

## REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Date of writing Report 19... When handed in at Local Office 29 MAY 1947 Port of NEWCASTLE-ON-TYNE  
 No. in Survey held at Wallsend + Sunderland Date, First Survey 24<sup>th</sup> MAY, 1946 Last Survey 16<sup>th</sup> MAY, 1947  
 Reg. Book (Number of Visits 94)  
 on the 1/3 "SUSSEX TRADER" Tons { Gross  
 Built at Sld By whom built Sir J. Laing + Co Ld Yard No. 777. When built 1947-5-140.  
 Engines made at Wallsend By whom made N.E. Mar. Eng. Co. (1938) Ld Engine No. 3141. When made 1947  
 Boilers made at ditto By whom made ditto Boilers No. 3141. When made 1947.  
 Registered Horse Power 494 Owners TRADERS NAVIGATION Co. Port belonging to  
 Nom. Horse Power as per Rule 546. = MN. Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes.  
 Trade for which vessel is intended open seas.

ENGINES, &c.—Description of Engines Triple Expn. Reheat type Revs. per minute 84 1/2.  
 Dia. of Cylinders 23" + 65" + 38" Length of Stroke 45" No. of Cylinders 3. No. of Cranks 3.  
 Crank shaft, dia. of journals as per Rule 13.11" as fitted 13 1/2" Crank pin dia. 13 1/2" Mid. length breadth ✓ Thickness parallel to axis 8 1/2" 8 3/8" MP, LP, AP  
 Intermediate Shafts, diameter as per Rule 12.48" as fitted 12 3/4" Crank webs Mid. length thickness ✓ Thickness around eye-hole 6 1/2" 6 3/4" all  
 Tube Shafts, diameter as per Rule — as fitted — Screw Shaft, diameter as per Rule 13.88" as fitted 14 1/4" Is the shaft fitted with a continuous liner Yes  
 Bronze Liners, thickness in way of bushes as per Rule 23 1/32" as fitted 3/4" Thickness between bushes as per Rule 17.344/32" as fitted 9/16" 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 In one piece.  
 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  
 Shaft. No If so, state type ✓ Length of Bearing in Stern Bush next to and supporting propeller 58"  
 Propeller, dia. 16'-6" Pitch VARYING 15.25 to 11.81 No. of Blades 4. Material Mang. Brgz whether Moveable No Total Developed Surface 90. sq. ft.  
 Feed Pumps worked from the Main Engines, No. Nil Diameter 4" Stroke 24" Can one be overhauled while the other is at work Yes  
 Bilge Pumps worked from the Main Engines, No. 2 Diameter 4" Stroke 24" Can one be overhauled while the other is at work Yes  
 IMPERT. Feed No. and size 2 MAIN. 7" x 9 1/2" x 21" 1 AUXY. 7" x 9 1/2" x 18" Pumps connected to the Main Bilge Line { No. and size One of 9" x 10" x 10" 2 of 4" x 24"  
 Pumps How driven BY STEAM. by Indept Steam. by M. Engine.  
 Ballast Pumps, No. and size One of 9" x 10" x 10" Lubricating Oil Pumps, including Spare Pump, No. and size NIL.  
 Are two independent means arranged for circulating water through the Oil Cooler ✓ Suctions, connected both to Main Bilge Pumps and Auxiliary  
 Bilge Pumps:—In Engine and Boiler Room 4 of 3" + 1 of 2" aft. 2 of 2" in D. Bth Cofferdam, 3 of 2" in Orly Bilge (& Transfer Pp).  
 In Pump Room ✓ In Holds, &c. In No 1, 2 + 3 fwd and No 4 aft. 2 of 3" in each. 2 of 5" in Hold 4 of 3", 2 in Tunnel well 1 of 2 1/2".  
 Main Water Circulating Pump Direct Bilge Suctions, No. and size One of 9" 2 of 5" on Starboard Side in E.Rm. 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 with both. ✓  
 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 both ✓  
 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 NIL How are they protected ✓  
 What pipes pass through the deep tanks NIL 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 Yes Is it fitted with a watertight door Yes worked from upper BX in E.Rm.

MAIN BOILERS, &c.—(Letter for record S.) Total Heating Surface of Boilers. 2 main = 55842 sq. ft. PLUS SPT. SURF. = 1150 SFT. 1 AUXY. = 11739 sq. ft. = SUM TOTAL. 8731 SFT.  
 Which Boilers are fitted with Forced Draft all 3 Bhrs. Which Boilers are fitted with Superheaters THE TWO MAIN BRS ONLY.  
 No. and Description of Boilers 3 Single Ended Working Pressure 220 LBS./SQ. IN.  
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? Yes  
 IS A DONKEY BOILER FITTED? No If so, is a report now forwarded? ✓

PLANS. Are approved plans forwarded herewith for Shafting 27-5-46 Main Boilers 29-4-46 Auxiliary Boilers 29-4-46 Donkey Boilers —  
 (If not state date of approval) Boiler Steam Pipe Arrangmt 29-7-46  
 Superheaters 16-8-46 General Pumping Arrangements 25-4-46 Oil fuel Burning Piping Arrangements 23-9-46  
 (S.H.N. 1005) PUMPING ARRGT. IN MACHY SPACES 11-9-46. SPARE GEAR.

Has the spare gear required by the Rules been supplied Yes ✓  
 State the principal additional spare gear supplied 2 Roller Bearings for HP & MP Poppet Valves  
 2 each V. Spindles + Bushes also Cover Spindles + Bushes for Poppet Valves.  
 6 plain tubes for Main Boilers, & 6 for Auxy Bhr.  
 1 Valve Spring for each Spt SV. (Main Bhr + Auxy Bhr.)  
 2 Superheater Elements complete with coupling nuts.

The foregoing is a correct description.  
 THE NORTH EASTERN MARINE ENGINEERING CO. (1938) LTD.

Manufacturer.

DIRECTOR



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Lloyd's Register  
Foundation

003321-003327-0139



Dates of Survey while building  
During progress of work in shops - - { 1946/ MAY 24, JUNE 4, 5, 6, 12, 18, 27 JULY 2, 8, 9, 10, 11, 15, 18, AUG. 7, 9, 12, 13, 16, 19, 20, 22, 23, 27, 29, SEPT. 3, 4, 5, 11, 17, 20, 23, 24, 25, 26, OCT. 1, 4, 7, 9, 10, 11, 14, 18, 21, 22, 23, 25, 28, 29, 30, 31  
During erection on board vessel - - { NOV. 2, 4, 5, 6, 7, 8, 12, 14, 18, 20, 22, 29 DEC. 2, 3, 6, 11, 13, 16, 19, 23, 30, 31, 1947/ JAN 3, 7, 8, 9, 13, 14, 15, 16, 20, 27, 28 FEB. 4, MAY 9, 12, 14, 16  
Total No. of visits 94

Dates of Examination of principal parts—Cylinders 4-10-46 Slides 3-12-46 Covers 4-10-46  
Pistons 3-12-46 Piston Rods 3-12-46 Connecting rods 3-12-46  
Crank shaft 1-10-46 Thrust shaft 1-10-46 Intermediate shafts 5-11-46  
Tube shaft ✓ at WORKS 28-10-46 Screw shaft 25-10-46 Propeller at SHIP. 4-11-46 (Sld)  
Stern tube at SHIP. 2-11-46 (Sld) Engine and boiler seatings 6-12-46, 7-1-47 Engines holding down bolts 7-1-47  
Completion of fitting sea connections 7-11-46 (Sld)  
Completion of pumping arrangements 23-4-47 Sld Boilers fixed 7-1-47  
Main boiler safety valves adjusted at SHIP. 1-4-47 } Sld Engines tried under steam  
Crank shaft material M. Sll Identification Mark AW. 1-10-46 Thrust shaft material M. Sll Identification Mark 7561. C.P.  
Intermediate shafts, material M. Sll Identification Marks 7. SHIFTS. LLOYD'S 7564-5-6-7-8-9, 7570. C.P.  
Screw shaft, material M. Sll Identification Mark WORKING 7563. C.P. Steam Pipes, material S.D. Sll. Test pressure 660 lb. Date of Test 21-10-46  
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 NOT DESIRED  
Is this machinery duplicate of a previous case No If so, state name of vessel  
General Remarks (State quality of workmanship, opinions as to class, &c.)

The Machinery of this Ship has been constructed and fitted on board in accordance with the approved plans, and the Society's Rules, and the materials & workmanship are good.

The Machinery was satisfactorily tested under working conditions, and is eligible, in our opinion, for record + LMC. 5.47 and the notations, 2 S.B (Spt) & 1 Aux S.B., 220 lb. wt. F.D. TS CL. Fitted for Oil fuel 5.47, flash point above 150° F.

The amount of Entry Fee ... £ :  
Special NWC 9/103-1360 129-121- :  
Donkey Boiler Fee ... £ :  
Travelling Expenses (if any) £ :  
When applied for, 27/5/47  
When received, 19

Date

FRI. 20 JUN 1947

Committee's Minute + LMC 5.47

FITTED FOR OIL FUEL 5.47 FLASH POINT ABOVE 150° F. F.D. C.L

2 S.B (Spt) + 1 Aux S.B. 220 lb.

A. Watt for Self & T. Grieve

Engineer Surveyor to Lloyd's Register of Shipping.



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