Rpt. 4.

No. 51173.

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Date of writing Report 09/ 19 ___ When handed in at Local Office 19 ___ Port of HULL

Received at London Office APR 28

No. in Reg. Book. Survey held at Hull Date, First Survey 5. 6. 40. Last Survey 2. 4. 1941.

on the H.M.S "JULIET" (Number of Visits 54.)

Built at Beverley By whom built Messrs. Cook. Welton & Gemmell. Ltd. Yard No. 669 When built 1941-3.

Engines made at Hull By whom made Messrs. C. D. Holmes Ld. Engine No. 1560. When made 1941-3.

Boilers made at Hull By whom made Messrs. C. D. Holmes Ld. Boiler No. 1560. When made 1941-3.

Registered Horse Power ✓ Owners The Admiralty Port belonging to —

Nom. Horse Power as per Rule 156 Is Refrigerating Machinery fitted for cargo purposes ✓ Is Electric Light fitted Yes

Trade for which Vessel is intended ✓

Tons { Gross / Net

ENGINES, &c.—Description of Engines Triple Expansion

Dia. of Cylinders 13½ · 23 · 38 Length of Stroke 27 No. of Cylinders 3 CONTRACT Revs. per minute 160 No. of Cranks 3

Crank shaft, *dia. of journals* as per Rule 7.5" as fitted 7⅞" *Crank pin dia.* 7⅞" *Crank webs* Mid. length breadth ✓ Mid. length thickness ✓ shrunk Thickness parallel to axis 4 13/16" Thickness around eye-hole 3 15/16"

Intermediate Shafts, *diameter* as per Rule 7.15" as fitted 7¼"

Thrust shaft, *diameter at collars* as per Rule 7.5" as fitted 7⅞"

Tube Shafts, *diameter* as per Rule ✓ as fitted ✓ **Screw Shaft,** *diameter* as per Rule 8.2" as fitted 8¼" *Is the* { tube / screw } *shaft fitted with a continuous liner* ✓ No

Bronze 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 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 shaft* Yes *If so, state type* Newark *Length of Bearing in* **Stern Bush** *next to and supporting propeller* 36½"

Propeller, *dia.* 105" *Pitch* 9' - 4" *No. of Blades* 3 *Material* C. I. *whether Moveable* No *Total Developed Surface* 30 *sq. feet*

Feed Pumps *worked from the* **Main Engines,** *No.* 2 *Diameter* 2½" *Stroke* 15" *Can one be overhauled while the other is at work* Yes

Bilge Pumps *worked from the* **Main Engines,** *No.* 2 *Diameter* 2½" *Stroke* 15" *Can one be overhauled while the other is at work* Yes

Feed Pumps { *No. and size* One 4×6×12 Weirs / *How driven* Independent Steam } **Pumps connected to the Main Bilge Line** { *No. and size* One — 6 × 5½ × 15" Weirs / *How driven* Independent Steam } No 1 Downton

Ballast Pumps, *No. and size* None **Lubricating Oil Pumps,** *including Spare Pump, No. and size* None

Are two independent means arranged for circulating water through the **Oil Cooler** None **Suctions,** *connected to both Main Bilge Pumps and Auxiliary Bilge Pumps;—In Engine and Boiler Room* Eng. Room 2 @ 2" dia + one @ 3½" dia. Stokehold 2 @ 2" dia

In Pump Room None *In Holds, &c.* One @ 2" dia in each of the following, Forepeak, Chain-locker, Aft Side Space, Magazine, Spirit Room, Bunker, Shaft space + aft peak

Main Water Circulating Pump Direct Bilge Suctions, *No. and size* One — 5" **Independent Power Pump Direct Suctions** *to the Engine Room Bilges, No. and size* One @ 3½" included above *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* Yes

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* Abt. W.L.

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* No

What Pipes pass through the bunkers Feed tank suctions *How are they protected* Wood casing.

What pipes pass through the deep tanks None *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~~ Space watertight* Yes *Is it fitted with a watertight door* No ~~*Worked from*~~ Access from flat above

MAIN BOILERS, &c.—(Letter for record S) *Total Heating Surface of Boilers* 2650 ☐'

Which Boilers are fitted with Forced Draft All *Which Boilers are fitted with Superheaters* None

No. and Description of Boilers One . S.B. *Working Pressure* 200 lbs/☐"

IS A REPORT ON MAIN BOILERS NOW FORWARDED? Yes

IS A DONKEY BOILER FITTED? No *If so, is a report now forwarded?* ✓

Can the donkey boiler be used for domestic purposes only

PLANS.

Are approved plans forwarded herewith for Shafting (If not state date of approval) *Main Boilers* *Auxiliary Boilers* None *Donkey Boilers* None

Superheaters None *General Pumping Arrangements* *Oil fuel Burning Piping Arrangements* None

SPARE GEAR.

Has the spare gear required by the Rules been supplied Yes

State the principal additional spare gear supplied See attached list

The foregoing is a correct description.

FOR CHARLES D. HOLMES & CO., LTD.

J. Holmes

Manufacturer.

5a.

Dates of Survey while building

During progress of work in shops - - 1940. June 5. 6. 21. 28. July. 4. 22. 30. Aug. 2. 21. 22. 28. Sept. 7. 13. 18. 24. 26. 27. 30. Oct. 4. 8. 14. 22. 25. 31. Nov. 11. 20. 21. 26. 28. Dec. 6. 10. 18.

During erection on board vessel - - - 1941. Jan. 6. 9. 16. 17. 31. Feb. 6. 10. 11. 14. 21. 24. 27. Mar. 5. 10. 13. 17. 20. Apr.

Total No. of visits 54.

Dates of Examination of principal parts—*Cylinders* 30/9/40. 27/9/40. 20/9/40. *Slides* *Covers* 30/9/40 27/9/40 20/

Pistons 7-8-40. *Piston Rods* 28-8-40. *Connecting rods* 28-8-40.

Crank shaft 8/10/40. *Thrust shaft* 20-9-40. *Intermediate shafts* 28/8/40. + 8/10/40.

Tube shaft ✓ *Screw shaft* 21-8-40. *Propeller* 17-1-41. + 30-9-40

Stern tube 26. 9. 40 *Engine and boiler seatings* 1-10-40 *Engines holding down bolts* 9. 1. 41

Completion of fitting sea connections 30-9-40

Completion of pumping arrangements 10-3-41 *Boilers fixed* 9-1-41 *Engines tried under steam* 20-3-41

Main boiler safety valves adjusted 10-3-41 *Thickness of adjusting washers* F. 13/32" S. 11/32"

Crank shaft material M.S. *Identification Mark* Couplg 107 ERH. 27-4-40. Pins 10. E.H. 14/5/40. *Thrust shaft material* M.S. *Identification Mark* 102 E.H.

Intermediate shafts, material M.S. *Identification Marks* Journals 2975. A.E.H. 10-4-40. 106 ERH. 27-4-40.

Screw shaft, material M.S. *Identification Mark* 96 E.H. 25-5-40. *Tube shaft, material* ✓ *Identification Mark* —

Steam Pipes, material Steel *Test pressure* 600 lbs/□" *Date of Test* 11/2/41

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 Yes *If so, state name of vessel* H.M.T. BIRCH. HUL RM. No.

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

The Machinery of this vessel has been constructed & fitted onboard in accordance with the approved Admiralty plans. The specification & the Society's Rules. The workmanship & materials are good & when tried at sea full power as practicable in Basin it was found satisfactory in every respect.

This vessel is eligible, in my opinion, when classed to have the records of ✠ L.M.C. 3.41 & OG & the notation T. 3 Cy. 13½, 23 & 156 N.H.P. 200 lbs. 1. SB. 3 cf. G.S. 63. H.S. 2650 F.D.

Certificate to be sent to

The Surveyors are requested not to write on or below the space for Committee's Minute.

The amount of Entry Fee ... £ : :

Special ... ... £ 75 : 0. :

Donkey Boiler Fee ... £ : :

Travelling Expenses (if any) £ : :

When applied for, 4. 4. 1941

When received, ... 19.....

Committee's Minute TUE. 29 APR 1941 + Lmc. 4. 41 JD; OG.

Assigned

Engineer Surveyor to Lloyd's Register of Shipping.