

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY. No. 34495 (C.900)

Received at London Office
 Survey Report 19 When handed in at Local Office 6th December 1944 Port of SUNDERLAND 11 DEC 1944
 Survey held at SUNDERLAND Date, First Survey 11th April 1944 Last Survey 29th June 1945
 on the 3/3 'MULLION COVE' (Number of Visits 124)
 Tons { Gross 1566.41
 Net 5268.69
 By whom built BARTRAMS Yard No. 301 When built 1945
 Made at GLASGOW By whom made DUNCAN STEWART & CO. LTD. Engine No. 147 When made 1945
 Made at SUNDERLAND By whom made NORTH EASTERN MARINE ENG. CO. Boiler No. 4078 When made 1945
 Horse Power _____ Owners _____ Port belonging to _____
 Power as per Rule 509 Is Refrigerating Machinery fitted for cargo purposes NO Is Electric Light fitted YES
 which Vessel is intended OPEN SEA

Engines, &c.—Description of Engines TRIPLE EXPANSION RECIPROCATING. SEE GLASGOW RFPN 65562. Revs. per minute
 Cylinders _____ Length of Stroke _____ No. of Cylinders _____ No. of Cranks _____
 ft. dia. of journals _____ Crank pin dia. _____ Crank webs _____ Mid. length breadth _____ Thickness parallel to axis _____
 as per Rule _____ as fitted _____ Mid. length thickness _____ shrunk _____ Thickness around eye-hole _____
 Main Shafts, diameter _____ as per Rule 13.34" Thrust shaft, diameter at collars _____ as per Rule 14"
 as fitted 13.5/8" as fitted _____ as fitted 14 1/2"
 Piston diameter _____ as per Rule 14.85" Is the — screw shaft fitted with a continuous liner? YES
 as fitted _____ as fitted 15 1/4" Is the after end of the liner made watertight in the _____
 Piston rings, thickness in way of bushes _____ as per Rule 3/4" Thickness between bushes _____ as per Rule 15/32"
 as fitted 13/16" as fitted 20/32" If the liner is in more than one length are the junctions made by fusion through the whole thickness of 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 _____
 Piston rods 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 _____
 If so, state type _____ Length of Bearing in Stern Bush next to and supporting propeller _____
 dia. 18'-3" Pitch 15'-6" No. of Blades 4 Material C.I. whether Moveable NO Total Developed Surface 98.5 sq. feet
 Piston rods worked from the Main Engines, No. _____ Diameter _____ Stroke _____ Can one be overhauled while the other is at work _____
 Piston rods worked from the Main Engines, No. 2 Diameter 4" Stroke 27" Can one be overhauled while the other is at work YES
 No. and size 2 - 9 1/2" x 7" x 21" Pumps connected to the Main Bilge Line { No. and size ONE - 10 1/2" x 13" x 24" ONE 9 1/2" x 7" x 21"
 How driven _____ How driven STEAM
 Pumps driven _____ No. and size ONE 10 1/2" x 13" x 24" Lubricating Oil Pumps, including Spare Pump, No. and size _____
 Independent means arranged for circulating water through the Oil Cooler _____ Suctions, connected to both Main Bilge Pumps and Auxiliary _____
 In Engine and Boiler Room THRUST RECESS. 1 @ 3" dia. PORT ER. 1 @ 3" dia. BR. 2 @ 3" dia. TUNNEL WELL 1 @ 2 1/2" dia.
 In Holds, &c. Nº1 - 2 @ 3" dia. Nº2 - 2 @ 3" dia. Nº3 - 2 @ 3" dia. Nº4 - 2 @ 2 1/2" dia. Nº5 - 2 @ 3" dia. Nº6 - 3 @ 2 1/2" dia.

Independent Power Pump Direct Bilge Suctions, No. and size 1 @ 5" dia. Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes? YES
ONE @ 5" dia. ONE PORTABLE 3" dia. Are they fitted with Valves or Cocks? YES
 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
 Connections fitted direct on the skin of the ship? YES Are they sufficiently high on the ship's side to be seen without lifting the stowhold plates? YES Are the Overboard Discharges above or below the deep water line? BOTH
 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
 Discharges through the bunkers? FORWARD SUCTIONS. How are they protected? BILGE LIMBER BOARDS
 Discharges through the deep tanks? Nº6 SUCTIONS. Have they been tested as per Rule? YES
 Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times? YES
 Prevention 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 to another? YES Is the Shaft Tunnel watertight? YES Is it fitted with a watertight door? YES worked from Main Deck

BOILERS, &c.— (Letter for record S.) Total Heating Surface of Boilers 7248 sq ft SM. 2790 sq ft = 10,038
 Boilers are fitted with Forced Draft ALL Which Boilers are fitted with Superheaters ALL
 Description of Boilers 3 - SINGLE ENDED MULTITUBULAR. Working Pressure 220 LBS/SQ. IN.
REPORT ON MAIN BOILERS NOW FORWARDED? YES
DONKEY BOILER FITTED? NO If so, is a report now forwarded? _____
 Is a boiler to be used for domestic purposes only? _____
 Are approved plans forwarded herewith for Shafting? 12.1.43. Main Boilers 26.6.42. Auxiliary Boilers _____ Donkey Boilers _____
 (If not state date of approval) _____
 General Pumping Arrangements 24.10.44. Oil fuel Burning Piping Arrangements 27.9.44.
SPARE GEAR.

gear required by the Rules been supplied YES
 principal additional spare gear supplied _____

The foregoing is a correct description.
 THE NORTH EASTERN MARINE ENGINEERING CO. (1938) LTD.
W. H. H. H. Manufacturer.
 RESIDENT MANAGER.
 009721-00 9729-0238



1944 Apr 11, 27 May 5, 11, 16, 31 Jun 5, 6, 8, 13, 19, 22, 23, 26, 28, 29 Jul 1, 3, 4, 5, 10, 11, 12, 14, 15, 17, 18, 19, 20, 21, 22, 24, 25
 During progress of work in shops - - Aug 18, 21, 22, 23, 24, 25, 31 Sep 2, 4, 5, 7, 9, 15, 19, 20, 22, 25, 26, 27, 29, 30 Oct 2, 3, 5, 6, 9, 10, 11, 12, 13, 16, 18, 20, 23, 24, 25, 26, 27, 29
 Dates of Survey while building During erection on board vessel - - 4, 8, 9, 10, 12, 13, 17, 21, 23, 29, 30 Dec 1, 5, 7, 8, 13, 14, 15, 18, 21, 22, 29, 30
 1945 Jan 11 Feb 16, 19, 21 Mar 15, 20, 23 Apr 5, 17, 19 May 1, 10, 31 Jun 11, 12, 20, 26, 27, 28, 29
 Total No. of visits 124

Dates of Examination of principal parts—Cylinders ✓ Slides ✓ Covers ✓
 Pistons ✓ Piston Rods ✓ Connecting rods ✓
 Crank shaft ✓ Thrust shaft 18.7.44. Intermediate shafts 27.7.44. 19.8.
 Tube shaft ✓ Screw shaft 18.7.44. Propeller 19.7.44.
 Stern tube 12.7.44. Engine and boiler seatings 5.7.44. Engines holding down bolts 6.11.44.
 Completion of fitting sea connections 10.7.44.
 Completion of pumping arrangements 11.6.45. Boilers fixed 2.10.44. Engines tried under steam 30.
 Main boiler safety valves adjusted 29.12.44. Thickness of adjusting washers 5/16" 5/16" 5/16" 5/16".
 Crank shaft material ✓ Identification Mark No 2744. 5.6.7. Thrust shaft material OH STEEL. Identification Mark
 Intermediate shafts, material OH STEEL. Identification Marks No 104. 11529. Tube shaft, material ✓ Identification Mark
 Screw shaft, material OH STEEL. Identification Mark 2743. Steam Pipes, material OH STEEL. Test pressure 660 LBS/SQ. IN. Date of Test
 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 ✓ If so, state name of vessel ✓
 General Remarks (State quality of workmanship, opinions as to class, &c.)

The machinery of this vessel has been constructed under Special Survey in accordance with the approved plans, Secretary's Letters, and the requirements of the Rules.
 The workmanship and materials are good.
 The machinery has been tried under working conditions, with satisfactory results, and is eligible in my opinion for Classification and to have the -

NOTATION **LMC** (WITH DATE) **TS.CL. 3 SB (SPT) 220 LBS/SQ. IN.**

The amount of Entry Fee ... £ : : When applied for,
 Special ... £ 44 : 5 : 26-7-1945
 Donkey Boiler Fee ... £ : : When received,
 Travelling Expenses (if any) £ : : 15-9-45
 17-10-1945

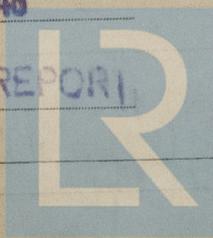
J. E. Munro, pp. L.R.H.
 Engineer Surveyor to Lloyd's Register
 5.12.47.

Committee's Minute

GLASGOW

13 APR 1948

SEE ACCOMPANYING MACHINERY REPORT



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