

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

Date of writing Report 23rd April 1946 When handed in at Local Office 27th April 1946 Port of Greenock
 No. in Survey held at Greenock Date, First Survey 9th August 1946 Last Survey 26th - 1946
 Reg. Book. Greenock (Number of Visits 26) Tons { Gross 294.62
 on the "Empire Lola" Single Sc. Lug Net -
 Built at Greenock By whom built George Brown & Co (Marine) Ltd. Yard No. 236 When built 1946
 Engines made at Greenock By whom made Rankin & Blackmore Engine No. 516 When made 1946
 Boilers made at Greenock By whom made Rankin & Blackmore Boiler No. 516 When made 1946
 Registered Horse Power ✓ Owners Ministry of War Transport Port belonging to Greenock
 Nom. Horse Power as per Rule 155 154 Is Refrigerating Machinery fitted for cargo purposes No. ✓ Is Electric Light fitted Yes. ✓
 Trade for which Vessel is intended Lowering purposes.

ENGINES, &c.—Description of Engines Triple expansion Revs. per minute 120
 Dia. of Cylinders 15" 25 1/2" 42" Length of Stroke 27" No. of Cylinders 3 No. of Cranks 3
 Crank shaft, dia. of journals as per Rule 8.048" Crank pin dia. 8 1/4" Mid. length breadth ✓ Thickness parallel to axis 5 1/2"
as fitted 8 1/4" Crank webs Mid. length thickness ✓ Thickness around eye-hole 3 5/8"
 Intermediate Shafts, diameter as per Rule 7.66" Thrust shaft, diameter at collars as per Rule 8.048"
as fitted 8" as fitted 8 1/4"
 Tube Shafts, diameter as per Rule 8.865" Is the ✓ screw shaft fitted with a continuous liner No. ✓
as fitted 9 1/4" Is the ✓ shaft fitted with a continuous liner No. ✓
 Bronze Liners, thickness in way of bushes as per Rule ✓ Thickness between bushes as per Rule ✓ Is the after end of the liner made watertight in the
as fitted ✓ as fitted ✓ propeller boss ✓
 If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner ✓
 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 ✓
 If 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 tube
 shaft Yes ✓ If so, state type Newark gland No 2 Length of Bearing in Stern Bush next to and supporting propeller 38"
 Propeller, dia. 10' 0" Pitch 11' 6" No. of Blades 4 Material C.I. whether Moveable No. Total Developed Surface 38 sq. feet
 Feed Pumps worked from the Main Engines, No. None Diameter ✓ Stroke ✓ Can one be overhauled while the other is at work ✓
 Bilge Pumps worked from the Main Engines, No. 2 Diameter 3" Stroke 15" Can one be overhauled while the other is at work Yes
 Feed Pumps { No. and size Swin Simplex 8 1/2" x 6" x 13" Stroke Pumps connected to the { No. and size 2 M.E. Bilge pumps - 1-7 1/2" x 5" x 6" 1-12" x 9" x 12"
 { How driven Steam Main Bilge Line { How driven Independent Steam
 Ballast Pumps, No. and size 1-7 1/2" x 5" x 6" Stroke Lubricating Oil Pumps, including Spare Pump, No. and size None
 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 4-2 1/2" In Holds, &c. 1-2"
 In Pump Room ✓

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1-5 1/2" **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 Valves
 Are they sited 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 ✓ 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 ✓ Is it fitted with a watertight door ✓ worked from ✓

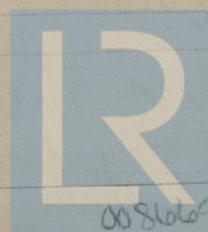
MAIN BOILERS, &c.—(Letter for record S) Total Heating Surface of Boilers 2400 sq. ft ✓
 Which Boilers are fitted with Forced Draft Yes Which Boilers are fitted with Superheaters ✓
 No. and Description of Boilers One cylindrical Working Pressure 200 lbs
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? Yes
 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 Yes Main Boilers Yes Auxiliary Boilers ✓ Donkey Boilers ✓
 (If not state date of approval)
 Superheaters ✓ General Pumping Arrangements Yes 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 As specification

The foregoing is a correct description
 HANKIN & BLACKMORE LTD.
 James Hankin, Director
 Manufacturer.



© 2021

Lloyd's Register Foundation

NOTE.—The words which do not apply should be deleted. If not, state whether, and when, one will be sent.

PILL
Gen
STR
U
Se
Flat
Bott
St
Bilg
St
Side
St
Upp
st
Upp
st
Stra
st
Stra
st
Poo
Brit
For
Tota
MII
CO
AF
S

(1945) AUG. 9. SEPT. 5. 7. 18. 25. OCT. 9. 15. 17. 24. 30. NOV. 1. 28. DEC. 5. 10. 13. 19. 21. 27.

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

(1946) JAN. 10. 11. 18. 23. 25. 30. 31. FEB. 8. 26. MAR. 5. 8. 14. 21. 25. 27. APR. 3. 16. 26.

36.

Dates of Examination of principal parts—Cylinders 25-1-46 Slides 31-1-46 Covers 25-1-46
Pistons 31-1-46 Piston Rods 26-2-46 Connecting rods 26-2-46
Crank shaft 10-1-46 Thrust shaft 10-1-46 Intermediate shafts 10-1-46
Tube shaft ✓ Screw shaft 5-3-46 Propeller 5-3-46
Stern tube 5-3-46 Engine and boiler seatings 27-3-46 Engines holding down bolts 27-3-46
Completion of fitting sea connections 4-3-46
Completion of pumping arrangements 4-3-46 Boilers fixed 6-3-46 Engines tried under steam 16-4-46
Main boiler safety valves adjusted 3-4-46 Thickness of adjusting washers *Pr. valve 13/32" Sib. valve 27/64"*
Crank shaft material *O.H. steel* Identification Mark *9698 + 9699* Thrust shaft material *O.N. steel* Identification Mark *9866*
Intermediate shafts, material *O.H. Steel* Identification Marks *9867* Tube shaft, material Identification Mark
Screw shaft, material *O.H. Steel* Identification Mark *9868* Steam Pipes, material *Copper* Test pressure *400 lbs^a* Date of Test *19-3-46*
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 *No*
Is this machinery duplicate of a previous case *Yes* If so, state name of vessel *Empire Frieda*

General Remarks (State quality of workmanship, opinions as to class, &c.) *The machinery of this vessel, has been built under Special survey, in accordance with the Rules & approved plans. The M.O.W.T. specification & plans have been supervised. The materials & workmanship are sound & good. The machinery has been efficiently installed in the vessel, & tested on sea trials, at full power with satisfactory results, & is eligible in our opinion to be classed in the Register Book with the record of L.M.C. 4-46 with the Notation T.S. O.G. 1-50 boiler 200 lbs^a fitted for oil fuel, flash point above 150°F. The Electric lighting installation was fitted under Special Survey see Glasgow Surveyor's Report.*

Greenwood

The amount of Entry Fee ... £ 3 0 0 When applied for,
Machinery Special ... £ 35 15 0 27th APR. 1946
+ 25 9- ... £ 9 14 0
Donkey Boiler Fee ... £ : : When received,
Travelling Expenses (if any) £ : : 19

Sr J. Trechmann & M. Caldwell & self.
E. Earnshaw
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 2 MAY 1946

Assigned -/- *Cmc 4.46*
fitted for oil fuel & P. above 150°F

