

Rpt. 4b.  
RECEIVEDMab. Rpt. No. 18696.  
**REPORT ON OIL ENGINE MACHINERY.**

No. 105675

Date of writing Report

19

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 17<sup>th</sup> DEC 1947Last Survey 5<sup>th</sup> OCTOBER 1948

Number of Visits 50

by Rules... Single on the Twin Triple Quadruple Screw vessel.

M.V. BRITISH YEOMAN

Tons Gross 8741 Net 5038

Built at Haverton Hill on Tees

By whom built Furness S.B. &amp; Co. Ltd

Yard No. H12. When built

Engines made at Wallsend

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

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. Ltd.

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, &amp;c. —Type of Engines

opposed piston type

Maximum pressure in cylinders

640 lb/sq. in.

Diameter of cylinders 600 m.m.

2 or 4 stroke cycle 2.

Single or double acting Single acting

Mean Indicated Pressure

85 lb/sq. in.

Ahead Firing Order in Cylinders 1.3.4.2.

Length of stroke 2320.

No. of cylinders 4.

No. of cranks 4

Span of bearings, adjacent to the crank, measured

Centres of side rods 1200 m.m.

Moment of inertia of flywheel

Is there a bearing between each crank

between each

Revolutions per minute 105.

Flywheel dia. For 1690 Weight

Aft 2450 Aft 3'26" 10m

For 1'33" Moment of inertia of flywheel

Tons. Ft. 2. Aft 45.4

For 7.245.

Kind of fuel used Heavy oil fuel

Crank pin dia. 450.

Crank webs

Mid. length breadth 820.

Mid. length thickness 192.

Thrust Shaft, diameter at collars

as fitted 450.

Wheel Shaft, diameter

as per Rule

as fitted

Intermediate Shafts, diameter

as per Rule

as fitted

Screw Shaft, diameter

as per Rule

as fitted

Is the tube screw shaft fitted with a continuous liner

CL

Is the after end of the liner made watertight in the

Liner Liners, thickness in way of bushes

as per Rule

as fitted

Thickness between bushes

as per Rule

as fitted

Propeller boss.

If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner.

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

Length of bearing in Stern Bush next to and supporting propeller.

Total developed surface

Pitch

No. of blades

Material

whether moveable

Kind of damper, if fitted

NONE FITTED

Moment of inertia of propeller

Is a governor or other arrangement fitted to prevent racing of the engine when decelerated

Thickens of cylinder liners

Are the cylinders fitted with safety valves

Yes

Means of

Method of reversing Engines

Forced

If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned

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

Can one be overhauled while the other is at work.

If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping

Cooling Water Pumps, No.

No. and size

How driven

Power Driven Lubricating Oil Pumps, including spare pump, No. and size

Suctions, connected to both main bilge pumps and auxiliary

In pump room

Pumps worked from the Main Engines, No.

No. and size

How driven

Power Driven Lubricating Oil Pumps, including spare pump, No. and size

Suctions, connected to both main bilge pumps and auxiliary

In pump room

Pumps connected to the Main Bilge Line

No. and size

How driven

Power Driven Lubricating Oil Pumps, including spare pump, No. and size

Suctions, connected to both main bilge pumps and auxiliary

In pump room

Cooling water led to the bilges

If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping

Power Driven Lubricating Oil Pumps, including spare pump, No. and size

Suctions, connected to both main bilge pumps and auxiliary

In pump room

In pump room

Independent Power Pump Direct Suctions to the engine room bilges, No. and size

No. and size

How driven

Power Driven Lubricating Oil Pumps, including spare pump, No. and size

Suctions, connected to both main bilge pumps and auxiliary

In pump room

Bilge mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges

No. and size

How driven

Power Driven Lubricating Oil Pumps, including spare pump, No. and size

Suctions, connected to both main bilge pumps and auxiliary

In pump room

Sea Connections fitted direct on the skin of the Ship

No. and size

How driven

Power Driven Lubricating Oil Pumps, including spare pump, No. and size

Suctions, connected to both main bilge pumps and auxiliary

In pump room

Highly high on the ship's side to be seen without lifting the platform plates

No. and size

How driven

Power Driven Lubricating Oil Pumps, including spare pump, No. and size

Suctions, connected to both main bilge pumps and auxiliary

In pump room

Each fitted with a discharge valve always accessible on the plating of the vessel

No. and size

How driven

Power Driven Lubricating Oil Pumps, including spare pump, No. and size

Suctions, connected to both main bilge pumps and auxiliary

In pump room

Pipes pass through the bunkers

No. and size

How driven

Power Driven Lubricating Oil Pumps, including spare pump, No. and size

Suctions, connected to both main bilge pumps and auxiliary

In pump room

Pipes pass through the deep tanks

No. and size

How driven

Power Driven Lubricating Oil Pumps, including spare pump, No. and size

Suctions, connected to both main bilge pumps and auxiliary

In pump room

Pipes, cocks, valves and pumps in connection with the machinery and all boiler mountings accessible at all times

No. and size

How driven

Power Driven Lubricating Oil Pumps, including spare pump, No. and size

Suctions, connected to both main bilge pumps and auxiliary

In pump room

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

No. and size

How driven

Power Driven Lubricating Oil Pumps, including spare pump, No. and size

Suctions, connected to both main bilge pumps and auxiliary

In pump room

From one compartment to another

No. and size

How driven

Power Driven Lubricating Oil Pumps, including spare pump, No. and size

Suctions, connected to both main bilge pumps and auxiliary

In pump room

Vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork

No. and size

How driven

Power Driven Lubricating Oil Pumps, including spare pump, No. and size

Suctions, connected to both main bilge pumps and auxiliary

In pump room

Air Compressors, No.

No. of stages

How driven

Power Driven Lubricating Oil Pumps, including spare pump, No. and size

Suctions, connected to both main bilge pumps and auxiliary

In pump room

Auxiliary Air Compressors, No.

No. of stages

How driven

Power Driven Lubricating Oil Pumps, including spare pump, No. and size

Suctions, connected to both main bilge pumps and auxiliary

In pump room

Provision is made for first charging the air receivers

No. and size

How driven

Power Driven Lubricating Oil Pumps, including spare pump, No. and size

Suctions, connected to both main bilge pumps and auxiliary

In pump room

Air Pumps, No.

No. and size

How driven

Power Driven Lubricating Oil Pumps, including spare pump, No. and size

Suctions, connected to both main bilge pumps and auxiliary

In pump room

Engines crank shafts, diameter

No. and size

How driven

Power Driven Lubricating Oil Pumps, including spare pump, No. and size

Suctions, connected to both main bilge pumps and auxiliary

In pump room

Auxiliary engines been constructed under special survey

No. and size

How driven

Power Driven Lubricating Oil Pumps, including spare pump, No. and size

Suctions, connected to both main bilge pumps and auxiliary

In pump room

Is a report sent herewith

No. and size

How driven

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In pump room

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No. and size

How driven

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Suctions, connected to both main bilge pumps and auxiliary

In pump room

Engines crank shafts, diameter

No. and size

How driven

Power Driven Lubricating Oil Pumps, including spare pump, No. and size

Suctions, connected to both main bilge pumps and auxiliary

In pump room



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~~ **IS A** DONKEY BOILERS FITTED **Yes**

If so, is a report now forwarded **Yes**

Is the donkey boiler intended to be used for domestic purposes only.....

PLANS. Are approved plans forwarded herewith for shafting.....

Crank shaft **3-2-48**

Receivers.....

Separate fuel tanks.....

Donkey boilers **4-6-48**

General pumping arrangements.....

Pumping arrangements in machinery space.....

Oil fuel burning arrangements.....

Have Torsional Vibration characteristics been approved **Yes**

Date of approval **3<sup>rd</sup> 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.

Dates  
of Survey  
while  
building

During progress of  
work in shops -

During erection on  
board vessel -

AT

NEWCASTLE-ON-TYNE

Total No. of visits **50**

Dates of examination of principal parts—

Cylinders.....

Crank shaft.....

Screw shaft.....

Completion of fitting sea connections.....

Crank shaft, material.....

Thrust shaft, material.....

Tube shaft, material.....

Identification marks on air receivers.....

Welded receivers, state Makers' Name.....

Is the flash point of the oil to be used over 150°F.....

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 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.....

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

The amount of Entry Fee.....

Special.....

Donkey Boiler Fee.....

Travelling Expenses (if any).....

Committee's Minute.....

Assigned.....

Has the steel been tested as required by the.....

When applied for.....

When received.....

Engineer Surveyor to Lloyd's Register of.....

The foregoing.....

edge for.....

heaters.....

he spare gear.....

he principal a.....

REPORT.....

DONKEY.....

he donkey boiler.....

INS. Are a.....

he spare gear.....

he principal a.....

REPORT.....

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