

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

31 MAR 1937

Date of writing Report

19

When handed in at Local Office

27/3/

1937 Port of

NEWCASTLE-ON-TYNE

No. in Survey held at

Newcastle on Tyne

Date, First Survey

29 April

Last Survey

25/3/

1937

Reg. Book.

on the S/S LLANDAFF

(Number of Visits 23)

Gross

Tons

Net

When built 1937

Built at

Sunderland

By whom built

Bartram & Sons Ltd

Yard No. 275

Recip.

Engines made at

Newcastle on Tyne

By whom made

White's Mar. Eng. Co. Ltd

Engine No.

9.C

When made

1937

L.P. Turbine made at

Newcastle on Tyne

By whom made

R.W. Hawthorn, Leschke & Co. Ltd

Turbine No.

9887

When made

1937

Boilers made at

Sunderland

By whom made

Geo Clark & Co. Ltd

Boiler No.

When made

1937

Registered Horse Power

Owners

Evan Thomas Radcliffe & Co.

Port belonging to

Nom. Horse Power as per Rule

348

Is Refrigerating Machinery fitted for cargo purposes

✓

Is Electric Light fitted

✓

Trade for which Vessel is intended

Ocean going

ENGINES, &c.—Description of Engines & L.P. Turbine D.R. Geared to One Screw Shaft Engine R.p.m. 305
 Dia. of Cylinders 24 1/4" + 2 of 20" Length of Stroke 13" No. of Cylinders 4 No. of Cranks 4
 Crank shaft, dia. of journals as per Rule 6.05" Crank pin dia. 7 3/4" Crank webs Mid. length breadth 9 3/4" Thickness parallel to axis
 as fitted 7 3/4" Mid. length thickness 4 7/8" Thickness around eye-hole
 Intermediate Shafts, diameter as per Rule 11.70" Thrust shaft, diameter at collars as per Rule 12.29"
 as fitted 12 Tube Shafts, diameter as per Rule Screw Shaft, diameter as per Rule 13.5 Is the tube shaft fitted with a continuous liner
 as fitted 13.5 Is the after end of the liner made watertight in the 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
 If so, state type Length of Bearing in Stern Bush next to and supporting propeller
 Propeller, dia. 18'0" Pitch 19.2" No. of Blades 4 Material Mang. Br. whether Movable No Total Developed Surface 106 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. none Diameter Stroke Can one be overhauled while the other is at work
 Feed Pumps No. and size two 6" x 8 1/2" x 18" Stroke Pumps connected to the Main Bilge Line No. and size
 How driven Steam Main Bilge Line How driven
 Ballast Pumps, No. and size Lubricating Oil Pumps, including Spare Pump, No. and size Two 6" x 5 1/2" x 15"
 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
 In Pump Room In Holds, &c.

Main Water Circulating Pump Direct Bilge Suctions, No. and size Independent Power Pump Direct Suctions to the Engine Room Bilges,
 No. and size Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes
 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
 Are all Sea Connections fitted direct on the skin of the ship Are they fitted with Valves or Cocks
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Are the Overboard Discharges above or below the deep water line
 Are they each fitted with a Discharge Valve always accessible on the plating of the vessel Are the Blow Off Cocks fitted with a spigot and brass covering plate
 What Pipes pass through the bunkers 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
 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 Is the Shaft Tunnel watertight Is it fitted with a watertight door worked from

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

Is Forced Draft fitted No. and Description of Boilers Working Pressure

IS A REPORT ON MAIN BOILERS NOW FORWARDED?

IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

Is the donkey boiler intended to be used for domestic purposes only

PLANS. Are approved plans forwarded herewith for Shafting 26/2/36 Main Boilers ✓ Auxiliary Boilers ✓ Donkey Boilers ✓
 (If not state date of approval) 7/3/36

Superheaters ✓ General Pumping Arrangements ✓ Oil fuel Burning Piping Arrangements ✓

SPARE GEAR.

Has the spare gear required by the Rules been supplied
 State the principal additional spare gear supplied

Yes. viz 2 top end bolts & nuts
 2 bottom end bolts & nuts
 2 main bearing bolts & nuts
 9 piston joint ring studs & nuts

12 Condenser tubes, 60 Condenser ferrules, 1 set of valves for water ends of pump.
 1 HP & 1 L.P. Escape Valve Springs, Assorted bolts, studs & nuts, and various
 sizes of iron. one Cast Iron Propeller.

The foregoing is a correct description,

For White's Marine Engineering

Manufacturer.

PILLAR
Centre
Stiffer
Platin
STRINGE
Upper
String
Thick
in w
Thick
If She
Second
String
STRA
FLAT PLAT
of Strake
BILGE PLAT
Strakes
SIDE PLAT
Strakes
UPPER DE
strake in
UPPER DE
strake in
STRAKE BE
strake in
STRAKE BE
strake in
POOP SIDE
BRIDGE SIDE
FORECASTLE
Total No.
MIDSHIP
COLLISIO
AFTER PI
STEEL.

1936
Apr 29. May 8. 13. June 10. July 22. Sep. 1. 25. Oct. 1. 12. 29. Nov. 18. 23. 26. 30.
1937
Jan. 4. 19. 20. 27. Feb. 10. Mar. 12. 15. 20. 25.
During progress of work in shops --
During erection on board vessel --
Total No. of visits 23.
Dates of Examination of principal parts—Cylinders 29/10/36 + 23/11/36 Slides 12/3/37 Covers 29/10/36 + 23/11/36
Pistons 12/3/37 Piston Rods 27/1/37 Connecting rods 20/1/37
Crank shaft 19/1/37 Thrust shaft ✓ Intermediate shafts ✓
Tube shaft ✓ Screw shaft ✓ Propeller ✓
Stern tube ✓ Engine and boiler seatings ✓ Engines holding down bolts ✓
Completion of fitting sea connections ✓
Completion of pumping arrangements ✓ Boilers fixed ✓ Engines tried under steam in shop 20/3/37.
Main boiler safety valves adjusted ✓ Thickness of adjusting washers ✓
Crank shaft material Forge M. Steel Identification Mark 2405 PHLP 2406 21/9/36 Thrust shaft material ✓ Identification Mark ✓
Intermediate shafts, material ✓ Identification Marks ✓ Tube shaft, material ✓ Identification Mark ✓
Screw shaft, material ✓ Identification Mark ✓ Steam Pipes, material ✓ Test pressure ✓ Date of Test ✓
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 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 except dia. of HP Cylinder. If so, state name of vessel S/S LLANASHE. New Rpt 94262.

General Remarks (State quality of workmanship, opinions as to class, &c.)
This Reciprocating Engine has been constructed under Special Survey in accordance with the Rules and approved plan, and the materials and workmanship are good. The Engine has been sent to Sunderland to be installed with its L.P Turbine and D/R, S/R Gearing in Messrs Bartram & Co. Yard No 275, S/S LLANBAFF.

For Basis of SHP + Allocation of Fees, see Newcastle Rpt No 94262 for Engines of S/S LLANASHE
New £21. 17. 0
Low £9. 0. 0
Red £46. 7. 0
The amount of Entry Fee ... £ 5: 0: When applied for
Special ... LMC £ 77: 4: 30 MAR 1937
Donkey Boiler Fee ... £ : : When received.
Travelling Expenses (if any) £ 18/8 10. 5 1937 New.
London 9c

Committee's Minute
Assigned
See Std. 78 32092
TUE 25 MAY 1937

A. Watt.
Engineer Surveyor to Lloyd's Register of Shipping.