

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 5 FEB 1930

Date of writing Report 28. 12. 1929 When handed in at Local Office 30th Jan'y 1930 Port of Greenock
 No. in Survey held at Greenock Date, First Survey 14th August 1929 Last Survey 30th Jan'y 1930
 Reg. Book. S/S "Antiope" (Number of Visits 52)
 on the S/S "Antiope" Tons { Gross 1025
 Net 725
 Built at Glasgow By whom built Havier Miller & Co Yard No. 271 When built 1930
 Engines made at Greenock By whom made John Kincaid & Co Engine No. 665 when made 1930
 Boilers made at ditto By whom made ditto Boiler No. 665 when made 1930
 Registered Horse Power 418 Owners New Egypt, Levant Shipping Co Port belonging to London
 Nom. Horse Power as per Rule 418 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes
 Trade for which Vessel is intended Foreign

ENGINES, &c.—Description of Engines Triple Expansion Revs. per minute 65
 Dia. of Cylinders 26" - 42" - 41" Length of Stroke 48" No. of Cylinders 3 No. of Cranks 3
 Crank shaft, dia. of journals as per Rule 13.5 Crank pin dia. 13 3/4" Crank webs Mid. length breadth shrunk Thickness parallel to axis 8 1/8"
 as fitted 13 3/4" Mid. length thickness shrunk Thickness around eye-hole 6"
 Intermediate Shafts, diameter as per Rule 12.9 Thrust shaft, diameter at collars as per Rule 13.5
 as fitted 13 1/4" as fitted 13 3/4"
 Tube Shafts, diameter as per Rule 17.42 Is the tube shaft fitted with a continuous liner Yes
 as fitted 15" as fitted 15" Is the screw shaft fitted with a continuous liner Yes
 Screw Shaft, diameter as per Rule 17.42 as fitted 15"
 Bronze Liners, thickness in way of bushes as per Rule 4.35 Thickness between bushes as per Rule 5.88 Is the after end of the liner made watertight in the
 as fitted 2 1/2" as fitted 5.8" 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 shaft No Length of Bearing in Stern Bush next to and supporting propeller 60"
 Propeller, dia. 41.9" Pitch 14.0 No. of Blades 4 Material Bronze whether Moveable No Total Developed Surface 100 sq. feet
 Feed Pumps worked from the Main Engines, No. 2 Diameter 4" Stroke 24" Can one be overhauled while the other is at work Yes
 Bilge Pumps worked from the Main Engines, No. 2 Diameter 4" Stroke 24" Can one be overhauled while the other is at work Yes
 Feed Pumps { No. and size 3 (2.4" x 9" & 2.4" x 8") Pumps connected to the { No. and size one 10" x 11" x 10"
 How driven Steam Main Bilge Line { How driven Steam
 Ballast Pumps, No. and size 10" x 11" x 10" Lubricating Oil Pumps, including Spare Pump, No. and size —
 Are two independent means arranged for circulating water through the Oil Cooler Yes Suctions, connected to both Main Bilge Pumps and Auxiliary
 Bilge Pumps;—In Engine and Boiler Room 3. 3" Tunnel Well 1. 3"
 In Holds, &c. 2. 3" in each (3 1/2" fitted on plan)

Main Water Circulating Pump Direct Bilge Suctions, No. and size one 8" Independent Power Pump Direct Suctions to the Engine Room Bilges,
 No. and size one 4 1/2" 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 Bilge Suction How are they protected Casing
 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 Yes worked from U.E.R. Platform

MAIN BOILERS, &c.—(Letter for record S) Total Heating Surface of Boilers 6999 #
 Is Forced Draft fitted No No. and Description of Boilers 3 Single ended Working Pressure 180
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? Yes 3SB.
 IS A DONKEY BOILER FITTED? No If so, is a report now forwarded? —

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

SPARE GEAR. State the articles supplied:— 2 Connecting Rod both top end with nuts ditto for
bottom end 2 Main Bearing both one set of coupling both
one set of Feed Bilge Pump Gears, a quantity of assorted
bolts & nuts, & iron of various sizes

The foregoing is a correct description,
 For John G. Kincaid & Co. Ltd.

J. G. Kincaid Director. John G. Kincaid & Co. Ltd. Manufacturer.



Dates of Survey while building

During progress of work in shops - - (1929) August 14. 19. 21. 24. Sept 11. 24. Oct. 2. 3. 4. 15. 18. 21. 25. Nov. 1. 4. 8. 11. 13. 15. 14. 18. 21. 22. 25. 26. 29. Dec. 2. 3. 4. 9. 10. 11. 12. 13. 14. 18. 19. 20. 24. 26. 31. (1930) Jan. 8. 9. 10. 13. 14. 15. 16. 20. 21. 24. 30.

During erection on board vessel - - -

Total No. of visits 52.

Dates of Examination of principal parts—Cylinders 4. - 12. 29 Slides 3. - 12. 29 Covers 4. 12. 29
 Pistons 9. - 12. 29 Piston Rods 20. 12 29 Connecting rods 9. - 12. 29
 Crank shaft 15- 11- 29 Thrust shaft 15- 11- 29 Intermediate shafts 12- 12 29
 Tube shaft ✓ Screw shaft 21. 11. 29 Propeller 8- 11- 29
 Stern tube 18- 11- 29 Engine and boiler seatings see E/R Pt 1 Engines holding down bolts 15- 1- 30

Completion of fitting sea connections see E/R Pt 1
 Completion of pumping arrangements 15- 1- 30 Boilers fixed 14- 1- 30 Engines tried under steam 30. 1. 30
 Main boiler safety valves adjusted 24. 1- 30 Thickness of adjusting washers P 5/16 S 9/32 P 23/64 S 7/16 P 5/16 S 5/16"

Crank shaft material S Identification Mark LR 665 WGM Thrust shaft material S Identification Mark LR 3554 WGM
 Intermediate shafts, material S Identification Marks 13864 13966 13866 Tube shaft, material ✓ Identification Mark -
 Screw shaft, material S Identification Mark LR 3613 R.R. Steam Pipes, material Iron Test pressure 540 Date of Test 16. 1. 30

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 carrying and burning oil fuel been complied with ✓
 Is this machinery duplicate of a previous case yes If so, state name of vessel S/S "Antigone" E/R Pt 1/2 1889

General Remarks (State quality of workmanship, opinions as to class, &c. These engines & boilers have been built under special survey in accordance with the approved plans - The workmanship & material are of good quality. They are now securely fitted on board, tried under steam & found satisfactory. The machinery is eligible in my opinion for the record of L.M.C. 1-30

It is submitted that this vessel is eligible for THE RECORD. + L.M.C. 1-30 Cl.

[Handwritten signature]
 4/2/30

The amount of Entry Fee ... £ 5 : - : When applied for,
 Special ... £ 87 : 14 : 28th JAN. 19. 30
 Donkey Boiler Fee ... £ : : : When received,
 Travelling Expenses (if any) £ : : : 30th JAN. 19. 30

[Handwritten signature]
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 4 FEB 1930

Assigned + L.M.C. 1.30.



GREENOCK

The Surveyors are requested not to write on or below the space for Committee's Minute.

CERTIFICATE WRITTEN