

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

29 JAN 1942

Date of writing Report 28/11 1942 When handed in at Local Office 28/11 1942 Port of W. Hartlepool
 No. in Survey held at Hartlepool Date, First Survey 8th May, 1941 Last Survey 27th January, 1942
 Reg. Book. S/S "EAGLES DALE" "EASE DALE" (Number of Visits 85)
 on the S/S "EAGLES DALE" Tons { Gross
 Net
 Built at Haverton Hill By whom built Furness Shipbuilding Co. Ltd. Yard No. 340 When built 1942
 Engines made at Hartlepool By whom made Richardsons Westgarth Co. Engine No. 2712 When made 1942
 Boilers made at " By whom made " Boiler No. 2712 When made 1942
 Registered Horse Power _____ Owners Admiralty Port belonging to _____
 n. Horse Power as per Rule 674 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes
 made for which Vessel is intended _____

GINES, &c.—Description of Engines Triple Expansion Vertical Surface Condensing Revs. per minute 85.5
 a. of Cylinders 27" x 44" x 76" Length of Stroke 51" No. of Cylinders 3 No. of Cranks 3
 ank shaft, dia. of journals as per Rule 15.214" Crank pin dia. 16" Crank webs Mid. length breadth _____ Thickness parallel to axis 9 5/8" 10 1/8"
 as fitted 15 1/2" Mid. length thickness _____ shrunk Thickness around eye-hole 8 1/4"
 Intermediate Shafts, diameter as per Rule 14.49" Thrust shaft, diameter at collars as per Rule 15.214"
 as fitted 14 3/4" as fitted 15 3/4" - 15 1/2"
 Tube Shafts, diameter as per Rule _____ Screw Shaft, diameter as per Rule 16.01" Is the {tube screw} shaft fitted with a continuous liner { Yes
 as fitted _____ as fitted 16 1/4" as fitted _____
 Bronze Liners, thickness in way of bushes as per Rule 7/8" Thickness between bushes as per Rule 5/8" Is the after end of the liner made watertight in the
 as fitted 13/16" as fitted 13/16" 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 _____
 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 _____
 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
 aft No If so, state type _____ Length of Bearing in Stern Bush next to and supporting propeller 5'-5"
 Propeller, dia. 18'-3" Pitch Varying No. of Blades 4 Material bronze whether Moveable No Total Developed Surface 131.75 sq. feet
 ed 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. 2 Diameter 5" Stroke 27" Can one be overhauled while the other is at work Yes
 Feed Pumps { No. and size 2-12"x9"x24"; 1-9"x6"x10" Pumps connected to the { No. and size 2-5"x27" + 5" connection Ballast Pump
 How driven Steam Main Bilge Line How driven Main Engine; Steam
 Ballast Pumps, No. and size 1-10"x12"x12" 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 3 1/2" aft. web, 3 1/2" E.R.P. 3 1/2" E.R.S. 2 1/2" Coff. 3 1/2" B.R.P. 3 1/2" B.R.S.
 Pump Room FORE PEAK 1-4" Chain Locker Flat 1-2 1/2" DEEP IN Holds, etc. TANK FLAT 1-2" P. 1-2" S. FORD PUMP ROOM 1-2 1/2" FORD COFF. 1-2 1/2" P. + 1-2 1/2" S.
 MAIN PUMP ROOM (FORD) 1-3" P. + 1-3" S. MAIN PUMP ROOM (Aft) 1-3" P. + 1-3" S. Aft. Coff. 1-3" EJECTOR.
 Main Water Circulating Pump Direct Bilge Suctions, No. and size 1-10" P. Independent Power Pump Direct Suctions to the Engine Room Bilges,
 No. and size 1-5" S. Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes mud box, valve & tail pipe
 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
 That Pipes pass through the bunkers none How are they protected _____
 That 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 none Is it fitted with a watertight door _____ worked from _____

MAIN BOILERS, &c.—(Letter for record S) Total Heating Surface of Boilers 10020 sq. ft.
 Which Boilers are fitted with Forced Draft all Which Boilers are fitted with Superheaters all
 No. and Description of Boilers 3 S.E. Mallett & Co. Working Pressure 220 LB/SQ"
 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 3/1/40 Main Boilers 16/10/39 Auxiliary Boilers _____ Donkey Boilers _____
 (If not state date of approval) 30/10/39
 Superheaters _____ General Pumping Arrangements _____ Oil fuel Burning Piping Arrangements 28/10/41

SPARE GEAR.
 Has the spare gear required by the Rules been supplied yes.
 State the principal additional spare gear supplied _____

1941. May 8. June 19. July 7. 9. 11. 22. 25. Aug. 6. 7. 8. 14. 15. 29. Sept. 1. 3. 5. 8. 15. 16. 20. 22. 24. 26. 30.
 During progress of work in shops - - -
 1. 2. 9. 10. 16. 20. 22. 23. 24. 27. 29. Nov. 3. 4. 5. 10. 14. 18. 21. 25. 27. 28. Dec. 1. 2. 3. 4. 5. 8. 9. 11. 12. 15. 16. 17. 19. 22. 23. 24. 27.
 1942. Jan. 2. 5. 6. 7. 8. 9. 10. 12. 13. 14. 15. 16. 17. 19. 20. 22. 23. 24. 27.
 During erection on board vessel - - -
 1941. Dec. 8. 20. 1942. Jan. 8. 22. 28. Feb. 3. 4. - - - 7.
 Total No. of visits **85**

Dates of Examination of principal parts—Cylinders **22.7.41** Slides **8.10.41** Covers **8.10.41**
 Pistons **8.10.41** Piston Rods **8.10.41** Connecting rods **8.10.41**
 Crank shaft **15.8.41** Thrust shaft **29.10.41** Intermediate shafts **4.12.41**
 Tube shaft **v** Screw shaft **4.12.41** Propeller **8/12/41. v**
 Stern tube **4.12.41** Engine and boiler seatings **8/12/41 v 29/12/41** Engines holding down bolts **v 22/1/42**
 Completion of fitting sea connections **v 8/12/41**
 Completion of pumping arrangements **4/2/42** Boilers fixed **22/1/42 v 28/1/42** Engines tried under steam **v 3/2/42**
 Main boiler safety valves adjusted **3/2/42** Thickness of adjusting washers **F. 3/4 A. 5/16. P. 3/8 S. 11/32. S. 3/32 S. 9/32**
 Crank shaft material **steel** Identification Mark **9806 H.A.I.** Thrust shaft material **steel** Identification Mark **9806**
 Intermediate shafts, material **Steel** Identification Marks **9806 H.A.I.** Tube shaft, material **v** Identification Mark **v**
 Screw shaft, material **Steel** Identification Mark **9806 W.E.I.** Steam Pipes, material **S.D. Steel** Test pressure **660 lb/sq. in.** Date of Test **27/1/42**
 Is an installation fitted for burning oil fuel **Yes** 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 **R. 18. 2711 "Eaglesdale"**
 General Remarks (State quality of workmanship, opinions as to class, &c.)

The engines & boilers of this vessel have been constructed under Special Survey & in accordance with the approved plans.
 The workmanship & materials have been found good.
 The machinery has been forwarded to Haverton Hill to be fitted on board by Messrs. Furness Shipbuilding Co. in their Yard No 340.
 In my opinion, the vessel will be eligible to have record of + LMC - with date - on completion.
 The machinery fitted on board in accordance with approved Plans Rule Requirements, tried out under working conditions & found satisfactory & in my opinion is eligible for record of + LMC - 2.42 & notation of T.B.(C.A) 2.42. forced draught & superheated.
 The ship's side inlet & discharge valves be inspected as required in accordance with Admiralty Instructions MS 2385/40. MS 3199/40.

The amount of Entry Fee ... £ 6 : 0 :
 Special $\frac{1}{2}$ LMC ... £ 86 : 19 :
 Donkey Boiler Fee ... £ 21 : 15 :
 Travelling Expenses (if any) £ : :
 When applied for, 28/1/1942
 When received, 19.

Clive Bell & Norman Shaw
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute
 Assigned Fitt for oil fuel
 22.4.42
 J.D. Co.



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