

Rpt. 4b.

REPORT ON OIL ENGINE MACHINERY.

No. 70306

Received at London Office

Date of writing Report

19

When handed in at Local Office

7.1.46 Port of

GLASGOW

No. in Survey held at

GLASGOW

Date, First Survey

17.11.45

Last Survey

21st Dec. 1945

Reg. Book.

Number of Visits

100

Actual.

on the ~~Triple~~ ^{Single} Screw vessel

M.V. "BRITISH SUPREMACY"

Tons ^{Gross} 8242 _{Net} 4816

Built at

Belfast

By whom built

Harland & Wolff Ltd.,

Yard No. 1284

When built 1945

Engines made at

Glasgow

By whom made

Harland & Wolff Ltd.,

Engine No. 9508

When made 1945

Donkey Boilers made at

Belfast

By whom made

Harland & Wolff Ltd.,

Boiler No. 1284

When made 1945

Brake Horse Power

3200

Owners

British Tanker Co. Ltd.,

Port belonging to

London

Nom. Horse Power as per Rule

490

Is Refrigerating Machinery fitted for cargo purposes

No

Is Electric Light fitted

Yes

Trade for which vessel is intended

Tanker

IL ENGINES, &c.—Type of Engines Heavy Oil Airless Injection 2 or 4 stroke cycle 4 Single or double acting Single

Maximum pressure in cylinders 700 lbs/sq.in.

Diameter of cylinders 740m/m

Length of stroke 1500m/m

No. of cylinders 6

No. of cranks 6

Mean Indicated Pressure 128 lbs/sq.in.

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge

972m/m

Is there a bearing between each crank

Yes

Revolutions per minute

115

Flywheel dia. 2489m/m

Weight 2590 Kgs.

Means of ignition Compression

Kind of fuel used Diesel

Crank Shaft,

Solid forged dia. of journals

as per Rule as approved 505m/m

Crank pin dia. 505m/m

Mid. length breadth 980m/m

Thickness parallel to axis 310m/m

Flywheel Shaft, diameter

as per Rule as fitted

Intermediate Shafts, diameter

as per Rule as approved

Thrust Shaft, diameter at collars

as per Rule as fitted 454m/m

Tube Shaft, diameter

as per Rule as fitted

Screw Shaft, diameter

as per Rule as approved

Is the { tube screw } shaft fitted with a continuous liner

-

Bronze Liners, thickness in way of bushes

as per Rule as fitted

Thickness between bushes

as per Rule as approved

Is the after end of the liner made watertight in the

-

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 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

-

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

-

Length of Bearing in Stern Bush next to and supporting propeller

-

Propeller, dia.

Pitch

No. of blades

Material

whether Moveable

Total Developed Surface

sq. feet

Method of reversing Engines Direct

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

Yes

Means of lubrication

-

Forced

Thickness of cylinder liners 41m/m

Are the cylinders fitted with safety valves

Yes

Are the exhaust pipes and silencers water-cooled or lagged with

-

non-conducting material

Yes

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

-

Cooling Water Pumps, No. 2 S.W. 2 F.W.

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

Yes

Bilge Pumps worked from the Main Engines, No. One

Diameter

Stroke

Can one be overhauled while the other is at work

-

Pumps connected to the Main Bilge Line

-

No. and Size

1 M.E. 80 tons per hour. 1 Bilge 100 tons/hr. 1 Ballast 170 tons/hr.

How driven

steam

steam

-

Is the cooling water led to the bilges

No

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

-

arrangements

-

Ballast Pumps, No. and size

1 @ 170 tons / hr.

Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size

2 @ 100 tons/hr.

Are two independent means arranged for circulating water through the Oil Cooler

Yes

Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge

Pumps, No. and size:—In Machinery Spaces

E.R. 3 @ 3 1/2" 2 off 2" Gutterways

O.F.T. pump

In Pump Room

-

In Holds, &c.

-

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size

3 @ 6"

Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes

Yes

Are the Bilge Suctions in the Machinery Spaces

Yes

Are all Sea Connections fitted direct on the skin of the ship

Are they fitted with Valves or Cocks

Both

Are they fixed sufficiently high on the ship's side to be seen without lifting the platform plates

Yes

Are the Overboard Discharges above or below the deep water line

below

Are they each fitted with a Discharge Valve always accessible on the plating of the vessel

Are the Blow Off Cocks fitted with a spigot and brass covering plate

Yes

How are they protected

-

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

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

-

If a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork

-

Main Air Compressors, No. None

No. of stages

Diameters

Stroke

Driven by

Auxiliary Air Compressors, No. 2

No. of stages

2

Diameters 280m/m

Stroke 130m/m

Driven by

Steam

Small Auxiliary Air Compressors, No. -

No. of stages

-

Diameters

Stroke

Driven by

-

What provision is made for first Charging the Air Receivers

Steam Driven compressors

-

Leaving Air Pumps, No. None

Diameter

Stroke

Driven by

Auxiliary Engines crank shafts, diameter

as per Rule as fitted

Steam driven

No. 2

Position

Starboard Inboard and Outboard

-

Have the Auxiliary Engines been constructed under special survey

-

Is a report sent herewith

-

See electrical 1st Entry

Rpt.

-

Master of Shipping.

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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. **None**

Cubic capacity of each

Internal diameter

thickness

Seamless, lap welded or riveted longitudinal joint

Material

Range of tensile strength

Working pressure by Rules

Actual

Starting Air Receivers, No.

Total cubic capacity

Internal diameter

thickness

Seamless, lap welded or riveted longitudinal joint

Material

Range of tensile strength

Working pressure by Rules

Actual

IS A DONKEY BOILER FITTED? **Yes (2)**

If so, is a report now forwarded?

see Belfast Rpt. No. (14029)

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

No

PLANS. Are approved plans forwarded herewith for Shafting

(If not, state date of approval)

7.1.44**Gls.**

Receivers

28.12.44**Bel**

Separate Fuel Tanks

25.5.44

Donkey Boilers

18.11.43**Bel**

General Pumping Arrangements

17.10.44**Bel**

Pumping Arrangements in Machinery Space

17.10.44

Oil Fuel Burning Arrangements

SPARE GEAR.

Has the spare gear required by the Rules been supplied

Yes

State the principal additional spare gear supplied

as per Rule and specification

Isomograph records were taken from a boiler vessel H.W. yard 1195 which were found satisfactory.

The foregoing is a correct description,

FOR HARLAND AND WOLFE LIMITED.

Wm. J. Wright.

Finnlestone Secretary

Manufacturer.

Dates of Survey while building

During progress of work in shops--	1943 Nov 17. 1944 Jan 10. 24. Dec 9. Mar 15. 28. 4. 16. 18. 24. 31. Jun 5. 7. 12. 15. 19. 22. 26. 28. Aug 4. 26. Aug 7. 14. 17. 24.
During erection on board vessel---	1943 Nov 14. 27. Dec 5. 12. 16. 23. 30. Jan 1. 8. 16. 20. 23. 30. Mar 11. 18. 25. 1945 Jan 3. 8. 17. 24. Feb 2. 5. 7. 14. 15. 26. Mar 5. 7. 12. 15. 19. 24. 25. 31.
Total No. of visits	100

Dates of Examination of principal parts—Cylinders **3.8.45** to **3.8.45** Covers **3.8.45** to **3.8.45** Pistons **10.9.45** to **10.9.45** Rods **10.9.45** to **10.9.45** Connecting rods **9.8.45**

Crank shaft **1.11.44** Flywheel shaft **1.11.44** Thrust shaft **1.11.44** Intermediate shafts **1.11.44** Tube shaft **1.11.44**

Screw shaft **1.11.44** Propeller **1.11.44** Stern tube **1.11.44** Engine sealings **19.9.45** Engines holding down bolts **26.11.45**

Completion of fitting sea connections **13.12.45** Completion of pumping arrangements **13.12.45** Engines tried under working conditions **13.12.45**

Crank shaft, Material **Steel** Identification Mark **G.E.M. 1.11.44** Flywheel shaft, Material **Steel** Identification Mark **G.E.M. 1.11.44**

Thrust shaft, Material **Steel** Identification Mark **G.E.M. 1.11.44** Intermediate shafts, Material **Steel** Identification Marks **G.E.M. 1.11.44**

Tube shaft, Material **Steel** Identification Mark **G.E.M. 1.11.44** Screw shaft, Material **Steel** Identification Mark **G.E.M. 1.11.44**

Identification Marks on Air Receivers **No. 308** **No. 314**

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 **Yes**

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 **Yes**If so, state name of vessel **"BRITISH MIGHT"**General Remarks (State quality of workmanship, opinions as to class, &c.) **The machinery of this vessel has been constructed****under Special Survey and in accordance with the approved plans, the Rules of this Society****and the Ministry of War Transport Specification for the main engines. The materials and workman-****ship are good. The machinery has been efficiently secured in position on board the vessel and****afterwards tried under full working conditions with satisfactory results. The machinery is****eligible in my opinion to be classed in the Register Book with the notation + L.M.C. 12.45 C.****Fitted for oil fuel 12.45 F.P. above 150° F. 2 D.B. W.P. 150 lbs per sq. inch.**

NOTE:— Specification main engines only.

Torsional records notice No. 1803. This machinery is a duplicate of M/V. "BRITISH COURAGE"

See London Letter 20/3/44.

The amount of Entry Fee .. £ **5** : **0** : **0**Special £ **98** : **10** : **0**Donkey Boiler Fee £ **16** : **8** : **0**

Specification Travelling Expenses (if any) £ : : 19

25% of 2/3

Committee's Minute

Assigned

1-1-45**208 150 lb.**

G. E. Murdoch
Engineer-Surveyor to Lloyd's Register of Shipping.