

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

5. 11. 1928

Date of writing Report 4. 7. 1928 When handed in at Local Office 4. 7. 1928 Port of MIDDLESBROUGH.

No. in Survey held at STOCKTON Date, First Survey 22. 2. 28 Last Survey 3. 7. 1928.
 Reg. Book. 41684 Sup. on the sc. "LLANFAIR" (Number of Visits 28)

Built at Sunderland By whom built Bartram & Sons Ltd Yard No. 263. Tons { Gross
 Net
 When built 1928

Engines made at Stockton By whom made Blair & Co (1926) Ltd Engine No. 1978 when made 1928

Boilers made at do. By whom made do. Boiler No. 1978 when made 1928.

Registered Horse Power _____ Owners Wimborne S.S. Co Ltd. Port belonging to London.

Nom. Horse Power as per Rule 460 Is Refrigerating Machinery fitted for cargo purposes no. Is Electric Light fitted Ye.

Trade for which Vessel is intended _____

ENGINES, &c.—Description of Engines Triple Expansion Revs. per minute 62.

Dia. of Cylinders 27" 44 1/2" 73" Length of Stroke 48" No. of Cylinders 3. No. of Cranks 3.

Crank shaft, dia. of journals as per Rule 13.86" Crank pin dia. 15" Crank webs Mid. length breadth 2' 0 1/2" Thickness parallel to axis 9 3/4"
 as fitted 14 1/2" Mid. length thickness 9 1/4" Thickness around eye-hole 6 7/8"

Intermediate Shafts, diameter as per Rule 13.2" Thrust shaft, diameter at collars as per Rule 13.86"
 as fitted 14" as fitted 15"

Tube Shafts, diameter as per Rule _____ Screw Shaft, diameter as per Rule 14.7" Is the tube shaft fitted with a continuous liner { Ye.
 as fitted _____ as fitted 16 1/4" as fitted 9 1/16" }

Bronze Liners, thickness in way of bushes as per Rule 3/4" Thickness between bushes as per Rule 9/16" Is the after end of the liner made watertight in the
 as fitted 3/4" as fitted 9/16" propeller boss Ye. If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner Ye.

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 Ye.

If two liners are fitted, is the shaft lapped or protected between the liners Ye. Is an approved Oil Gland or other appliance fitted at the after
 end of the tube shaft no. Length of Bearing in Stern Bush next to and supporting propeller 5' 6"

Propeller, dia. 18' 0" Pitch 18' 0" No. of Blades 4 Material Bronze whether Moveable no. Total Developed Surface 102 sq. feet

Feed Pumps worked from the Main Engines, No. 2 Diameter 3 1/2" Stroke 3 1/4" Can one be overhauled while the other is at work Ye.

Bilge Pumps worked from the Main Engines, No. 2. Diameter 5" Stroke 3 1/4" Can one be overhauled while the other is at work Ye.

Feed Pumps { No. and size 2-7 1/2" x 5 1/2" x 8" (MUMFORD DUPLY) Pumps connected to the { No. and size 1-8" x 9" x 8" hamant Duplex
 How driven 1-6" x 4" x 6" STEAM Main Bilge Line { How driven Steam

Ballast Pumps, No. and size 1-10" x 12" x 12" Lubricating Oil Pumps, including Spare Pump, No. and size _____

Are two independent means arranged for circulating water through the Oil Cooler Ye. Suctions, connected to both Main Bilge Pumps and Auxiliary
 Bilge Pumps;—In Engine and Boiler Room 3-3", 1-2 1/2" in Tunnel Well.

In Holds, &c. Nº 1: 2-3", Nº 2: 2-3 1/2", Nº 3: 2-3", Nº 4: 2-3"

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1-8" Independent Power Pump Direct Suctions to the Engine Room Bilges,
 No. and size 1-4 1/2" Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes Ye.

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 Ye.

Are all Sea Connections fitted direct on the skin of the ship Ye. 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 Ye. 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 Ye. Are the Blow Off Cocks fitted with a spigot and brass covering plate Ye.

What Pipes pass through the bunkers Towards Bilge Suctions How are they protected wood casings

What pipes pass through the deep tanks _____ Have they been tested as per Rule Ye.

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

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 Ye. Is the Shaft Tunnel watertight Ye. Is it fitted with a watertight door Ye. worked from E.R. Top Platform

MAIN BOILERS, &c.—(Letter for record S.) Total Heating Surface of Boilers 7917 1/2.

Is Forced Draft fitted no. No. and Description of Boilers 3 S.B. Working Pressure 180lbs.

IS A REPORT ON MAIN BOILERS NOW FORWARDED? Ye.

IS A DONKEY BOILER FITTED? Ye. If so, is a report now forwarded? Already sent Feb Rpt 13303.

PLANS. Are approved plans forwarded herewith for Shafting 3217. Main Boilers 7. 1. 27. Auxiliary Boilers Ye. Donkey Boilers 26. 10. 27
 (If not state date of approval)

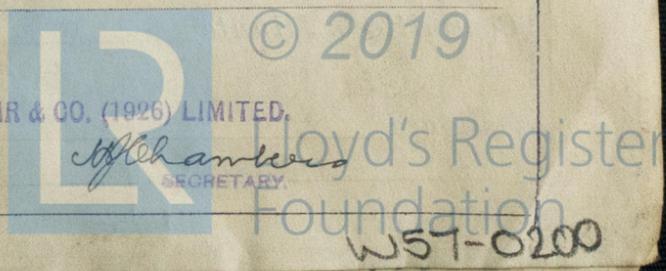
Superheaters Ye. General Pumping Arrangements 1. 6. 27. Oil fuel Burning Piping Arrangements Ye.

SPARE GEAR. State the articles supplied:— As per Rules + 1 tail shaft, 1 propeller, 4 main check valves,
 4 donkey check valves, 5 air pump valves, 2 feed donkey pump valves, 1 impeller & shaft
 for circulating pump, 9 piston balls & nuts, quantity gland & cover studs & nuts, boiler and
 condenser tubes, condenser ferrules, firebars and furnace door baffles.

The foregoing is a correct description,

Manufacturer.

For BLAIR & CO. (1926) LIMITED.



1928
 Feb 22-24-28. Mar 7-13-15-20-27-30. Apr 2-10-11-16-20-25. May 2-4-10-15-16-18-24-30-31.
 During progress of work in shops -- Jun 1-5-8. Jul 3.
 Dates of Survey while building {
 During erection on board vessel ---
 Total No. of visits 28

Dates of Examination of principal parts—Cylinders 20.4.28. Slides 20.4.28. Covers 20.4.28.
 Pistons 16.4.28. Piston Rods 16.4.28. Connecting rods 16.4.28.
 Crank shaft 16.4.28. Thrust shaft 16.4.28. Intermediate shafts 25.4.28.
 Tube shaft ✓ Screw shaft 25.4.28. Propeller 16.4.28.
 Stern tube 16.4.28. Engine and boiler seatings 30.5.28. Engines holding down bolts 8.6.28.
 Completion of fitting sea connections 3.5.28
 Completion of pumping arrangements 3.7.28 Boilers fixed 30.5.28. Engines tried under steam 3.7.28.
 Main boiler safety valves adjusted 8.6.28. Thickness of adjusting washers P. 9/16" 4" s. Centre 5/16" 11/32" s. S. 3/8" 11/32" s.
 Crank shaft material Steel Identification Mark LLOYDS NO 5752 D 16.4.28 PTB. Thrust shaft material Steel Identification Mark LLOYDS NO 5752 D 16.4.28 PTB.
 Intermediate shafts, material Identification Marks LLOYDS NO 5752 D 25.4.28 PTB. Tube shaft, material ✓ Identification Mark ✓
 Screw shaft, material Iron Identification Mark LLOYDS NO 7497 Steam Pipes, material Copper Test pressure 360 lbs. Date of Test 1.6.28.
 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 carrying and burning oil fuel been complied with ✓
 Is this machinery duplicate of a previous case Yes. If so, state name of vessel 'LLANDILO'

General Remarks (State quality of workmanship, opinions as to class, &c.)
 The materials and workmanship are good.
 This machinery has been built under special survey in accordance with the Rules and Approved Plan, securely fitted aboard and tested under working conditions with satisfactory results and is, in my opinion, eligible for classification with record + L.M.C. 4/28.

It is submitted that this vessel is eligible for THE RECORD. + L.M.C. 7-28 cl.

P.M. 6/7/28.
 G.R.K.

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

The amount of Entry Fee ...	£ 5-0-0	When applied for,
Special ...	£ 94-0-0	4-7-1928
Donkey Boiler Fee ...	£ :	When received,
Travelling Expenses (if any) £	:	6-7-1928

P.M. 6/7/28.
 G.R.K.
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUES. 10 JUL 1928
 Assigned + L.M.C. 7/28 cl.

CERTIFICATE WRITTEN.

