

Rpt. 4.

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 14 FEB 1944

11 FEB 1944

Date of writing Report 8-11-43
 No. in Survey held at HULL
 Reg. Book on the STEAM TUG **SESAME** J. 2537
 Built at SELBY By whom built Cochrane & Sons Ltd Yard No. 1275 When built 1944
 Engines made at HULL By whom made Char. D. Holmes Engine No. 1650 When made
 Boilers made at W. HARTLEPOOL By whom made Central Marine Eng. Works Boiler No. R 362 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 5/8"
 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 10" Is the {tube} shaft fitted with a continuous liner {Yes}
 as fitted 10 1/4" as fitted 10 1/4" Is the {screw} shaft fitted with a continuous liner {Yes}

bronze Liners, thickness in way of bushes as per Rule .601" Thickness between bushes as per Rule .45"
 as fitted 2 1/32" as fitted 1 1/32" 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 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 No. If so, state type — Length of Bearing in Stern Bush next to and supporting propeller 4 1/2"
 Propeller, dia. 11-9" Pitch 12-0" No. of Blades 4 Material CI whether Moveable Solid 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 Main Bilge Line {No. and size One 7" x 7" x 8" 3" Mean Head pump
 How driven Independent Steam How driven Independent Steam Ejector 10 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 in each of the following at 2" dia:—

Fore peak, Water ballast port and Air Air Peak
 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 3" Mean-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. / sq. in.

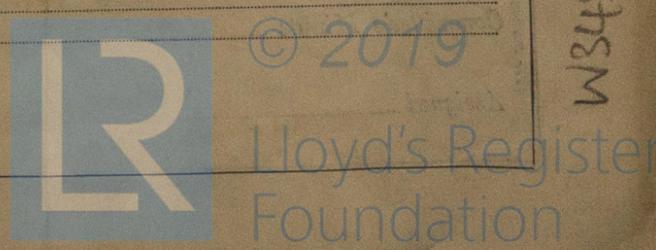
IS A REPORT ON MAIN BOILERS NOW FORWARDED? Yes
 IS A DONKEY BOILER FITTED? No If so, is a report now forwarded? —
 Can the donkey boiler be used for domestic purposes only —

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 None General Pumping Arrangements 13-5-40 Oil fuel Burning Piping Arrangements 26-4-40

SPARE GEAR.
 Is the spare gear required by the Rules been supplied Yes

State the principal additional spare gear supplied OIL FUEL SPARE GEAR
 Two sets of bolts and nuts One set Lockwood & Colville rings and 2 Thermometers
 Two sets of bolts do. Sprung Pistons & Piston Valves 6 Bulker bodies
 Two Main bearings do. 12 Balle tubes plain 6 do Caps
 One set of Compression bolts 4 do Frag 36 do washers
 Two Safety Valve Springs One Piston Rod 36 do diaphragms
 25 Condenser tubes One Valve Rod 6 Five inch baffles
 50 do ferrules One Main & One Donkey Check Valves 12 Gauge glasses

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



W345-0080

'SESAME' J 2537.

During progress of work in shops -- { 1943 May 5, 19, 26. June 19, 21. July 2, 8. Aug 6, 7, 21, 27. Sept 3, 7, 10, 14, 20, 24, 27, 30. Oct 1, 4, 7, 9, 11, 16, 19, 20, 25, 27. Nov 2, 6, 12, 16, 19. Dec 7, 13, 17. Jan 13, 15, 1944

Dates of Survey while building { 1943 Sep 18, 20, 30. Oct 2. Nov 20, 28. Dec 9, 13, 14, 15, 21, 24, 30. 1944 Jan 5, 8, 19, 21, 22, 24, 25, 27.

Total No. of visits 60.

Dates of Examination of principal parts—Cylinders 1/10/43, 4/10/43, 20/9/43. Slides 12-11-43. Covers 1/10/43, 4/10/43, 20/9/43.

Pistons 2-11-43. Piston Rods 2-11-43. Connecting rods 2-11-43.

Crank shaft 20-10-43. Thrust shaft 27-9-43. Intermediate shafts 27/10/43.

Tube shaft NONE. Screw shaft 7-9-43. Propeller 20/9/43.

Stern tube 15/9/43. Engine and boiler seatings 20/11/43. Engines holding down bolts 9/12/43.

Completion of fitting sea connections 20/3/43.

Completion of pumping arrangements 30/12/43. Boilers fixed 9/12/43. Engines tried under steam 30/12/43.

Main boiler safety valves adjusted 30/12/43. Thickness of adjusting washers F & A 3/8".

Crank shaft material F.1. Steel. Identification Mark 1146 CP. 17-6-43. Jamals 1466 CP. 16-9-43. Thrust shaft material F.1. Steel. Identification Mark 1144 CP. 3-9-43.

Intermediate shafts, material F.1. Steel. Identification Marks 1145 CP. 7/9/43. Tube shaft, material NONE. Identification Mark ✓

Screw shaft, material F.1. Steel. Identification Mark 1143. CP. 18-6-43. Steam Pipes, material Steel. Test pressure 630 lb. Date of Test 13-12-43.

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. Hul. Rpt. 51413.

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

The Machinery of this Vessel has been constructed in accordance with the approved plan, 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 a near full power as practicable in the basin were found satisfactory in every respect.

Vessel's machinery, in my opinion, when classed to have records of

⊕ LMC 1,44 and G.L. and notation of T 3 Cy 17", 28", 46" - 33"

222 NHP ONE SB. 210 lb 3 cf. HS 3550 of F.D.

Fitted for oil fuel 1,44. F.P. above 150°F.

Part for charges at last Harbours - Report N° 18469.

The amount of Entry Fee	£	:	:	When applied for,
Special class (P.M.)	35	-	16	19
Donkey Boiler Fee	59	-	10	19
Travelling Expenses (if any)	£	:	:	19

ADMIRALTY A/c rendered from London 3.3.44

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

Committee's Minute TUES. 22 FEB 1944

Assigned + LMC 1.44 FD CL

