

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

Date of writing Report 19 13 When handed in at Local Office 13 Port of Glasgow
 No. in Survey held at Glasgow Date, First Survey 20.6.41 Last Survey 9-10-1942
 Reg. Book. on the S/S EMPIRE DOMINICA (Number of Visits 38) Tons { Gross / Net }
 Built at Sunderland By whom built Short Bros. Yard No. 481 When built 1945-8 mo.
 Engines made at Glasgow By whom made Duncan Stewart & Co. Ltd Engine No. 149 When made 1942
 Boilers made at Glasgow By whom made Duncan Stewart & Co. Ltd Boiler No. 54-0-8 When made 1942
 Registered Horse Power 510 Owners SA-8-85 Port belonging to SA-5-55
 Nom. Horse Power as per Rule 510 Is Refrigerating Machinery fitted for cargo purposes SA-5-55 Is Electric Light fitted SA-5-55
 Trade for which Vessel is intended SA-5-55

ENGINES, &c.—Description of Engines Triple expansion Revs. per minute
 Dia. of Cylinders 24 1/2"-39"-70" Length of Stroke 48" No. of Cylinders 3 No. of Cranks 3
 Crank shaft, dia. of journals as per Rule Crank pin dia. 14 3/4" Crank webs Mid. length breadth 22" Thickness parallel to axis 9"
 as fitted 14 1/4" Mid. length thickness 9" Thickness around eye-hole 6 3/8"
 Intermediate Shafts, diameter as per Rule Thrust shaft, diameter at collars as per Rule
 as fitted as fitted Is the { tube / screw } shaft fitted with a continuous liner {
 Tube Shafts, diameter as per Rule Screw Shaft, diameter as per Rule
 as fitted as fitted Is the after end of the liner made watertight in the
 propeller boss as per Rule Thickness between bushes as fitted
 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 Is an approved Oil Gland or other appliance fitted at the after end of the tube
 a t If so, state type Length of Bearing in Stern Bush next to and supporting propeller
 Propeller, dia. Pitch No. of Blades Material whether Moveable Total Developed Surface sq. feet
 Feed Pumps worked from the Main Engines, No. none Diameter Stroke Can one be overhauled while the other is at work
 Bilge Pumps worked from the Main Engines, No. 2 Diameter 4" Stroke 27" Can one be overhauled while the other is at work yes
 Feed Pumps { No. and size / How driven } Pumps connected to the Main Bilge Line { No. and size / How driven }
 Ballast Pumps, No. and size 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 Suctions, connected to both Main Bilge Pump and Auxiliary
 In Pump Room In Holds, &c.
 Main Water Circulating Pump Direct Bilge Suctions, No. and size Independent Power Pump Direct Suctions to the Engine Room Bilges,
 No. and size Are all the Bilge Suction Pipes in holds and tunnel well fitted with steam boxes
 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
 Are all Sea Connections fitted direct on the skin of the ship Are they fitted with Valves or Cocks
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stowage plates Are the Overboard Discharges above or below the deep water line
 Are they each fitted with a Discharge Valve always accessible on the plating of the vessel Are the Blow Off Cocks fitted with a spigot and brass covering plate
 What Pipes pass 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
 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 Is the Shaft Tunnel watertight Is it fitted with a watertight door worked from

MAIN BOILERS, &c.—(Letter for record) Total Heating Surface of Boilers
 Which Boilers are fitted with Forced Draft Which Boilers are fitted with Superheaters
 No. and Description of Boilers Working Pressure
 IS A REPORT ON MAIN BOILERS NOW FORWARDED?
 IS A DONKEY BOILER FITTED? If so, is a report now forwarded?
 Can the donkey boiler be used for domestic purposes only
 PLANS. Are approved plans forwarded herewith for Shafting Main Boilers Auxiliary Boilers Donkey Boilers
 (If not state date of approval)
 Superheaters General Pumping Arrangements Oil fuel Burning Piping Arrangements

SPARE GEAR.

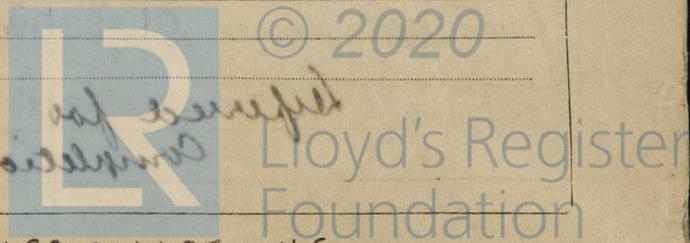
Has the spare gear required by the Rules been supplied only as per list attached.
 State the principal additional spare gear supplied Coupling Bolts?

The foregoing is a correct description.
DUNCAN STEWART & CO. LTD.

Frank B. Lindsay Manufacturer.

Director

004489-004495-0145



28100

During progress of work in shops - - - 1941 June 20 July: 9-23-31 Aug 22 Sep: 2-14-17 Oct: 10 Nov: 7-13 Dec: 17-18-29
 During erection on board vessel - - - 1942 Jan 6 Feb 3-16-26 Mar: 3-11-20 Apr: 2-15-24 May: 4-16-20 June: 8-16 July 3
 Aug: 3-11-12-15-28 Sep: 9-22 Oct: 9
 Total No. of visits 38

Dates of Examination of principal parts—Cylinders 8-6-42 Slides 3-7-42 Covers 26-2-42
 Pistons 26-2-42 Piston Rods 28-8-42 Connecting rods 15-5-42
 Crank shaft 15-4-42 Thrust shaft Intermediate shafts
 Tube shaft Screw shaft Propeller
 Stern tube Engine and boiler seatings Engines holding down bolts
 Completion of fitting sea connections
 Completion of pumping arrangements Boilers fixed Engines tried under steam
 Main boiler safety valves adjusted Thickness of adjusting washers
 Crank shaft material 9. Steel Identification Mark 440405 * Thrust shaft material Identification Mark
 Intermediate shafts, material Identification Marks 10799 L.C.O. 15-4-42 Tube shaft, material Identification Mark
 Screw shaft, material Identification Mark Steam Pipes, material Test pressure Date of Test

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
 Is this machinery duplicate of a previous case yes If so, state name of vessel (in store) Glo Rpt 12 65360

General Remarks (State quality of workmanship, opinions as to class, &c.)
 *In addition, all the original identification marks are stamped on each forging, as per report attached.
 The materials and workmanship are good.
 The engines have been constructed under special survey and in accordance with the M.S. specification on satisfactory completion of fitting in the vessel and of trials, they will in my opinion be eligible for classification and the record + LMC (with date).
 These engines will be stored at the L.M.S. London Road Mineral Station Glasgow.

This engine, Duncan Stewart & Co by No A149, has been efficiently fitted on board S/EMPIRE DOMINICA - Short Bros. Yard No 485. by N.E. MacKay & Co (1938) L. Wellman under their Machinery Contract No 3111. - and tested under working conditions
 J. Watt
 Newcastle on Tyne
 Sept 1945

GJB
 12/10/42

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 ... £ 6 : - : When applied for,
 + SPECIFICATION
 2/3 Special FEE ... £ 50 : 5 : 13 OCT 1942
 Donkey Boiler Fee ... £ : : When received,
 Travelling Expenses (if any) £ : : 19.

J. Davis.
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 13 OCT 1942 FIN. 28 SEP 1945

Assigned *Refered for completion* See F.E. machy. rpt.

