

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 2 OCT 1947

Date of writing Report 19... When handed in at Local Office 1/10/1947 Port of Glasgow
 No. in Survey held at Glasgow Date, First Survey 7 Feb 1946 Last Survey 18 Sept 1947
 Reg. Book 26497 on the Single Screw Steamer CRAFTSMAN (Number of Visits 85) Tons Gross 4726 Net 3993
 Built at Gov Glasgow By whom built Lithgows & Co. Yard No. 1020 When built 1947
 Engines made at Glasgow By whom made David Rowan & Co Engine No. 1198 When made 1947
 Boilers made at Glasgow By whom made David Rowan & Co Boiler No. 1198 When made 1947
 Registered Horse Power 1286 Owners T. & J. Harrison Port belonging to Liverpool
 Nom. Horse Power as per Rule 1286 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes
 Trade for which vessel is intended Open Sea Service

ENGINES, &c.—Description of Engines Triple Expansion with fwd. coupled Pist. Crank Revs. per minute 82
 Dia. of Cylinders 29 x 47 x 81 Length of Stroke 54 No. of Cylinders 3 No. of Cranks 3
 Crank shaft, dia. of journals as per Rule 16 1/4 Crank pin dia. 16 1/4 Crank webs Mid. length breadth 26 Thickness parallel to axis 10 3/4
 as fitted 16 1/4 Mid. length thickness 10 3/4 shrunk Thickness around eye-hole 7 3/4
 Intermediate Shafts, diameter as per Rule 15.62 Thrust shaft, diameter at collars as per Rule App.
 as fitted 15.71 as fitted 14.25
 Tube Shafts, diameter as per Rule 17.161 Is the shaft fitted with a continuous liner Yes
 as fitted 16 1/2 / 17 1/4
 Screw Shaft, diameter as per Rule 26.4/32 Thickness between bushes as per Rule 19.8/32
 as fitted 7/8 as fitted 3/4 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 Continuum
 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 at No If so, state type Yes Length of Bearing in Stern Bush next to and supporting propeller 6'-0"
 Propeller, dia 18'-6" Pitch 20'-0" No. of Blades 4 Material Bronze whether Moveable Yes Total Developed Surface 125 sq. feet
 Feed Pumps worked from the Main Engines, No. 2 Diameter 5 1/2 Stroke 24 Can one be overhauled while the other is at work Yes
 Bilge Pumps worked from the Main Engines, No. 2 Diameter 5 1/2 Stroke 24 Can one be overhauled while the other is at work Yes
 Feed Pumps No. and size 2 MAIN 1 Aux. All 307/HR. Pumps connected to the Main Bilge Line No. and size 2-29 1/2 / HR. 1-907/HR. 1-2007/HR.
 How driven 1-STEAM 1-2507/HR. 1-2007/HR. 1-907/HR. Lubricating Oil Pumps, including Spare Pump, No. and size 2-10 1/2 x 11 1/4 x 18
 Are two independent means arranged for circulating water through the Oil Cooler Yes Suctions, connected both to Main Bilge Pumps and Auxiliary
 Bilge Pumps:—In Engine and Boiler Room E.P. 2-2 2-3 1/2 COFFER DAM 1-2 TUNNEL 1-2 B.R. 2-3
 In Pump Room Yes In Holds, &c. No 1. 2. 3. 4 5. — 2-3 1/2 EACH

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1-14 Independent Rower Pump Direct Suctions to the Engine and/or Boiler Room Bilges, No. and size 1-5
 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 Water
 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 C.I.F. filling pipes & heating coils How are they protected Yes
 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 Yes Is it fitted with a watertight door Yes worked from Upper deck.

MAIN BOILERS, &c.—(Letter for record P) Total Heating Surface of Boilers 73896 sq. ft. 19736
 Which Boilers are fitted with Forced Draft All Which Boilers are fitted with Superheaters All
 No. and Description of Boilers 4 S.P.E. Vertical Ret. Tube Working Pressure 220 lbs.
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? Yes
 IS A DONKEY BOILER FITTED? No If so, is a report now forwarded? Yes
 Can the donkey boiler be used for other than domestic purposes Yes

PLANS. Are approved plans forwarded herewith for Shafting No Main Boilers No Auxiliary Boilers Yes Donkey Boilers Yes
 (If not state date of approval)
 Superheaters No General Pumping Arrangements No Oil fuel Burning Piping Arrangements No
 Plans retained for Comb. 1199. SPARE GEAR.
 Has the spare gear required by the Rules been supplied Yes
 State the principal additional spare gear supplied

SPARE T.S. :- L.R. 14993 HAI
 F. 1226. 29.5.46

The foregoing is a correct description.
 For David Rowan & Co. Ltd
 Archd. H. Grierson, Manufacturer.



NOTE.—The words which do not apply should be crossed out.

a List of
 are
 now
 4.10.12.
 22.24.29.
 14.17.18.
 15.16.19.21
 03.

4/ 72158

Dates of Survey while building

During progress of work in shops - - -

During erection on board vessel - - -

Total No. of visits 85

Dates of Examination of principal parts—Cylinders 10.12.46 Slides 10.12.46 Covers 10.12.46

Pistons 12.12.46 Piston Rods 12.12.46 Connecting rods 12.12.46

Crank shaft 6.11.46 Thrust shaft 6.2.47 Intermediate shafts 19.12.46

Tube shaft ✓ Screw shaft 12.2.47 Propeller 12.2.47

Stern tube 14.7.47 Engine and boiler seatings 28.5.47 Engines holding down bolts 16.7.47

Completion of fitting sea connections 20.5.47

Completion of pumping arrangements 10.9.47 Boilers fixed 10.6.47 Engines tried under steam 18.9.47

Main boiler safety valves adjusted 27.8.47 Thickness of adjusting washers

Crank shaft material O.H.S. Identification Mark LR.14993.HA1 Thrust shaft material O.H.S. Identification Mark

Intermediate shafts, material O.H.S. Identification Mark F761-67 Tube shaft, material ✓ Identification Mark ✓

Screw shaft, material O.H.S. Identification Mark F760.26.4.46 Steam Pipes, material S Test pressure 660 Lbs Date of Test Completed 14.8

Is an installation fitted for burning oil fuel Yes Is the flash point of the oil to be used over 150° F. Yes

Have the requirements of the Rules for the use of oil as fuel been complied with Yes

Is the vessel (not being an oil tanker) fitted for carrying oil as cargo Yes If so, have the requirements of the Rules been complied with Yes

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 J.S. DALES MAN (No. 11.1078) main engines only

General Remarks (State quality of workmanship, opinions as to class, &c.)

The Machinery of this vessel has been constructed under Special Survey & in accordance with the approved plans. The materials & workmanship are good. It has been satisfactorily installed in the vessel, tested under full working conditions & found satisfactory. The Machinery is in my opinion eligible for record of H.L.M.C. 9.47, T.S.-C.L., H.S.E. Boilers 220 H.P. Fitted for Oil Fuel 9.47, F.P. above 150°F, Exhaust Steam Turbine.

The amount of Entry Fee ... £ 189.60 When applied for, 1 OCT 1947

Special ... £ : : When received, 19

Donkey Boiler Fee ... £ : : 19

Travelling Expenses (if any) £ : : 19

A. H. Swann
Engineer Surveyor to Lloyd's Register of Shipping.

GLASGOW 1 OCT 1947

Date 1 Oct 1947
Committee's Minute

Fitted for oil fuel 9.47 F.P. above 150°F



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Ballast P
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compartment