

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

9 NOV 1945

Received at London Office

Date of writing Report 19... When handed in at Local Office 19... Port of Hull
 No. in Survey held at Selly House Date, First Survey 8. 8. 1945 Last Survey Oct 23rd 1945
 Reg. Book on the "EMPIRE SHEILA" YMS 1149 (Number of Visits 22)
 Tons { Gross 292 Net Nil
 Built at Selly By whom built Cochran Sons Ltd. Yard No. 1299 When built 1945
 Engines made at Providence, Rhode Is. USA By whom made Franklin Machine & Foundry Co Engine No. 1016 When made 1943
 Boilers made at Glasgow By whom made Barclay Curle Boiler No. 42/20 When made 1944
 Registered Horse Power... Owners Ministry of War Transport Port belonging to India
 m. Horse Power as per Rule 109 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted YES
 made for which vessel is intended Joining Services

GINES, &c.—Description of Engines Triple expansion - see USA Cut N° B-606. Revs. per minute 130
 No. of Cylinders 12, 20, 33 Length of Stroke 24 No. of Cylinders 3 No. of Cranks 3
 Crank shaft, dia. of journals as per Rule 7 3/4 Crank pin dia. 7 3/4 Mid. length breadth 15 1/16 Thickness parallel to axis 5
 as fitted 7 3/4 Crank webs shrunk Mid. length thickness 5 1/8 Thickness around eye-hole 3 1/2
 Intermediate Shafts, diameter as per Rule App. Thrust shaft, diameter at collars as per Rule App.
 as fitted 6 5/8 as fitted 8 1/2
 Main Shafts, diameter as per Rule App. Screw Shaft, diameter as per Rule 8 Is the { tube / screw } shaft fitted with a continuous liner { No / Yes }
 as fitted App. as fitted 8 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 Yes
 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 Yes
 If so, state type Kawak Length of Bearing in Stern Bush next to and supporting propeller 2'-7 1/2"
 Propeller, dia. 9'-0" Pitch 9'-6" No. of Blades 4 Material C.I. whether Moveable No Total Developed Surface 31.5 sq. feet
 Main Engines, No. None Diameter ✓ Stroke ✓ Can one be overhauled while the other is at work ✓
 Auxiliary Engines, No. None Diameter ✓ Stroke ✓ Can one be overhauled while the other is at work ✓
 Main Bilge Pumps, No. and size Two 7' x 5' x 12' Pumps connected to the Main Bilge Line { No. and size One 7 1/2', 5', 6' / One 12', 9', 12' }
 How driven Ind. Str. / Ind. Str. / Ind. Str. / Steam
 Lubricating Oil Pumps, including Spare Pump, No. and size One 2 1/2' { One hand pump to fill and one to ME bearings }
 Oil Cooler One only Suctions, connected to both Main Bilge Pumps and Auxiliary
 Bilge Pumps:—In Engine and Boiler Room E.R. 3-2 1/2" & 1-3" / BR 2-2 1/2"
 In Pump Room ✓ In Holds, &c. 1-2"

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1-4" Independent Power Pump Direct Suctions to the Engine Room Bilges,
 No. and size 1-3" 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
 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 None How are they protected ✓
 What pipes pass through the deep tanks None 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 Part of E.R. Is it fitted with a watertight door — worked from —

MAIN BOILERS, &c.—(Letter for record S) Total Heating Surface of Boilers 1786
 Which Boilers are fitted with Forced Draft SOLE BOILER Which Boilers are fitted with Superheaters NONE
 No. and Description of Boilers 15B Working Pressure 220 lb.

IS A REPORT ON MAIN BOILERS NOW FORWARDED? YES
 IS A DONKEY BOILER FITTED? No If so, is a report now forwarded? ✓
 Can the donkey boiler be used for domestic purposes only ✓

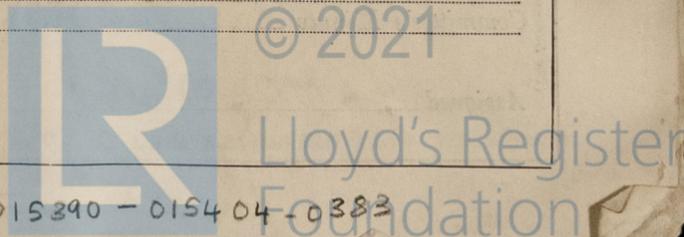
PLANS. Are approved plans forwarded herewith for Shafting 25.7.44 Main Boilers 14.9.42 Auxiliary Boilers ✓ Donkey Boilers ✓
 (If not state date of approval)
 Superheaters ✓ General Pumping Arrangements 19.7.44 Oil fuel Burning Piping Arrangements 11.5.45

SPARE GEAR.

Has the spare gear required by the Rules been supplied As per Specification
 State the principal additional spare gear supplied —

The foregoing is a correct description.

Manufacturer.



" E. SHEILA "

Dates of Survey while building
 During progress of work in shops - - - { Main Engines built in Providence, Rhode Island, USA by Franklin Machine and Foundry Co. and supplied to Amos Smith as installers by the Admiralty
 During erection on board vessel - - - { 1945 MAR 8, 14, 21 APR 16, MAY 29 JULY 18, 23, 26, 31 AUG 21, 30 SEP 1, 3, 5, 7, 12, 13, 14, 15, 18 Oct 15.
 Total No. of visits 22.

Dates of Examination of principal parts—Cylinders Slides Covers No.
 Pistons Piston Rods of Shipping Connecting rods B-606
 Crank shaft Su American Thrust shaft Bureau Intermediate shafts
 Tube shaft Su American Screw shaft 14.3.45 Propeller 21.3.45
 Stern tube 14.3.45 Engine and boiler seatings 16.4.45 Engines holding down bolts 31.7.45
 Completion of fitting sea connections 21.3.45
 Completion of pumping arrangements 7.9.45 Boilers fixed 31.7.45 Engines tried under steam 7.9.45
 Main boiler safety valves adjusted 7.9.45 Thickness of adjusting washers P 11/32 S 3/8
 Crank shaft material Su American Identification Mark Bureau Thrust shaft material Cert. No Identification Mark B.606
 Intermediate shafts, material F.1/STL Identification Marks 142, FW, 29/44 Tube shaft, material Identification Mark
 Screw shaft, material D.V. Identification Mark S.16.12.44 Steam Pipes, material Steel Test pressure 160 lb Date of Test 3.9.45
 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 No ✓ 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 "Empire Stella"

General Remarks (State quality of workmanship, opinions as to class, &c.)
 The main engines and boiler for this vessel supplied by Admiralty from reserve stock and installed by Amos Smith of Hull in accordance with the Specification, the Secretary's letters and the Rules.
 The workmanship and materials appear to be good.
 The machinery has been tried under working conditions and found satisfactory at completion of the trials.
 Eligible in my opinion to have record of LMC (R) 10.45 OG
 T 3 Cy. 12", 20", 33" - 24" M.N° 109 15B 220H F.D.
 3 cf 1-15 1786 # Fitted for oil fuel 10.45. FP above 150°F.

N4P 109 c 57. - £ s d 27-5-0
 FE 3-0-0
 Glasgow £ s d 11-18-0
 for boiler and 2-19-6 for Specification

One fifth for fitting-out 5-9-0
 25% for Specification 1-7-3
 FE 3-0-0

2/5 for Boiler Spec 2-14-6 already charged by Glasgow
 at Middlesbrough 2-19-6

The amount of Entry Fee ... £ 3 : 0 :
 25% Special FITT-O.H.T ... £ 5 : 9 :
 Donkey Boiler Fee ... £ 1 : 7 : 3
 25% BOWLER SPEC ... £ 2 : 14 : 6
 Travelling Expenses (if any) £
 When applied for 10 NOV 1945
 When received, 19

W. Shields
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute ... FRI. 30 NOV 1945

Assigned LMC (R) 10.45

FITTED FOR OIL FUEL 10.45 FLASH POINT ABOVE 150° F. F.D. O.G.

