

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

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Writing Report 24-12-1947 When handed in at Local Office 24-12-1947 Port of WEST HARTLEPOOL

Survey held at WEST HARTLEPOOL Date, First Survey 25<sup>th</sup> January, 1945 Last Survey 27<sup>th</sup> August, 1945  
(Number of Visits 82)

Book on the S.S. 'CULLIN SOUND' Tons { Gross  
Net

at WEST HARTLEPOOL By whom built W. GRAY & CO LTD Yard No. 1171 When built 1945

Engines made at KILMARNOCK By whom made GLENFIELD & KENNEDY LTD Engine No. A 176 When made 1943

Boilers made at WEST HARTLEPOOL By whom made CENTRAL MARINE ENGINE WORKS Boiler No. 1171 When made 1945

Registered Horse Power 2500 Owners ADMIRALTY Port belonging to -

Horse Power as per Rule 542 Is Refrigerating Machinery fitted for cargo purposes - Is Electric Light fitted YES

For which vessel is intended MN-670

Engines, &c.—Description of Engines STEAM RECIPROCATING TRIPLE EXPANSION Revs. per minute 76

No. of Cylinders 3 Length of Stroke 48" No. of Cranks 3

Mid. length breadth 22" Thickness parallel to axis 9"  
Crank webs Mid. length thickness 9" shrunk Thickness around eye-hole 6 3/8"

Intermediate Shafts, diameter as per Rule 13.32" as fitted 13 3/4" Thrust shaft, diameter at collars as per Rule 14.99" as fitted 14 1/4"

Shafts, diameter as per Rule 14.84" as fitted 15 1/4" Is the { tube screw } shaft fitted with a continuous liner YES

Size Liners, thickness in way of bushes as per Rule 7.53" as fitted 8 1/2" Thickness between bushes as per Rule 5.6" as fitted 2 1/2" Is the after end of the liner made watertight in the

bell 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

Is an approved Oil Gland or other appliance fitted at the after end of the tube YES

Length of Bearing in Stern Bush next to and supporting propeller 5' 1"

Propeller, dia. 18' 3" Pitch 15' 10" No. of Blades 4 Material BRONZE whether Moveable NO Total Developed Surface 98.5 sq. feet

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

How driven STEAM Pumps connected to the Main Bilge Line { No. and size 2 at 4" x 27" / 1 at 10" x 12" x 12" Duplex / 1 at 9 1/2" x 7 1/2" Single How driven LEVER / STEAM

Lubricating Oil Pumps, including Spare Pump, No. and size - Suctions, connected to both Main Bilge Pumps and Auxiliary

Oil Cooler - In Holds, &c. NO 1 - 2 at 3", NO 2 - 2 at 3 1/2", NO 3 - 2 at 3", NO 4 - 2 at 3"

Independent Power Pump Direct Suctions to the Engine Room Bilges, YES

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 they fitted with Valves or Cocks BOTH

Are the Overboard Discharges above or below the deep water line BELOW

Are the Blow Off Cocks fitted with a spigot and brass covering plate YES

How are they protected -

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 Shaft Tunnel watertight YES Is it fitted with a watertight door NO worked from -

Is the donkey boiler be used for domestic purposes only -

Are approved plans forwarded herewith for Shafting - Main Boilers 22.2.41 Auxiliary Boilers - Donkey Boilers -

General Pumping Arrangements YES Oil fuel Burning Piping Arrangements YES

SPARE GEAR.

Is the spare gear required by the Rules been supplied YES

Is the principal additional spare gear supplied TO ADMIRALTY SPECIFICATION

The foregoing is a correct description.  
FOR THE CENTRAL MARINE ENGINE WORKS,

(Sd. G. H. G. & Co. Ltd.)

GENERAL MANAGER.

Manufacturer.



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Lloyd's Register  
Foundation

W426-0111



# WEST HARTLEPOOL.

Dates of Survey while building

During progress of work in shops - - 1944. Jan 25. April 20. May 30. July 3. 31. Aug. 3. 4. 21. 22. Sept. 1. 6. 13. 20. 22. 23. 26. 28. 30. 0

During erection on board vessel - - 7. 10. 14. 19. 20. 23. 24. 25. 26. 27. 28. 30. 31. Nov. 1. 2. 3. 4. 5. 7. 8. 9. 10. 13. 14. 15. 16. 17. 18. 20. 21. 22. 23. 28. 29. Dec. 6. 7. 12. 13. 14. 15. 16. 21. 22. 29. 1945. Jan. 8. 9. 10. 12.

M'BRO. 1945 March 24. April 4. 10. May 3. 17. July 25. Aug. 7. 9. 10. 27. 29.

Total No. of visits 82

Dates of Examination of principal parts—Cylinders. — Slides. — Covers. —

Pistons. — Piston Rods. — Connecting rods. —

Crank shaft. — Thrust shaft. 1. 11. 44, 1. 9. 44, Intermediate shafts. 10. 10. 44

Tube shaft. — Screw shaft. 22. 8. 44 Propeller. 7. 11. 44

Stern tube. 10. 10. 44. Engine and boiler seatings. 2. 11. 44. Engines holding down bolts. 13. 11. 44.

Completion of fitting sea connections. 2. 11. 44

Completion of pumping arrangements. 8. 1. 45 Boilers fixed. 6. 12. 44. Engines tried under steam. 8. 12. 44. 9. 1. 45.

Main boiler safety valves adjusted. 8. 1. 45 Thickness of adjusting washers. P. 5/16 3/4 1 1/4 C 5/16 1/4 1/32 5 3/8 23 7/32

Crank shaft material. STEEL Identification Mark. 506. Thrust shaft material. STEEL Identification Mark. 3735 C.P.

Intermediate shafts, material. STEEL Identification Marks. 3736-7-8-9 Tube shaft, material. — Identification Mark. —

Screw shaft, material. STEEL Identification Mark. 8634 C.P. Steam Pipes, material. STEEL Test pressure. 600 lbs. Date of Test. 13. 12. 44

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. — 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. — If so, state name of vessel. —

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

The engines and boilers of this vessel have been built under special survey and in accordance with approved plans.

The workmanship materials have been found good

Upon completion they were examined under full working conditions and found satisfactory

The electric installation was to Admiralty Supervision

It is recommended that the machinery of this vessel is eligible for records

+ L.M.C 8. 45, 250 F.D. 220 H.P. (34) Fitted for oil Fuel 8. 45 F.P. above 150° F. T.S. C.L.

The amount of Entry Fee ... £ : : When applied for, 19

Special ... £ : : When received, 19

Donkey Boiler Fee ... £ : : 19

Travelling Expenses (if any) £ : : 19

Committee's Minute

Assigned

John S. L. J. per A.O. Oxford.

Engineer Surveyor to Lloyd's Register of Shipping.