

Rpt. 4.

REPORT ON MACHINERY

No. 68893

SAT. 1-JUL. 1916

Received at London Office

Date of writing Report 26 June 1916 When handed in at Local Office JUN 27 1916 Port of NEWCASTLE-ON-TYNE

No. in Survey held at North Shields Date, First Survey 15 Feb Last Survey 22 Jun 1916

Reg. Book. on the Swinburn Motor Vessel "Sebastian". (Number of Plates 43) Tons { Gross Not

Master Built at Dundee By whom built Caledon S.B. Coy. Ltd. When built 1914

Engines made at Amsterdam By whom made Warrspoor when made 1916

Boilers made at By whom made when made

Registered Horse Power Owners Sebastian Diesel Motor Boat Coy. Ltd. Port belonging to London

Nom. Horse Power as per Section 28 2 1/2 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

ENGINES, &c.—Description of Engines 20.47" Length of Stroke 35.43 Revs. per minute Dia. of Screw shaft as per rule as fitted Material of screw shaft

Is the screw shaft fitted with a continuous liner the whole length of the stern tube Yes Is the after end of the liner made water tight

in the propeller boss Yes If the liner is in more than one length are the joints burned 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 No Length of stern bush 4.659 ft.

Dia. of Tunnel shaft as per rule as fitted Dia. of Crank shaft journals as per rule as fitted Dia. of Crank pin Size of Crank webs Dia. of thrust shaft under

collars Dia. of screw 11.0" Pitch of Screw 4.9" No. of Blades 4 State whether moveable No Total surface 4.659 ft.

No. of Feed pumps Diameter of ditto Stroke Can one be overhauled while the other is at work

No. of Bilge pumps Diameter of ditto Stroke Can one be overhauled while the other is at work

No. of Donkey Engines Sizes of Pumps No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room Suction remains as originally fitted. In Holds, &c.

No. of Bilge Injections sizes Connected to condenser, or to circulating pump Is a separate Donkey Suction fitted in Engine room & size

Are all the bilge suction pipes fitted with roses Yes Are the roses in Engine room always accessible Yes Are the sluices on Engine room bulkheads always accessible

Are all connections with the sea direct on the skin of the ship Yes Are they Valves or Cocks Both

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Are the Discharge Pipes 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 are carried through the bunkers How are they protected

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

Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges Yes

Dates of examination of completion of fitting of Sea Connections of Stern Tube Screw shaft and Propeller

Is the Screw Shaft Tunnel watertight None Is it fitted with a watertight door worked from

BOILERS, &c.—(Letter for record) Manufacturers of Steel

Total Heating Surface of Boilers Is Forced Draft fitted No. and Description of Boilers

Working Pressure Tested by hydraulic pressure to Date of test No. of Certificate

Can each boiler be worked separately Area of fire grate in each boiler No. and Description of Safety Valves to

each boiler Area of each valve Pressure to which they are adjusted Are they fitted with easing gear

Smallest distance between boilers or uptakes and bunkers or woodwork Mean dia. of boilers Length Material of shell plates

Thickness Range of tensile strength Are the shell plates welded or flanged Descrip. of riveting: cir. seams

long. seams Diameter of rivet holes in long. seams Pitch of rivets Lap of plates or width of butt straps

Per-centages-of-strength-of longitudinal joint rivets plates Working pressure of shell by rules Size of manhole in shell

Size of compensating ring No. and Description of Furnaces in each boiler Material Outside diameter

Length of plain part top Thickness of plates crown bottom Description of longitudinal joint No. of strengthening rings

Working pressure of furnace by the rules Combustion chamber plates: Material Thickness: Sides Back Top Bottom

Pitch of stays to ditto: Sides Back Top If stays are fitted with nuts or riveted heads Working pressure by rules

Material of stays Diameter at smallest part Area supported by each stay Working pressure by rules End plates in steam space:

Material Thickness Pitch of stays How are stays secured Working pressure by rules Material of stays

Diameter at smallest part Area supported by each stay Working pressure by rules Material of Front plates at bottom

Thickness Material of Lower back plate Thickness Greatest pitch of stays Working pressure of plate by rules

Diameter of tubes Pitch of tubes Material of tube plates Thickness: Front Back Mean pitch of stays

Pitch across wide water spaces Working pressures by rules Girders to Chamber tops: Material Depth and

thickness of girder at centre Length as per rule Distance apart Number and pitch of stays in each

Working pressure by rules Superheater or Steam chest; how connected to boiler Can the superheater be shut off and the boiler worked

separately Diameter Length Thickness of shell plates Material Description of longitudinal joint Diam. of rivet

holes Pitch of rivets Working pressure of shell by rules Diameter of flue Material of flue plates Thickness

If stiffened with rings Distance between rings Working pressure by rules End plates: Thickness How stayed

Working pressure of end plates Area of safety valves to superheater Are they fitted with easing gear

2m. 114. E.

Is a Report also sent on the Hull of the ship?

If not, state whether, and when, this will be sent?

2m. 114. E.

2m. 114. E.

IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:—

Spare Gear checked and found in Ex of requirements ✓

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building

(During progress of work in shops - - -
During erection on board vessel - - -
Total No. of visits

Feb 18 19 21 22 24 25 26 29 Mar 1 2 3 7 10 15 17 25 27 29 Apr 7 12 17 27 May 25 29 11 13 18

Is the approved plan of main boiler forwarded herewith

Dates of Examination of principal parts—Cylinders

Slides

Covers

Pistons

Rods

Connecting rods

Crank shaft

Thrust shaft

Tunnel shafts

Screw shaft

Propeller

Stern tube

Steam pipes tested

Engine and boiler seatings

Engines holding down bolts

Completion of pumping arrangements

Boilers fixed

Engines tried under steam

Main boiler safety valves adjusted

Thickness of adjusting washers

Material of Crank shaft

Identification Mark on Do.

Material of Thrust shaft

Identification Mark on Do.

Material of Tunnel shafts

Identification Marks on Do.

Material of Screw shafts

Identification Marks on Do.

Material of Steam Pipes

Test pressure

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 Section 49 of the Rules been complied with

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 engines of this vessel have been fitted on board in Special Survey and all the necessary connections have been tested. On completion the machinery was tried under air and fuel at moorings, and running at a speed of 100 to 105 Revs per minute for four hours everything worked well.

The main air compressors were shut off and the engines were both worked from the Auxiliary air compressor with satisfactory results.

The machinery throughout is now in good and efficient condition and eligible in our opinion to have the rec of + Lm.C. 6, 16 as recommended in Amsterdam report 6900 which is now returned herewith.

The amount of Entry Fee ... £

Special ... £

Donkey Boiler Fee ... £

Travelling Expenses (if any) £

Committee's Minute

Assigned

When applied for,

JUN 30 1916

When received,

22 4 1916

Reginald & Bain - R. H. Hallcross
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping

FRI 20 APR 1917

FRI 10 MAY 1917

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Lloyd's Register Foundation