

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

14 AUG 1941

Date of writing Report 26/7/1941 When handed in at Local Office 7. 8. 1941 Port of MIDDLESBROUGH
 No. in Survey held at South Bank Date, First Survey 12th May Last Survey 21st July 1941
 Reg. Book. H. M. (Corvette) "STONECROP" (Number of Visits) 1 Gross Tons 1941
 on the South Bank By whom built Smiths Dock Co Ltd Yard No. 1096 When built 1941
 Engines made at South Bank By whom made Smiths Dock Co Ltd Engine No. 549 when made 1941
 Boilers made at Hastepool By whom made Richardsons, Westgate Boiler No. 549 when made 1941
 Registered Horse Power The Admiralty Port belonging to no. Is Electric Light fitted yes
 Nom. Horse Power as per Rule Is Refrigerating Machinery fitted for cargo purposes no. Is Electric Light fitted yes
 Trade for which Vessel is intended no.

ENGINES, &c.—Description of Engines

Revs. per minute 185

Dia. of Cylinders as per Rule Length of Stroke as fitted No. of Cylinders as per Rule No. of Cranks as fitted
 Crank shaft, dia. of journals as per Rule Crank pin dia. as fitted Crank webs as per Rule Mid. length breadth as fitted Thickness parallel to axis as fitted
 Intermediate Shafts, diameter as per Rule Thrust shaft, diameter at collar as fitted as fitted as per Rule
 Tube Shafts, diameter as per Rule Screw Shaft, diameter as per Rule Is the tube as fitted Is the screw as fitted shaft fitted with a continuous liner as fitted
 Bronze Liners, thickness in way of bushes as per Rule Thickness between bushes as fitted Is the after end of the liner made watertight in the propeller boss as fitted
 If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner as fitted
 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 as fitted
 If two liners are fitted, is the shaft lapped or protected between the liners as fitted Is an approved Oil Gland or other appliance fitted at the after end of the tube shaft as fitted

Propeller, dia. 10'-6" Pitch 10'-8" No. of Blades 3 Material Bronze Whether Movable Solid Total Developed Surface 31 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 2-6" x 8 1/2" x 18", 1-8" x 10 1/2" x 22" Pumps connected to the { No. and size 2-6" x 6" x 6" & Downton Pump
 How driven Steam Main Bilge Line { How driven Steam
 Ballast Pumps, No. and size 2-6" x 6" x 6" 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 Bilge Pumps, -
 In Engine and Boiler Room 1-3" Ford (aft) 1-3" Ford BR (aft) 1-3" aft BR (aft)
 In Holds, &c. Fore Peak 1-2", 6 chain locker 1-2", Asdic compartment 1-2", Ford magazine 1-2", aft magazine 1-2", Spirit room 1-2", 6 off ordnance 1-2", Tunnel well 1-2", aft peak 1-2"

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1-3" fore ER (aft) 1-3" in each BR Independent Power Pump Direct Suctions 1-9 1/2" to the Engine Room Bilges, No. and size 1-3"
 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 below
 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 none 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 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 separate compartment worked from -

MAIN BOILERS, &c.—(Letter for record See 8c. report) Total Heating Surface of Boilers 7080 sq. ft.
 Is Forced Draft fitted yes No. and Description of Boilers 2-Single Ended Working Pressure 225 lbs/sq. in.
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? no.
 IS A DONKEY BOILER FITTED? no. If so, is a report now forwarded? -

PLANS. Are approved plans forwarded herewith for Shafting - Main Boilers - Auxiliary Boilers - Donkey Boilers -
 Superheaters - General Pumping Arrangements 3/5/41 Oil fuel Burning Piping Arrangements 3/5/41

SPARE GEAR. State the articles supplied:—3 main bearings (1 Large, 2 small) 1 H.P. & 1 L.P. bottom end bearings complete with bolts & nuts. 1 set coupling bolts 1 set H.P. piston rings. 1 set H.P. piston valve springs. 4 main bearing bolts & nuts (2 Large, 2 small). 1 impeller shaft. 1 set thrust pads. 1 set of valves of each size used for liquid end of each independent pump. 1 set of metallic packing for each size of piston rod. 1 set of air pump valves. 4 feed check valve lifts (2 main & 2 aux). 1 set oil fuel burner nozzles with atomisers. 12 tube stoppers. 12 condenser tubes & 30 gaskets. Steel bars & plates of various sizes, a quantity of assorted bolts, studs & nuts. 5 spares as per Specification.

The foregoing is a correct description,

FOR SMITH'S DOCK CO., LTD.,

Manufacturer.

A. Waxley
ENGINE WORKS MANAGERLloyd's Register
Foundation

003742-003749-0314

1941. May 12. 22. 26 June 11 July 7. 8. 11. 12. 15. 16. 21.
 During progress of work in shops - - -
 Dates of Survey while building
 During erection on board vessel - - -
 Total No. of visits *Eleven*
 Dates of Examination of principal parts—Cylinders Slides Covers
 Pistons Piston Rods Connecting rods
 Crank shaft Intermediate shafts
 Tube shaft Propeller *12/5/41*
 Stern tube Engine and boiler seatings *7/5/41* Engines holding down bolts *22/5/41*
 Completion of pumping arrangements *8/7/41* Boilers fixed *4/6/41* Engines tried under steam *16/7/41*
 Main boiler safety valves adjusted *7/7/41* Thickness of adjusting washers *FOR PORT 9/16" STAR 15/32 AFT BOILER PORT 11/32 STAR 13/32*
 Crank shaft material Identification Mark *B.C.* Thrust shaft material Identification Mark *B.C.*
 Intermediate shafts, material Identification Marks *B.C.* Tube shaft, material Identification Mark *See*
 Screw shaft, material Identification Mark *B.C.* Steam Pipes, material Test pressure Date of Test *B.C. RM*
 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 carrying and burning oil fuel been complied with *yes*
 Is this machinery duplicate of a previous case *yes* If so, state name of vessel *H.M. (Corvette) "SAMPHIRE"*

General Remarks (State quality of workmanship, opinions as to class, &c.) *The main & auxiliary machinery & boilers of this vessel have been constructed under British Corporation Register of Shipping and Aircraft Survey & installed under Lloyd's Register of Shipping Survey, in accordance with the Rule Requirements and approved plans, & the Admiralty Specification.*
The materials & workmanship are good, & the machinery found satisfactory at the trials.
The boilers securely fitted on board, the safety valves adjusted under steam to 225 lbs/sq. and a satisfactory accumulation test carried out.

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 ... £	:	:	When applied for,
Special ...	£	<i>50 -</i>	<i>13. 8. 1941.</i>
Donkey Boiler Fee ... £	:	:	When received,
Travelling Expenses (if any) £	:	:	<i>19</i>

R. J. Easthope.
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute *FRI. 22 AUG 1941*
 Assigned *See Mch. J.C. 17079*
2. Lm. # 7.41
2. Lm. # 7.41 to
22. CL.