

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office  
Date of writing Report 19 When handed in at Local Office 13.10.1942 Port of Glasgow  
No. in Survey held at Glasgow Date, First Survey 20.6.1942 Last Survey 9-10-1942  
Reg. Book. on the S/S EMPIRE DOMINICA (Number of Visits 38)  
Built at Sunderland By whom built Short Bros. Yard No. 481 Tons { Gross  
Engines made at Glasgow By whom made Duncan Stewart & Co. Ltd. Engine No. 149 When made 1942  
Boilers made at Glasgow By whom made SA-8-85 Boiler No. When made  
Registered Horse Power 510 Owners SA-8-85 Port belonging to SA-8-85  
Nom. Horse Power as per Rule 510 Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted  
Trade for which Vessel is intended

ENGINES, &c.—Description of Engines Triple expansion  
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 14 1/4" Crank pin dia. 14 3/4" Mid. length breadth 22" Mid. length thickness 9" Thickness parallel to axis 9" Thickness around eye-hole 6 3/8"  
Intermediate Shafts, diameter as per Rule as fitted Thrust shaft, diameter at collars as per Rule as fitted  
Tube Shafts, diameter as per Rule as fitted Screw Shaft, diameter as per Rule as fitted Is the { tube } shaft fitted with a continuous liner { screw }  
Bronze Liners, thickness in way of bushes as per Rule as fitted Thickness between bushes as per Rule as fitted Is the after end of the liner made watertight in the propeller boss  
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 { No. and size How driven Main Bilge Line }  
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 Pumps 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 tank well fitted with steam-heated  
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

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

Frank B. Hindley, Manufacturer.

Director

004489-004495-0145

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Lloyd's Register  
Foundation



28100

1941 June 20 July: 9-23-31 Aug 22 Sep: 2-14-17 Oct 10 Nov: 7-13 Dec: 17-18-29  
 1942 Jan 6 Feb 3-16-26 Mar: 3-11-20 Apr: 2-15-24 May: 14-16-20 June: 8-16 July 3  
 Aug: 3-11-12-15-28 Sep: 9-22 Oct: 9  
 Dates of Survey while building  
 During progress of work in shops - -  
 During erection on board vessel - - -  
 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

10799

Thrust shaft material

Identification Mark

Intermediate shafts, material

Identification Marks

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, &amp;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. Macpherson (1938) & Wellman  
 under their Machinery Contract No 3111. - and tested  
 under working conditions

Watt  
 Newcastle on Tyne  
 Sept 1945

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

Committee's Minute GLASGOW 13 OCT 1942

28 SEP 1945

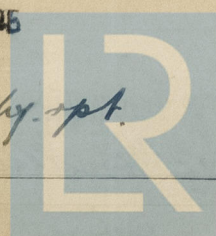
Assigned

Referred for  
 Completion

Sue F.E. machy. rpt.

Sh. Davis.

Engineer Surveyor to Lloyd's Register of Shipping.



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