

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

5 AUG 1943

Received at London Office.

Date of writing Report

19

When handed in at Local Office

19

Port of HULL

7-5-43. S.

No. in Survey held at HULL

Date, First Survey 14. 10. 42.

Last Survey 8. 4. 1943.

Reg. Book

(Number of Visits 34.)

391

on the H.M. Trawler GRILSE.

Tons { Gross 391
Net 128

Built at SELBY.

By whom built Cochran & Sons Ltd

Yard No. 1265.

When built 1943

Engines made at HULL.

By whom made Ainsworth Ltd

Engine No. 721.

When made

Boilers made at HULL.

By whom made Ainsworth Ltd

Boiler No. 721

When made

Registered Horse Power

Owners THE ADMIRALTY.

Port belonging to

Nom. Horse Power as per Rule 125.

Is Refrigerating Machinery fitted for cargo purposes No

Is Electric Light fitted Yes.

Trade for which vessel is intended

Government Service.

ENGINES, &c.—Description of Engines Triple Expansion

Dia. of Cylinders 13 1/2", 24", 39"

Length of Stroke 27"

No. of Cylinders 3.

Contract. Revs. per minute 115.

No. of Cranks 3.

Crank shaft, dia. of journals

as per Rule 7.65.

as fitted 8"

Crank pin dia. 8"

Crank webs

Mid. length breadth

Thickness parallel to axis 5"

Mid. length thickness

shrunk

Thickness around eye-hole 3 9/16"

Intermediate Shafts, diameter

as per Rule 7.3"

as fitted 7 3/4"

Thrust shaft, diameter at collars

as per Rule 7.65"

as fitted 8"

Tube Shafts, diameter

as per Rule

as fitted

Screw Shaft, diameter

as per Rule 8.15"

as fitted 8 1/2"

Is the { tube screw } shaft fitted with a continuous liner { Yes.

Bronze Liners, thickness in way of bushes

as per Rule 9/16"

as fitted 19/32"

Thickness between bushes

as per Rule

as fitted 19/32"

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 One length

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

Propeller, dia. 10'-3"

Pitch 10'-9"

No. of Blades 4.

Material C.I.

Length of Bearing in Stern Bush next to and supporting propeller 2'-11 9/16"

whether Moveable Solid.

Total Developed Surface 39 1/2 sq. feet

Feed Pumps worked from the Main Engines, No. One

Diameter 3"

Stroke 15"

Can one be overhauled while the other is at work (one at a time)

Bilge Pumps worked from the Main Engines, No. One

Diameter 3.

Stroke 15"

Can one be overhauled while the other is at work (one at a time)

Feed Pumps { No. and size None 6" x 4 1/4" x 6" Duplex

Pumps connected to the

No. and size 6" x 4 1/4" x 6" Duplex 3" ejector

Pumps { How driven Independent Steam

Main Bilge Line

How driven Independent Steam

Ballast Pumps, No. and size None

Lubricating Oil Pumps, including Spare Pump, No. and size None

Are two independent means arranged for circulating water through the Oil Cooler None

Suctions, connected to both Main Bilge Pumps and Auxiliary

Bilge Pumps:—In Engine and Boiler Room 2 @ 2" Dia. and one 3" Ejector (see below)

In Pump Room

In Holds, &c. One @ 2" Dia in each of the following:—

Fwd Ballast Space, ASDIC Room, Aft Ballast Space, Magazine, Magazine, Spirit Room

Main Water Circulating Pump Direct Bilge Suctions, No. and size One @ 6"

Independent Power Pump Direct Suctions to the Engine Room Bilges,

No. and size one 3" Steam Ejector

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 Yes.

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 None.

Is it fitted with a watertight door

worked from

MAIN BOILERS, &c.—(Letter for record S.) Total Heating Surface of Boilers 1873. 1/2

Which Boilers are fitted with Forced Draft All.

Which Boilers are fitted with Superheaters None

No. and Description of Boilers One S.B.

Working Pressure 210 lb 10"

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 13-8-41. Main Boilers 13-8-41. Auxiliary Boilers

(If not state date of approval)

Donkey Boilers

Superheaters

General Pumping Arrangements 16-6-41.

Oil fuel Burning Piping Arrangements None

SPARE GEAR.

As the spare gear required by the Rules been supplied Yes.

State the principal additional spare gear supplied See attached list.

The foregoing is a correct description.

For AMOS & SMITH LTD.

Manufacturer.

A.R. Towler
DIRECTOR

003444-003444-0040

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Lloyd's Register
Foundation

09082

GRILSC.

1942. Oct. 14-21. Nov. 12-16. Dec. 24-29. 1943. Jan. 7-8. Feb. 2-24. Mar. 10-20.
 During progress of work in shops - - - June 21-25.
 Dates of Survey while building
 During erection on board vessel - - - 1943 MAR 10, 23. AP 15. MY 31. JUN 4, 7, 8, 9, 11, 15, 16, 18, 22, 24, 25, 28.
 JUL 1, 2, 8.
 Total No. of visits 34

Dates of Examination of principal parts - Cylinders 24/12/42. 29/12/42. Slides 22-12-43. Covers 24/12/42. 29/12/42.
 Pistons 27-2-43. Piston Rods 27-2-43. Connecting rods 27-2-43.
 Crank shaft 2-2-43. Thrust shaft 21-10-42. Intermediate shafts 16-11-42.
 Tube shaft None. Screw shaft 16-11-42. Propeller 23-3-43.
 Stern tube 11-10-3-43. Engine and boiler seatings 31-5-43. Engines holding down bolts 11-6-43.
 Completion of fitting sea connections 23-3-43.
 Completion of pumping arrangements 25-6-43. Boilers fixed 11-6-43. Engines tried under steam 25/6/43.
 Main boiler safety valves adjusted 25-6-43. Thickness of adjusting washers P. 7/16" S. 3/8".
 Crank shaft material F.1. Steel. Identification Mark 247. P. 246. F. W. 25/9/42. LLOYDS 250 FW 1533. J. 5. Identification Mark 21-10-42.
 Intermediate shafts, material D. Identification Marks 1533 16-11-42. Tube shaft, material - Identification Mark -
 Screw shaft, material D. Identification Mark 25-9-42. Steam Pipes, material Steel. Test pressure 630 lb. Date of Test 27-6-43.
 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 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 GRAYLING.

General Remarks (State quality of workmanship, opinions as to class, etc.)

The Machinery of the vessel has been constructed under Special Survey in accordance with the approved plans, the Rules, the Specification, and Admiralty requirements, of good materials and workmanship.

The Machinery has been fitted aboard under Special Survey and when tried at as near full power as practicable in the boiler was found satisfactory in every respect.

It is eligible, in our opinion, to have the record * LMC 7,43 CL. and the notation of T. 3 Cy. 12 1/2", 24", 39". - 27" / 210 lb 10". HP 125. GS. 50. HS. 1873. F. D.

Certificate to be sent to

The amount of Entry Fee ... £ 3 : :
 Special ... £ 3 : :
 Donkey Boiler Fee ... £ 3 : :
 Travelling Expenses (if any) £ : :
 When applied for, AUG 1943
 When received, 19

ADMIRALTY

A/c rendered from London 26 AUG 1943

Engineer Surveyor to Lloyd's Register of Shipping.

FRI. 20 AUG 1943

Committee's Minute

Assigned

+ LMC 7,43 20 CL



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