

Rpt. 4b. RECEIVED

REPORT ON OIL ENGINE MACHINERY.

No. 105675

Mob. Rpt. No. 18696

NOV 1948
Date of writing Report

When handed in at Local Office 10 NOV 1948

Received at London Office

No. in Reg. Book. Survey held at Wallsend

Port of NEWCASTLE-on-TYNE

Date, First Survey 17th DEC 1947

Last Survey 5th OCTOBER 1948

Number of Visits 50

Single on the Triple Screw vessel

M.V. BRITISH YEOMAN

Tons Gross 8741
Net 5038

Built at Haverton Hill on Tees

By whom built Furness S.B. Co Ld

Yard No H12 When built

Engines made at Wallsend

By whom made N.E. Mar. Eng Co (1938) Ld

Engine No 3160 When made 1948-10m

Donkey Boilers made at ditto

By whom made ditto

Boiler No 3160 When made 1948

Brake Horse Power 3100

Owners British Tanker Co Ld.

Port belonging to

I.N. Power as per Rule 688 MN.

Is Refrigerating Machinery fitted for cargo purposes No.

Is Electric Light fitted

Trade for which vessel is intended Open sea service

L ENGINES, &c. —Type of Engines opposed piston type

Maximum pressure in cylinders 640 lbs/sq. in.

Diameter of cylinders 600 m.m.

2 or 4 stroke cycle 2 Single or double acting Single acting

Mean Indicated Pressure 85 lbs/sq. in.

Ahead Firing Order in Cylinders 1.3.4.2.

Length of stroke 2320 No. of cylinders 4 No. of cranks 4 of three throw

Distance between centres of side rods 1200 m.m.

Weight of flywheel 1690

Moment of inertia of flywheel 432

Is there a bearing between each crank Yes

Span of bearings, adjacent to the crank, measured between each 3-throw Revolutions per minute 105

Kind of fuel used Heavy oil fuel

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Thrust Shaft, diameter as per Rule as fitted

Intermediate Shafts, diameter as per Rule as fitted

Screw Shaft, diameter as per Rule as fitted

Thrust Shaft, diameter at collars as fitted

Is the tube screw shaft fitted with a continuous liner CL

Thickness of cylinder liners, thickness in way of bushes as per Rule as fitted

Thickness between bushes as per Rule as fitted

Is the after end of the liner made watertight in the stern tube Yes

Is the space charged with a plastic material insoluble in water and non-toxic Yes

Is an approved Oil Gland or other appliance fitted at the after end of the liner Yes

Is the shaft lapped or protected between the liners Yes

Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes

Can one be overhauled while the other is at work Yes

Are the cylinders fitted with safety valves Yes

Are the exhaust pipes and silencers water cooled Yes

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AIR RECEIVERS:—Have they been made under survey..... State No. of report or certificate.....
 Is each receiver, which can be isolated, fitted with a safety valve as per Rule.....
 Can the internal surfaces of the receivers be examined and cleaned..... Is a drain fitted at the lowest part of each receiver.....
Injection Air Receivers, No...... Cubic capacity of each..... Internal diameter..... thickness.....
 Seamless, welded or riveted longitudinal joint..... Material..... Range of tensile strength..... Working pressure.....
Starting Air Receivers, No...... Total cubic capacity..... Internal diameter..... thickness.....
 Seamless, welded or riveted longitudinal joint..... Material..... Range of tensile strength..... Working pressure.....

ARE DONKEY BOILERS FITTED Yes If so, is a report now forwarded Yes.
 Is the donkey boiler intended to be used for domestic purposes only No.
PLANS. Are approved plans forwarded herewith for shafting Crank Shaft 3-2-48 Receivers ✓ Separate fuel tanks ✓
 (If not, state date of approval) + Shafting
 Donkey boilers H-6-48 General pumping arrangements ✓ Pumping arrangements in machinery space ✓
 Oil fuel burning arrangements ✓
 Have Torsional Vibration characteristics been approved Yes Date of approval 3rd Feb 1948 ✓

SPARE GEAR.

Has the spare gear required by the Rules been supplied Yes
 State the principal additional spare gear supplied 1 Cylr Liner, 2 Piston Heads, 80 piston rings + 32 scraper
 40 spray plugs, 1 roller chain for Cam shaft drive, etc etc

THE NORTH EASTERN MARINE ENGINEERING CO. (1938) LTD.

The foregoing is a correct description, and the particulars of the installation as fitted, are as approved for torsional vibration characteristics.
 Manufacturer.

DIRECTOR
 Dates of Survey while building AT
 During progress of work in shops - 1947 DEC. 14, 1948 FEB. 18, MAR. 9, 22, APR. 10, 27, 30, MAY 6, 7, 10, 13, 18, 19, JUNE 1, 2, 7, 8, 9, 10, 14, 16, 17, 21, 22, 28, 29, JULY 2, 5, 6, 9, 13
 During erection on board vessel - 1, 4, 6, 10, 11, 12, 18, 23, 25, SEPT. 1, 9, 13, 15, 27, 28, OCT. 5
 Newcastle-on-Tyne Total No. of visits 50

Dates of examination of principal parts—Cylinders 5-5-48 to 1-9-48 Pistons 3-8-48 Rods 3-8-48 Connecting rods 3-8-48
 Crank shaft 10-8-48 Flywheel shaft 10-8-48 Thrust shaft 10-8-48 Intermediate shafts ✓ Tube shaft ✓
 Screw shaft ✓ Propeller ✓ Stern tube ✓ Engine seatings ✓ Engine holding down bolts ✓
 Completion of fitting sea connections ✓ Completion of pumping arrangements ✓ Engines tried under working conditions ✓
 Crank shaft, material M.Stl Identification mark S977 Flywheel shaft, material M.Stl Identification mark as Crank Shaft
 Thrust shaft, material Identification mark 9-4-48 Intermediate shafts, material ✓ Identification marks ✓
 Tube shaft, material ✓ Identification mark ✓ Screw shaft, material ✓ Identification mark ✓
 Identification marks on air receivers ✓

Welded receivers, state Makers' Name ✓
 Is the flash point of the oil to be used over 150°F Yes
 Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with ✓
 Description of fire extinguishing apparatus fitted ✓
 Is the vessel (not being an oil tanker) fitted for carrying oil as cargo ✓ 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.)
 This Engine has been constructed under special survey in accordance with the Society's Rules, tested under full load in works with satisfactory results.
 The Engine has been sent to W. Hartlepool to be fitted on board

T.V.C.s approved for Service Speed of 10.5 RPM See letter 3/2/48

The amount of Entry Fee ... £ ✓
 Special 2/3rd of 212-12/14 £ 141-15/-
 Fat & Condn Bed. Lab. £ 16-0/-
 Donkey Boiler Fee. £ Col. £
 Travelling Expenses (if any) £
 Committee's Minute FRI. 8 APR 1949
 Assigned See F.E. Melby, spk
 When applied for 10 NOV 1948
 When received 19
 A Watt
 Engineer Surveyor to Lloyd's Register of S

Has the Steel been tested as required by the Rules ✓

Certificate (if required) to be sent to NEWCASTLE-ON-TYNE

