

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

Date of writing Report 27.10.1943 When handed in at Local Office 27.10.1943 Port of HULL
 No. in Survey held at HULL Date, First Survey 30.1.43 Last Survey 21.10.1943
 Reg. Book "EARNER" J 2535 (Number of Visits 59) Tons {Gross 597
 on the STEAM TUG Net ni.
 Built at SELBY By whom built Cochrane & Co Ltd Yard No. 1270 When built 1943
 Engines made at HULL By whom made Chas. D. Holmes Ltd Engine No. 1647 When made
 Boilers made at WEST HARTLEPOOL By whom made Central Mar Eng Works Boiler No. R 361 When made
 Registered Horse Power _____ Owners Admiralty Port belonging to _____
 Nom. Horse Power as per Rule 222 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted YES
 Trade for which vessel is intended Rescue tug

ENGINES, &c.—Description of Engines Triple Expansion CONTRACT. Revs. per minute 122
 Dia. of Cylinders 17" 28" 46" Length of Stroke 33" No. of Cylinders 3 No. of Cranks 3
 Crank shaft, dia. of journals as per Rule 9.46 Crank pin dia. 9 5/8" Mid. length breadth _____ Thickness parallel to axis 6 1/8"
as fitted 9 5/8" Crank webs _____ shrunk Thickness around eye-hole 4 5/16"
 Intermediate Shafts, diameter as per Rule 9.01 Thrust shaft, diameter at collars as per Rule 9.46
as fitted 9 1/4" as fitted 9 5/8"
 Tube Shafts, diameter as per Rule _____ Screw Shaft, diameter as per Rule 10" Is the tube shaft fitted with a continuous liner { Yes
as fitted None as fitted 10 1/4" screw

Bronze Liners, thickness in way of bushes as per Rule .601 Thickness between bushes as per Rule .45 Is the after end of the liner made watertight in the propeller boss Yes
as fitted 2 1/32" as fitted 1 7/32"
 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. 11-9" Pitch 12'-0" No. of Blades 4 Material CI whether Moveable No Total Developed Surface 52 sq. feet
 Feed Pumps worked from the Main Engines, No. 2 Diameter 3" Stroke 18" Can one be overhauled while the other is at work Yes
 Bilge Pumps worked from the Main Engines, No. 2 Diameter 3" Stroke 18" Can one be overhauled while the other is at work Yes
 Feed Pumps { No. and size One 7" x 5" x 6" Duplex Pumps connected to the { No. and size One 7" x 7" x 8" 2 3" steam Hand pump ME
 How driven Independent Recam Main Bilge Line { How driven Independent Recam Ejector 3/4 Cofferdam

Ballast Pumps, No. and size One 7" x 7" x 8" 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 1/4" 3" Steam Ejector & 4 @ 1 1/2" suction in gutterways
 In Pump Room Cofferdam One @ 2" In Holds, &c. One @ 2" Dia in each of the following Fore Peak
Water ballast port and drain After Peak

Main Water Circulating Pump Direct Bilge Suctions, No. and size 6" Independent Power Pump Direct Suctions to the Engine Room Bilges,
 No. and size 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 _____

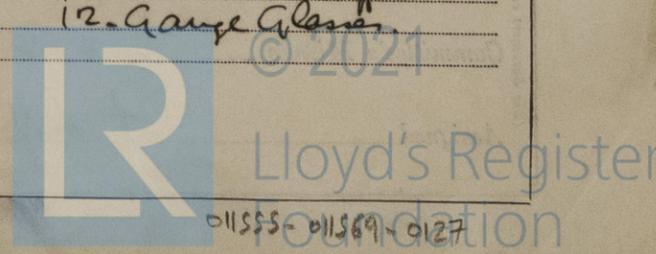
MAIN BOILERS, &c.—(Letter for record S) Total Heating Surface of Boilers 3550 sq ft
 Which Boilers are fitted with Forced Draft All Which Boilers are fitted with Superheaters None
 No. and Description of Boilers One S.B. Working Pressure 210 lb/10"
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? Yes
 IS 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 10-1-40 Main Boilers 20-10-39 Auxiliary Boilers None Donkey Boilers None
 (If not state date of approval)
 Superheaters _____ General Pumping Arrangements 13-5-40 Oil fuel Burning Piping Arrangements 26-4-40

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

2 Top and bottom nuts One Set lockwood and Calise rings & spring OIL FUEL SPARE GEAR
2 Bottom end do for Pistons and piston valves. 2 Thermometers
2 Main bearing do 12. Boiler tubes plain 6. Burner Rods
One Set Coupling nuts 4 do do Pray. 6 " Caps
2 Safety Valve Springs One Piston rod 36 " Nipples
25 Condenser tube One Valve rod 36 " Dia. Plug
50 do ferrules. One Main & One Aux. Check Valve 6 Fire watch traps
One Set Feed & Bilge pump Valves. 12. Gauge Glasses
One Set Air pump Valves.

The foregoing is a correct description.
 FOR CHARLES D. HOLMES & CO., LTD.
M.R. Evans Manufacturer.



During progress of work in shops - - - 1943. Jan. 30. Feb. 9. 11. Apr. 2. 9. 16. 30. May. 7. 14. 21. June 10. 14. 16. 19. 25. July 28. 16. 19. 20. 22. 23. Aug. 6. 13. 21. 23. 24. Sept. 2. 3. 4. 20. 21. 25

Dates of Survey while building - - - 1943 Jun 17. Jul 12, 27. Aug 6, 18, 24. Sep 9, 15, 16, 22, 24, 28, 30. Oct. 1, 4, 5, 6. Oct 12, 13, 14, 15, 19, 20, 21.

Total No. of visits 59.

Dates of Examination of principal parts - Cylinders 20/7/43. 22/7/43. Slides 7/7/43. Covers 20/7/43. 22/7/43.

Pistons 3/9/43. Piston Rods 2/8/43. Connecting rods 27/8/43.

Crank shaft 16-7-43. Thrust shaft 19/6/43. Intermediate shafts 2/9/43.

Tube shaft 17/9/43. Screw shaft 14/6/43. Propeller 17/9/43.

Stern tube 17/9/43. Engine and boiler seatings 18/8/43. Engines holding down bolts 16/9/43.

Completion of fitting sea connections 17/9/43.

Completion of pumping arrangements 5/10/43. Boilers fixed 15/9/43. Engines tried under steam 5/10/43.

Main boiler safety valves adjusted 5/10/43. Thickness of adjusting washers F 17/32. A 7/16.

Crank shaft material F. I. Steel. Identification Mark 586. CP. 3-6-43. Thrust shaft material F. I. Steel. Identification Mark 15. 19-6-43.

Intermediate shafts, material D°. Identification Marks 842, 15. 5-43. 15-3-43. Tube shaft, material NONE. Identification Mark -

Screw shaft, material D°. Identification Mark 8363. CP. 23-4-43. Steam Pipes, material Steel. Test pressure 630 lb. Date of Test 21-9-43.

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 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 Frisky, H.E. Rpt. 51413.

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

The Machinery of the Vessel has been constructed in accordance with the approved plans the Rules and the Specification, of tested material made by firms accredited by the Society.

The Workmanship and material are good.

The Machinery & Auxiliaries have been fitted on board and when tried under steam at as near full power as practicable in the basin well found satisfactory in every respect.

Eligible to be classed in the Register Book * LMC 10, 43 CL.

T 3 cy. 17", 28", 46" - 33". 1 SB. 210 lb NHP 222

HS 3550 lb F.D.

Filters for oil fuel 10, 43. F.P. above 150° F.

This vessel has proceeded to sea without the 5" portable pump engine which is stored on starboard side of boiler room casing on deck and intended for salvage purposes. W.S.S.

See also WH Rpt N° 18454.

The amount of Entry Fee	£	:	:	When applied for,
Special CASE (PTM)	£	35	16	NOV 1943
Donkey Boiler Fee	£	59	10	
Travelling Expenses (if any)	£			When received,
	£			19

Committee's Minute TUES. 23 NOV 1943

ADMIRALTY!

A/c rendered from 26. 11. 43

J. McEneaney
W. Shields
Engineer Surveyor to Lloyd's Register of Shipping.

Assigned + LMC 10, 43 FD Ch

