

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Date of writing Report 19 14 When handed in at Local Office 14 MAY 1941 Port of HULL

No. in Survey held at Hull Date, First Survey 13.9.40 Last Survey 26.4.1941
 Reg. Book. 179. on the H.M.T. "COPINSAY" (Number of Visits 40)

Built at Selby By whom built Leochrane & Sons, Ltd Yard No. 1224 Tons { Gross 452
 Net 142

Engines made at Hull By whom made Amos Smith & Co. Engine No. 685 When built 1941-4
 Boilers made at Hull By whom made Amos Smith & Co. Boiler No. 685 When made 1941-4

Registered Horse Power 156 Owners The Admiralty Port belonging to ✓
 Nom. Horse Power as per Rule 156 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted Ys.

Trade for which Vessel is intended ✓

ENGINES, &c. — Description of Engines Triple expansion Revs. per minute 160
 Dia. of Cylinders 13 1/2 - 23 - 38 Length of Stroke 27 No. of Cylinders 3 No. of Cranks 3
 Crank shaft, dia. of journals as per Rule 7 3/8 Crank pin dia. 7 3/8 Crank webs Mid. length breadth 1 1/2 Thickness parallel to axis 4 13/16
as fitted 7 7/8 Mid. length thickness shrunk 3 5/16

Intermediate Shafts, diameter as per Rule 7.15" Thrust shaft, diameter at collars as per Rule 7.5"
as fitted 7 1/4" as fitted 7 7/8"

Tube Shafts, diameter as per Rule 8.2 Screw Shaft, diameter as per Rule 8 1/4 Is the { tube } shaft fitted with a continuous liner { no
as fitted 8 1/4" { screw }

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
 a t Ys If so, state type Newark Length of Bearing in Stern Bush next to and supporting propeller 36 1/2"

Propeller, dia. 105" Pitch 9-4 No. of Blades 3 Material 6.8 whether Moveable no Total Developed Surface 30 sq. feet
 Feed Pumps worked from the Main Engines, No. 2 Diameter 2 1/2" Stroke 15" Can one be overhauled while the other is at work Ys
 Bilge Pumps worked from the Main Engines, No. 2 Diameter 2 1/2" Stroke 15" Can one be overhauled while the other is at work Ys

Feed Pumps { No. and size One 4 x 6 + 12 Weirs Pumps connected to the { No. and size One - 6 x 5 1/2 + 15 Weirs } Also ✓
 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 Eng. Room 2 at 2" dia + one at 3 1/2" dia Waterloa 2 at 2" dia
 In Pump Room none In Holds, &c. One at 2" dia in each of the following - Forepeak, Chain locker
Asdic space, Magazine, Spirit room, Sanitary, Shaft space, aft peak.

Main Water Circulating Pump Direct Bilge Suctions, No. and size One - 5" Independent Power Pump Direct Suctions to the Engine Room Bilges,
 No. and size One at 3" included above Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes Ys
 Are the Bilge Suctions in the Machinery Space led from easily accessible man-boxes, placed above the level of the working floor, with straight tail pipes to the bilges Ys
 Are all Sea Connections fitted direct on the skin of the ship Ys Are they fitted with Valves or Cocks Ys
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Ys Are the Overboard Discharges above or below the deep water line at W.L.
 Are they each fitted with a Discharge Valve always accessible on the plating of the vessel Ys Are the Blow Off Cocks fitted with a spigot and brass covering plate no
 What Pipes pass through the bunkers Dead tank suction How are they protected wood casing
 What pipes pass through the deep tanks none Have they been tested as per Rule Ys
 Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times Ys
 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 Ys Is the Shaft space watertight Ys Is it fitted with a watertight door no Access from
flat above

MAIN BOILERS, &c. — (Letter for record S) Total Heating Surface of Boilers 2650 ft
 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 200 lbs 2"

IS A REPORT ON MAIN BOILERS NOW FORWARDED? Ys
 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 17.10.39 Main Boilers 17.10.39 Auxiliary Boilers none Donkey Boilers none
 (If not state date of approval)
 Superheaters none General Pumping Arrangements 17.10.39 Oil fuel Burning Piping Arrangements none

SPARE GEAR.
 Has the spare gear required by the Rules been supplied Ys
 State the principal additional spare gear supplied See attached list

1940. 1941

During progress of work in shops - - Sep. 13. 30. Oct. 25. Nov. 4. 13. 19. 25. Dec. 12. 31. Jan. 3. 13. 23. 25. 29. 30. Feb. 3. 8. 18. 19. 24. 25.

Dates of Survey while building { 7. 12. 14. 19. Mar. 24. 26. Apr. 1. 26. 7. 10. 16. 19. 22. 23. 24. 25. 26.

During erection on board vessel - - -

Total No. of visits 40.

"FAZNIROJ" T.M.H.

Dates of Examination of principal parts—Cylinders 25/1/41. 25/1/41. 30/1/41 Slides 30-1-41 Covers 25/1/41. 25/1/41. 30/1/41

Pistons 30/1/41. Piston Rods 30/1/41. Connecting rods 30/1/41.

Crank shaft 3/2/41. Thrust shaft 19/1/40. Intermediate shafts 12/1/41.

Tube shaft ✓ Screw shaft 25/10/40. Propeller 8/11/40

Stern tube 4/11/40 Engine and boiler seatings 8-11-40 Engines holding down bolts 7.3.41

Completion of fitting sea connections 8-11-40.

Completion of pumping arrangements 16-4-41 Boilers fixed 7.3-41 Engines tried under steam 23-4-41

Main boiler safety valves adjusted 16-4-41 Thickness of adjusting washers bolts 11/32"

Crank shaft material M.S. Coupling 442. E.R.H. Journal 290 T.T. Thrust shaft material M.S. Identification Mark E.H.501.

Intermediate shafts, material M.S. 594 G.R.H. L.T. 15. T.T. 1-10-40. Tube shaft, material M.S. Identification Mark

Screw shaft, material M.S. Identification Mark 27/8/40. Steam Pipes, material Steel Test pressure 600 Date of Test 26/3/41

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 H.M.T. "ASH" Hull ref. no. 5070

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

The machinery of this vessel has been constructed and fitted on board in accordance with the approved Admiralty plans; the specification and the Society's Rules. The workmanship and materials are good and when tried at as near full power as practicable in the basin it was found satisfactory in every respect.

The vessel is eligible, in our opinion, when classed to have the records of + L.M.C. 4-41. and O.G. and the notations T. 3 reg 13½, 23, + 38 156 N.H.P. 200 lb. 1. S.B. 3 of G.S. 63 H.S. 2650 F.D.

The amount of Entry Fee ... £ : : When applied for, 03 MAY 1941

Special ... £ 75 : 0 : When received,

Donkey Boiler Fee ... £ : : 19

Travelling Expenses (if any) £ : :

Committee's Minute FRI. 16 MAY 1941

Assigned + L.M.C. 4-41 52, 09.

J. Anteman & Dyke J. Anteman

Engineer Surveyor to Lloyd's Register of Shipping.