

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

Date of writing Report 16/12/52 When handed in at Local Office 16/12/52 Port of London

No. in Survey held at Bedford Date, First Survey 19/10/51 Last Survey 2/12/52

Reg. Book. on the M.V. "SILVERBROOK" (Number of Visits 9) Tons } Gross }  
Net }

By whom built Smiths Dry Dock Co Yard No. 1225 When built

Engines made at BEDFORD By whom made W.H. ALLEN, SONS & CO. LTD. Engine No. 92944 When made 1952

Boilers made at By whom made Boiler No. When made

Registered Horse Power 84 Owners Port belonging to

Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted

Trade for which Vessel is intended

**ENGINES, &c.**—Description of Engines 2 - 9 1/2" & 12 1/2" x 5" STROKE ENGINE DRIVING FORGE DYNAMO. Revs. per minute 500

Dia. of Cylinders 9 1/2" H.P. & 12 1/2" L.P. Length of Stroke 5" No. of Cylinders 2 No. of Cranks 2

Crank shaft, dia. of journals as per Rule 3.25 - 3.0 Crank pin dia. 3.25 - 3.0 Crank webs Mid. length breadth 4.25 Thickness parallel to axis 2.125 shrunk Thickness around eye-hole 2.375

Intermediate Shafts, diameter as per Rule 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

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

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 tub

aft 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. Diameter Stroke Can one be overhauled while the other is at work

Bilge Pumps worked from the Main Engines, No. Diameter Stroke Can one be overhauled while the other is at work

Feed Pumps { No. and size } Pumps connected to the { No. and size }  
{ How driven } Main Bilge Line { 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 Suctions, connected to both Main Bilge Pumps and Auxiliary

Engine Pumps;—In Engine and Boiler Room In Holds, &c.

Pump Room

**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 strum-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 they fitted with Valves or Cocks

Are all Sea Connections fitted direct on the skin of the ship

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold 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

How are they protected

What Pipes pass through the bunkers

Have they been tested as per Rule

What pipes pass through the deep tanks

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?

Is 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.**

Is the spare gear required by the Rules been supplied AS BELOW.

Is the principal additional spare gear supplied

1 SET PISTON RINGS.

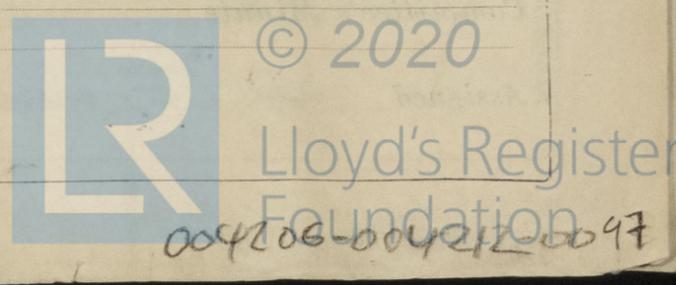
2 PAIRS CROSSHEAD BRASSES WITH BOLTS, NUTS & SPLIT PINS.

2 PAIRS CONNECTING ROD BRASSES WITH BOLTS, NUTS & SPLIT PINS.

1 SET GOVERNOR SPRINGS.

The foregoing is a correct description.

FOR W.H. ALLEN, SONS & CO. LTD. Manufacturer.



JM  
12  
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1951 Oct 19-26 Dec 11 1952 Feb 22-25-27-29 hrs. 28 Dec 2

Dates of Survey while building  
 During progress of work in shops - -  
 During erection on board vessel - - -  
 Total No. of visits

9 (in shops)

Dates of Examination of principal parts—Cylinders 22-2-52 25-2-52 Slides 25-2-52 Covers 22-2-52 25-2-52

Pistons 27-2-52 Piston Rods 27-2-52 Connecting rods 29-2-52

Crank shaft 11-12-51 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 *Best Steel* Identification Mark SET 2: LLOYD'S F3030 AEE 1112-51 (PW) Thrust shaft material - Identification Mark -

Intermediate shafts, material ✓ Identification Marks SET 4: LLOYD'S F2131 AEE 1112-51 (PW) 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 ✓ If so, state name of vessel ✓

General Remarks (State quality of workmanship, opinions as to class, &c. *The Steam Generators have been constructed under special survey in accordance with the requirements of the Rules; the steel was made at works approved by the Committee, the workmanship is good; on completion the steam generators were tested upon the bench under full load conditions with satisfactory results.*

#  
22-12-52

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	25 sh	£ 10 : 0 :	When applied for,
Special ...	...	£ :	16/12/1952
Donkey Boiler Fee ...	...	£ :	When received,
Travelling Expenses (if any)	£ 2 : 4 : 1 :		19

*RUCoomler*  
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI. 22 MAY 1953

Assigned *See F.E. mch. rpt.*