

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

9 MAR 1932

Date of writing Report 25-2-1932 When handed in at Local Office 26-2-1932 Port of Glasgow
 No. in Survey held at Glydebank Date, First Survey 17-9-31 Last Survey 24-2-1932
 Reg. Book M on the S.S. "Floran" (Number of Visits 30) Tons {Gross 500
 Net 188
 Built at Bowling By whom built Scott & Sons Yard No. 321 When built 1932
 Engines made at Glydebank By whom made Aitchison Blair Engine No. 183 When made 1932
 Boilers made at Glasgow By whom made D. Thomson & Co. Ltd. Boiler No. 387 When made 1932
 Registered Horse Power _____ Owners Frontier Towing S.S.C. Ltd. Port belonging to Trinity
 Nom. Horse Power as per Rule 110 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted No
 Trade for which Vessel is intended Trailing

ENGINES, &c.—Description of Engines Triple expansion Revs. per minute 111
 Dia. of Cylinders 18 1/2 - 23 - 30 Length of Stroke 27 No. of Cylinders 3 No. of Cranks 3
 Crank shaft, dia. of journals as per Rule 7.47 Crank pin dia. 7 1/2 Crank webs Mid. length breadth 14 3/8 Thickness parallel to axis 5 1/16
 as fitted 7 5/8 Mid. length thickness 6 1/16 Thickness around eye-hole 3 3/8
 Intermediate Shafts, diameter as per Rule _____ as fitted None Thrust shaft, diameter at collars as per Rule 7.47
 as fitted _____ as fitted 7 5/8
 Tube Shafts, diameter as per Rule _____ as fitted _____ Screw Shaft, diameter as per Rule 8.02
 as fitted _____ as fitted 8 1/8 Is the {screw} shaft fitted with a continuous liner { No }
 Bronze Liners, thickness in way of bushes as per Rule 3/32 Thickness between bushes as per Rule 11/32 Is the after end of the liner made watertight in the
 propeller boss No If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner Over length
 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 _____ Is an approved Oil Gland or other appliance fitted at the after end of the tube
 shaft No If so, state type _____ Length of Bearing in Stern Bush next to and supporting propeller 31 3/8
 Propeller, dia. 18-3 Pitch 10-9 No. of Blades 4 Material C.S. whether Movable No Total Developed Surface 36 1/2 sq. feet
 Feed Pumps worked from the Main Engines, No. 2 Diameter 2 1/4 Stroke 11 Can one be overhauled while the other is at work Yes
 Bilge Pumps worked from the Main Engines, No. 2 Diameter 2 1/4 Stroke 11 Can one be overhauled while the other is at work Yes
 Feed Pumps { No. and size 1-8 1/2 x 7-8, 1-6 1/2 x 4-6 Pumps connected to the { No. and size 1-8 1/2 x 7-8
 How driven Steam Main Bilge Line { How driven Steam
 Ballast Pumps, No. and size 1-8 1/2 x 7-8 Lubricating Oil Pumps, including Spare Pump, No. and size None
 Are two independent means arranged for circulating water through the Oil Cooler _____ Suctions, connected to both Main Bilge Pumps and Auxiliary
 Bilge Pumps;—In Engine and Boiler Room E.R. 1-2 1/2, 1-2, B.R. 2-2 1/2
 In Pump Room _____ In Holds, &c. 2-8 1/2

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1-6 Independent Power Pump Direct Suctions to the Engine Room Bilges,
 No. and size 1-8 1/2 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 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 For Bilges How are they protected Wood casing
 What pipes pass through the deep tanks None 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 2000 sq. ft.
 Is Forced Draft fitted No No. and Description of Boilers 1-4 multitubular Working Pressure 200
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? Yes
 IS A DONKEY BOILER FITTED? No If so, is a report now forwarded? _____
 Is the donkey boiler intended to be used for domestic purposes only _____
 PLANS. Are approved plans forwarded herewith for Shafting Yes Main Boilers Yes Auxiliary Boilers _____ Donkey Boilers _____
 (If not state date of approval)
 Superheaters _____ General Pumping Arrangements Yes Oil fuel Burning Piping Arrangements _____

SPARE GEAR.

Has the spare gear required by the Rules been supplied Yes
 State the principal additional spare gear supplied 2 propeller blades

The foregoing is a correct description,

Manufacturer.

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 AITCHISON, BLAIR, LIMITED.
 Arch Blair
 Lloyd's Register
 Foundation
 002330-002339-0050

Rpt. 5
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 No. in Reg. Book.
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1931 Sep: 17, 24, 30 Oct: 6, 14, 21, 23, 28 Nov: 3, 10, 16, 23, 27, 30 Dec: 2, 5, 16, 23, 30 (1932) Jan:
 During progress of work in shops - - 11, 14, 18, 20, 25, 26 Feb: 1, 4, 10, 17, 24
 Dates of Survey while building
 During erection on board vessel - - -
 Total No. of visits 30

Dates of Examination of principal parts—Cylinders 14-10-31 *de* Slides 16-12-31 *de* Covers 30-9-31 *de*
 Pistons 30-9-31 *de* Piston Rods 23-11-31 *de* Connecting rods 6-10-31 *de*
 Crank shaft 14-10-31 *de* Thrust shaft 3-11-31 *de* Intermediate shafts ✓
 Tube shaft ✓ Screw shaft 20-11-31 *de* Propeller 23-12-31 *de*
 Stern tube 8-12-31 *de* Engine and boiler seatings 25-1-32 Engines holding down bolts 4-2-32
 Completion of fitting sea connections 25-1-32
 Completion of pumping arrangements 17-2-32 Boilers fixed 11-2-32 Engines tried under steam 17-2-32.
 Main boiler safety valves adjusted 17-2-32 Thickness of adjusting washers P 3/8", 6 3/8"
 Crank shaft material S Identification Mark 143 Thrust shaft material S Identification Mark 9004
 Intermediate shafts, material none Identification Marks ✓ Tube shaft, material ✓ Identification Mark ✓
 Screw shaft, material S Identification Mark 9004 Steam Pipes, material Copper Test pressure 400 Date of Test 10-2-32
 Is an installation fitted for burning oil fuel 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 *not desired*
 Is this machinery duplicate of a previous case If so, state name of vessel ✓

General Remarks (State quality of workmanship, opinions as to class, &c. *The machinery of this vessel has been built under special survey in accordance with the approved plans, and the Society's Rules, and requirements, the materials, and workmanship are good, it has been securely fitted on board, and satisfactorily tried under steam, and in my opinion is eligible for the record & L.M.C. 2-32.*

26/2/32

The amount of Entry Fee ... £ 3 : - : When applied for,
 Special ... *3/5* £ 16 : 10 : 14.3.19.32
 Donkey Boiler Fee ... £ : : When received,
 Travelling Expenses (if any) £ : : 16.3.19.32

Jas. Cairns
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 8 - MAR 1932
 Assigned *+ L.M.C. 2.32.*



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The Surveyor is requested not to write on or within the space for Committee's Minute.

CERTIFICATE WRITTEN.