

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Date of writing Report 2 JUN 1943 When handed in at Local Office 2 JUN 1943 19 43 Port of NEWCASTLE-ON-TYNE Received at London Office 7 JUN 1943

No. in Survey held at South Shields Date, First Survey 28-10-42 Last Survey 14-5- 1943
Reg. Book (Number of Visits 26)

26413 on the S.S. EMPIRE PERDITA Tons Gross 7028.41 Net 4875.76

Built at South Shields By whom built J. Readhead & Sons Ltd Yard No. 533 When built 1943

Engines made at South Shields By whom made J. Readhead & Sons Ltd Engine No. 533 When made 1943

Boilers made at Sunderland By whom made G. Clark (1938) Ltd Boiler No. 1306 When made 1943

Registered Horse Power Owners Ministry of War Transport Port belonging to S. Shields

Nom. Horse Power as per Rule 510 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

Trade for which vessel is intended General Cargo

ENGINES, &c.—Description of Engines Triple Expansion Revs. per minute 76

Dia. of Cylinders 24 1/2 x 39 x 70 Length of Stroke 48 No. of Cylinders 3 No. of Cranks 3

as per Rule 14 Mid. length breadth 22 Thickness parallel to axis 9

Crank shaft, dia. of journals 14 1/4 Crank pin dia. 14 3/4 Crank webs 9 shrunk Thickness around eye-hole 6 3/8

as per Rule 13.33 as per Rule 14

Intermediate Shafts, diameter 13 5/8 Thrust shaft, diameter at collars 14 1/4

as per Rule 14.85 as per Rule 15 1/4

Tube Shafts, diameter 14.85 Is the tube shaft fitted with a continuous liner Yes

as fitted 15 1/4 as fitted 15 1/4

Bronze Liners, thickness in way of bushes .765 Thickness between bushes .812 Is the after end of the liner made watertight in the propeller boss Yes

as per Rule .765 as per Rule .812

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 at Yes If so, state type Yes

Length of Bearing in Stern Bush next to and supporting propeller 5-1/8

Propeller, dia. 18-3 Pitch 16-6 No. of Blades 4 Material C.I. whether Moveable No Total Developed Surface 110 sq. feet

Feed Pumps worked from the Main Engines, No. No Diameter 4 Stroke 27 Can one be overhauled while the other is at work Yes

Bilge Pumps worked from the Main Engines, No. 2 Diameter 4 Stroke 27 Can one be overhauled while the other is at work Yes

Feed Pumps { No. and size (2) 7 x 9 1/2 x 21 (1) 7 x 9 1/2 x 21 Pumps connected to the { No. and size (1) 10 1/2 x 13 x 24 (1) 7 x 9 1/2 x 21 How driven Steam Main Bilge Line How driven Steam

Ballast Pumps, No. and size (1) 10 1/2 x 13 x 24 (1) 7 x 9 1/2 x 21 Lubricating Oil Pumps, including Spare Pump, No. and size Yes

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 4-3 dia

In Pump Room Yes In Holds, &c. N^o 1 hold 2-3 dia N^o 2 hold 2-3 dia N^o 3 hold 2-3 dia N^o 4 hold 2-3 dia N^o 5 hold 2-3 dia N^o 6 hold 2-3 dia Tunnel well 1-2 1/2 dia

Main Water Circulating Pump Direct Bilge Suctions, No. and size One 9 dia Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size One 5 dia

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 Sea Connections fitted direct on the skin of the ship Amidships N.B.T. Yes Are they fitted with Valves or Cocks Below

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 pass through the bunkers Bilge How are they protected Wood casings

What pipes pass through the deep tanks Yes Have they been tested as per Rule Yes

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 No worked from Yes

MAIN BOILERS, &c.—(Letter for record S) Total Heating Surface of Boilers 7248.5

Which Boilers are fitted with Forced Draft 3 Main Which Boilers are fitted with Superheaters 3 Main

No. and Description of Boilers 3 S.E.M. Working Pressure 220 lbs

IS A REPORT ON MAIN BOILERS NOW FORWARDED? Sunderland Report N^o 33625

IS A DONKEY BOILER FITTED? Yes If so, is a report now forwarded? Yes

Can the donkey boiler be used for domestic purposes only Yes

PLANS. Are approved plans forwarded herewith for Shafting 22-8-41 Main Boilers 23-4-42 Auxiliary Boilers Yes Donkey Boilers Yes

(If not state date of approval)

Superheaters Yes General Pumping Arrangements 18-12-42 Oil fuel Burning Piping Arrangements Yes

SPARE GEAR.

Has the spare gear required by the Rules been supplied Yes

State the principal additional spare gear supplied

The foregoing is a correct description.

FOR JOHN READHEAD & SONS, LTD.

H.H. Coateworth

Manufacturer.

Director.



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Lloyd's Register Foundation

Dates of Survey while building

During progress of work in shops - -

During erection on board vessel - - -

Total No. of visits

1942.

Oct. 28. Nov. 6. 11. 18. 24. Dec. 1. 3. 4. 9. 10. 11. 14. 15. 18. 21. 23. 31.

FEB. 1. 2. 3. 4. 8. 9. 10. 11. 15. 17. 19. 24. 26. MAR. 1. 2. 3. 5. 4. 9. 10. 11. 15. 16. 17. 19. 22. 23. 24. 25. 26. 29. 30. 31.

APR. 12. 13. 14. 15. 16. 17. 19. 20. 21. 22. 27. 28. 29. MAY. 17.

96

Dates of Examination of principal parts - Cylinders

15-3-43

Slides

16-3-43

Covers

16-3-43

Pistons

15-3-43

Piston Rods

11-3-43

Connecting rods

11-3-43

Crank shaft

31-12-42

Thrust shaft

10-4-43

Intermediate shafts

10-4-43

Tube shaft

✓

Screw shaft

10-3-43

Propeller

10-3-43

Stern tube

6-3-43

Engine and boiler seatings

30-3-43

Engines holding down bolts

15-4-43

Completion of fitting sea connections

10-3-43

Completion of pumping arrangements

20-4-43

Boilers fixed

30-3-43

Engines tried under steam

16-4-43

Main boiler safety valves adjusted

16-4-43

Thickness of adjusting washers

P/P-3/8" C/P-1/2" S/P-1/2"

Crank shaft material

S.M. Steel

Identification Mark

7110

Thrust shaft material

S.M. Steel

Identification Mark

7655

Intermediate shafts, material

S.M. Steel

Identification Marks

7656 7659 7657 7660 7658 7661

Tube shaft, material

✓

Identification Mark

12-2-43

Screw shaft, material

S.M. Steel

Identification Mark

7662

Steam Pipes, material

S.P. Steel

Test pressure

660 lbs

Date of Test

14/30/31-4-43

Is an installation fitted for burning oil fuel

No

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

Yes

If so, state name of vessel

EMPIRE CAPULET

General Remarks (State quality of workmanship, opinions as to class, &c.

The machinery of this vessel has been constructed under special survey in accordance with rule requirements & approved plans. Materials & workmanship are good. The machinery was satisfactorily tested on moving trial in my opinion is eligible for classification with records of + L.M.C. 43 F.D.C.L. 3 S.B. (S.F).

NEWCASTLE-ON-TYNE

Certificate to be sent to

The amount of Entry Fee

£ 6 : 0 :

Special

£ 75 - 7 - 6

Donkey Boiler Fee

£ ✓ :

Travelling Expenses (if any)

£ ✓ :

When applied for,

2 JUN 1943

When received,

19

J. H. Matthews
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

FRI. 11 JUN 1943

Assigned

+ L.M.C. 5. 43.

J.D. Chy