shaft, dia. of journals 9" Crank pin dia. 9" Crank webs 17 1/2" Mid. length breadth 5 5/8" Thickness parallel to axis 4"

Intermediate Shafts, diameter 8 3/8" as per Rule 8.375 Thrust shaft, diameter at collars 8 9/8" as per Rule 8.9

Tube Shafts, diameter none Screw Shaft, diameter 9 7/8" as per Rule 9.7 Is the tube shaft fitted with a continuous liner no

Bronze Liners, thickness in way of bushes no liner Thickness between bushes as per Rule 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 yes

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 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 end of the tube yes

Propeller, dia. 11'-0" Pitch 11'-8" No. of Blades Four Material C.I. whether Moveable solid Total Developed Surface 46 sq. feet

Feed Pumps worked from the Main Engines, No. 2 Diameter 2 3/4" Stroke 16" Can one be overhauled while the other is at work yes

Bilge Pumps worked from the Main Engines, No. 2 Diameter 2 3/4" Stroke 16" Can one be overhauled while the other is at work yes

Feed Pumps { No. and size One Weir Pumps connected to the { No. and size 2.5 3" dia x 16" stroke from One 7x7x8" duplex

How driven Independent Steam Main Bilge Line { How driven main engines Dawson Donnie, independent steam

Ballast Pumps, No. and size One 7x7x8" duplex Lubricating Oil Pumps, including Spare Pump, No. and size as per Rule

Are two independent means arranged for circulating water through the Oil Cooler yes Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge Pumps:—In Engine and Boiler Room Two each 2" dia. Boiler room two 2 1/4"

In Pump Room as per Rule In Holds, &c. One each of 2" dia to fore peak, aft peak and

Main Water Circulating Pump Direct Bilge Suctions, No. and size One 5 1/2" dia Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size One 2 1/4"

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 both 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 above

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 pass through the bunkers none How are they protected as per Rule

What pipes pass through the deep tanks none Have they been tested as per Rule yes

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 no tunnel Is it fitted with a watertight door yes worked from as per Rule

MAIN BOILERS, &c.—(Letter for record S) Total Heating Surface of Boilers 2778 sq. ft.

Which Boilers are fitted with Forced Draft all Which Boilers are fitted with Superheaters none

No. and Description of Boilers One S.B. Working Pressure 210 lbs/sq. in.

IS A REPORT ON MAIN BOILERS NOW FORWARDED? yes

IS A DONKEY BOILER FITTED? no If so, is a report now forwarded? no

Can the donkey boiler be used for domestic purposes only yes

PLANS. Are approved plans forwarded herewith for Shafting 3-1-41 Main Boilers 8-8-40 Auxiliary Boilers as per Rule Donkey Boilers as per Rule

(If not state date of approval)

Superheaters as per Rule General Pumping Arrangements 1-11-40 Oil fuel Burning Piping Arrangements as per Rule

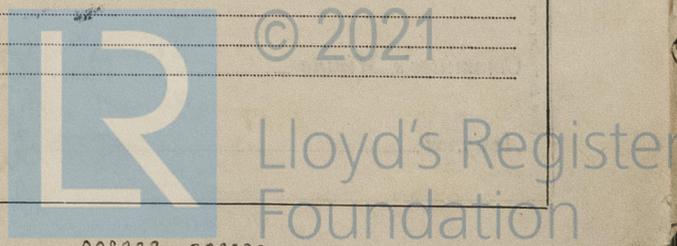
SPARE GEAR.

Was the spare gear required by the Rules been supplied yes

State the principal additional spare gear supplied as specification

The foregoing is a correct description.

Manufacturer.



Dates of Survey while building

During progress of work in shops - -

During erection on board vessel - - -

Total No. of visits. 29.

May 23, June 8th 16, 22, 23, July 3, 15, 30, Aug 6, 19, 25
 Sept 8, 10, 12, 14, 15, 16, 17, 21, 22, 23, 28, 29, Oct 1, 2, 5, 6, 7, 8

Dates of Examination of principal parts—Cylinders Slides Covers

Pistons Piston Rods No. 65630 Connecting rods

Crank shaft Thrust shaft Intermediate shafts

Tube shaft Screw shaft 22.6.42 Propeller 23.6.42

Stern tube 22.6.42 Engine and boiler seatings 8.9.42 Engines holding down bolts 29.9.42

Completion of fitting sea connections 23.6.42

Completion of pumping arrangements 8.10.42 Boilers fixed 2-10.42 Engines tried under steam 8-10-42

Main boiler safety valves adjusted 8.10.42 Thickness of adjusting washers Fd. 3/8" AFT 5/16"

Crank shaft material steel Identification Mark N°507 Thrust shaft material M.S. Identification Mark 127. LT.

Intermediate shafts, material MS. Identification Marks 161 LT. AWS. 9-12-41 Tube shaft, material Identification Mark

Screw shaft, material MS Identification Mark 440. 1-1-42 Steam Pipes, material Steel Test pressure 630 lb/□ Date of Test 7-5-40

Is an installation fitted for burning oil fuel. no 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. ✓

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 Emp. Bich Hul. RPT N° 51473. EMP. SPRITE Ital. RPT N° 5167

General Remarks (State quality of workmanship, opinions as to class, &c. The machinery of this vessel has been constructed in accordance with the approved plans, the Rules, and the specification; of tested materials made by firms accredited by the Society. The workmanship and material are good.

The main and auxiliary machinery have been fitted on board, tried under steam at as near full power as practicable in the basin, found satisfactory in all respects. It is eligible in my opinion, when classed, to record of * LMC 10.42 and O.G., with notation T. 3cyl. 16", 26 1/2" 177 NHP. ONE S.B. 210 lb/□ 3 c.F. G.S 64 lb H.S. 2778 lb F.D.

Certificate to be sent to

(The Surveyors are requested not to write on or below the space for Committee's Minute.)

The amount of Entry Fee ... £ : : } When applied for, 19 NOV 1942

1/5 Special +. Spec - ... £ 33 : 3 } 19

Donkey Boiler Fee ... £ : : } When received,

Travelling Expenses (if any) £ : : } 19

W. Shields & John Douglas
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute ... FRI. 27 NOV 1942

Assigned ... + Lamb 10.42

22, 09.

