

REPORT ON OIL ENGINE MACHINERY.

No. 52280.

12 JAN 1944

Received at London Office

11 JAN 1944 Port of **HULL**

Date of writing Report

When handed in at Local Office

Date, First Survey 30. 6. 43. Last Survey 4. 1. 1944

No. in Survey held at Reg. Book.

Gool

Number of Visits 17.

Single }
Twin }
Triple }
Quadruple }
Screw vessel

"AMENITY"

Tons }
Gross 881
Net 461

Built at *Gool* By whom built *Gool Shipbuilding & Rep. Co. Ld.* Yard No. 395 When built 1944
 Engines made at *Newbury* By whom made *Newbury Diesel Co. Ld.* Engine No. 785 When made
 Donkey Boilers made at — By whom made — Boiler No. — When made —
 Brake Horse Power 600 Owners *J. J. Edwards Sons Ld.* Port belonging to *London*
 Nom. Horse Power as per Rule 167 Is Refrigerating Machinery fitted for cargo purposes *no* Is Electric Light fitted *yes*
 Trade for which vessel is intended *Coasting*

OIL ENGINES, &c.—Type of Engines *Compression Ignition* { See *Lon Rpt.*
 No. 111, 522. 2 or 4 stroke cycle 2 Single or double acting *SA*
 Maximum pressure in cylinders 700 lb Diameter of cylinders 320 mm. Length of stroke 426 mm No. of cylinders 6 No. of cranks 6
 Mean Indicated Pressure 76
 Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 452 mm. Is there a bearing between each crank *yes*
 Revolutions per minute 300 Flywheel dia. 900 mm. Weight 500 lb. Means of ignition *Compression* Kind of fuel used *Sae Oil*
 Crank Shaft, { Solid forged } dia. of journals as per Rule *appd.* Crank pin dia. 192 mm. Crank Webs Mid. length breadth 106 mm. Thickness parallel to axis *shrunk*
 as fitted 192 mm. Mid. length thickness 252 mm. Thickness around eye-hole
 Flywheel Shaft, diameter as per Rule *appd.* Intermediate Shafts, diameter as fitted 6 3/4" Thrust Shaft, diameter at collars as per Rule *appd.*
 as fitted 192 mm. as fitted 192 mm.
 Tube Shaft, diameter as per Rule *appd.* Is the { tube } shaft fitted with a continuous liner { *no*
 as fitted *appd.* as fitted

Bronze Liners, thickness in way of bushes as per Rule *appd.* Thickness between bushes as per Rule *appd.* 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 *yes*
 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 *yes*
 If two liners are fitted, is the shaft lapped or protected between the liners *yes* 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 2' 6 5/8"
 Propeller, dia. 6' 4" Pitch 3' 10" No. of blades 4 Material *C.I.* whether Moveable *no* Total Developed Surface 15.11 sq. feet
 Method of reversing Engines *brine (air)* Is a governor or other arrangement fitted to prevent racing of the engine when declutched *yes* Means of lubrication *forces*
 Thickness of cylinder liners 32 mm. Are the cylinders fitted with safety valves *yes* Are the exhaust pipes and silencers water cooled or lagged with non-conducting material *lagged*
 If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine *yes*
 Cooling Water Pumps, No. 2 ME & 1 NO. 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. 2 Diameter 110 mm Stroke 120 mm Can one be overhauled while the other is at work *yes*
 Pumps connected to the Main Bilge Line { No. and Size 1 General Service Pump 70 tons/hour } 2 - 110 mm, 120 mm.
 How driven *Auxy. Engine (Diesel)* ME

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 *1 - ME. 10 tons/hour. 1 - Elect driven do.*
 Ballast Pumps, No. and size 1-100 Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size 1 - ME. 10 tons/hour.
 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 *worked from*
 In Holds, &c. 1 PIS in each hold - 2 1/2" in no. 1 & 3" in no. 2.
 Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size *One 3"*
 Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes *yes* Are the Bilge Suctions in the Machinery Spaces 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 *C.I. & G.M. valves fitted on E.W. str. boxes.* Are they fitted with Valves or Cocks *Valves*
 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 *ABOVE*
 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 *NONE* How are they protected *yes*
 What pipes pass through the deep tanks *NONE* Have they been tested as per Rule *yes*
 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 *none* Is it fitted with a watertight door *worked from*
 If a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork *yes*
 Main Air Compressors, No. *One* No. of stages *One* Diameters 110 mm. Stroke 110 mm. Driven by *M.E.*
 Auxiliary Air Compressors, No. *One* No. of stages *two* Diameters 52 & 120 mm. Stroke 100 mm. Driven by *Auxy. Eng.*
 Small Auxiliary Air Compressors, No. *Abon* No. of stages *hand-starting* Stroke — Driven by —
 What provision is made for first Charging the Air Receivers.
 Scavenging Air Pumps, No. *One* Diameter 670 mm. Stroke 426 mm. Driven by *M.E.*
 Auxiliary Engines crank shafts, diameter as per Rule *As approved* No. 2 Position *1 PIS Eng Room.*
 as fitted 85 mm. Journal 80 mm pin
 Have the Auxiliary Engines been constructed under special survey *yes* Is a report sent herewith *yes*

AMENITY

See Lon. Rpt. N^o 111,522.

AIR RECEIVERS:—Have they been made under survey YES ✓ State No. of Report or Certificate C 2611, 2670.
Is each receiver, which can be isolated, fitted with a safety valve as per Rule YES ✓
Can the internal surfaces of the receivers be examined and cleaned YES ✓ Is a drain fitted at the lowest part of each receiver YES ✓
Injection Air Receivers, No. 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. Four ✓ Total cubic capacity 52 cu.ft. ✓ Internal diameter 19" ✓ thickness 1/2" ✓
Seamless, lap welded or riveted longitudinal joint Riveted ✓ Material Steel ✓ Range of tensile strength 28/32 ton ✓ Working pressure by Rules Actual 400 lb. ✓

IS A DONKEY BOILER FITTED? NO ✓ If so, is a report now forwarded?
Is the donkey boiler intended to be used for domestic purposes only ✓

PLANS. Are approved plans forwarded herewith for Shafting See Lon. Rpt N^o 111,522. Receivers 12.6.42. Separate Fuel Tanks 6.10.42
Donkey Boilers ✓ General Pumping Arrangements 1-10-42 Pumping Arrangements in Machinery Space 25.3.43
Oil Fuel Burning Arrangements ✓

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,

Manufacturer.

Dates of Survey while building { During progress of work in shops-- } See London Report N^o 111,522.
{ During erection on board vessel--- } 1943 JUN 30 JULY 27. AUG 18. SEP. 21, 27. OCT 26. NOV 2, 4, 10, 17. DEC 6, 9, 20, 22, 29, 31.
{ Total No. of visits } 17.

Dates of Examination of principal parts—Cylinders Covers Pistons Rods Connecting rods
Crank shaft See London Rpt. N^o 111,522. Flywheel shaft Thrust shaft Intermediate shafts Tube shaft
Screw shaft 27/7/43. Propeller 18/8/43. Stern tube 27/7/43. Engine sealings 21/9/43. Engines holding down bolts 6/12/43
Completion of fitting sea connections 18/8/43. Completion of pumping arrangements 31/12/43. Engines tried under working conditions 3/12/43 4/1/44.
Crank shaft, Material See London Identification Mark N^o 111,522. Flywheel shaft, Material Identification Mark
Thrust shaft, Material Identification Mark F.I. STL. Identification Marks LLOYDS 332, CP, 8/4/43
Tube shaft, Material Identification Mark ✓ Screw shaft, Material F.I. STL. Identification Marks LLOYDS, 333 CP, 8/4/43.

Identification Marks on Air Receivers
29538, R 1930 TP 600 # WP 400 # 30.4.43. HDB
29539, R 1930 TP 600 # WP 400 # 30.4.43. HDB
30800, R 2065 TP 600 # WP 400 # 4.10.43. HDB.
30801, R 2055 TP 600 # WP 400 # 4.10.43. HDB.

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 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 ABILITY ✓

General Remarks (State quality of workmanship, opinions as to class, &c.)
The machinery of this vessel has been installed onboard the motor coaster "AMENITY" at Gode under Special Survey in accordance with the Rules, the Secretary's letter & approved plans. The workmanship and materials are good.
The machinery has been tried under working conditions and found satisfactory and is eligible to be recorded in the Register Book *LMC 1, 44. O.G.
Oil Engine 2SC. SA. 6 cylinders 12 5/8 - 16 3/4. 167 NHP.

See Lon. Rpt. N^o 111,522 for other part of fee.

The amount of Entry Fee .. £ : : When applied, 19.
Special PART ... £ 13 : 18/4 : 19.
Donkey Boiler Fee ... £ : : When received,
Travelling Expenses (if any) £ : : 19.

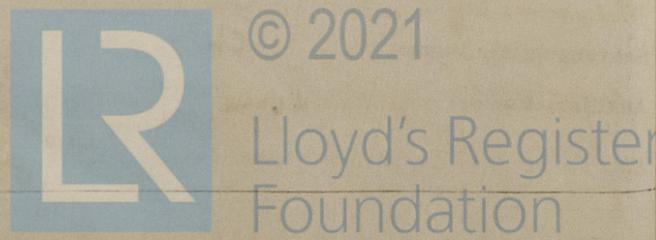
Committee's Minute

Assigned

FRI. 21 JAN 1944

+ LMC 1, 44 O.G. Oil Eng.

W.S. Shields.
Engineer Surveyor to Lloyd's Register of Shipping.



Certificate (if required) to be sent to the Surveyors are requested not to write on or below the space for Committee's Minute.