

REPORT ON OIL ENGINE MACHINERY.

No 5793.

Received at London Office 13 NOV 1942

Date of writing Report 9th Nov 1942, when handed in at Local Office DUBLIN, Port of DUBLIN.
 Date, First Survey 7th SEPT. Last Survey 3rd Nov. 1942.
 No. in Survey held at DUBLIN. Number of Visits 10.

8136 on the Single } Screw vessel
Triple }
Quadruple }
 Name of vessel "GOLDFINDER" Tons Gross 294
 Net 166

Built at HARBURG By whom built G. RENCK JUN K. G. Yard No. 1938-6
 Engines made at BEDFORD By whom made W. H. ALLEN SONS & CO. LTD Engine No. K2/44143 When made 1942
 Donkey Boilers made at By whom made Boiler No. When made
 Brake Horse Power 250 Owners H. J. WILSON Port belonging to LONDON
 Nom. Horse Power as per Rule 48 Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted yes
 Trade for which vessel is intended Coasting

MAIN ENGINES, &c. Type of Engines HEAVY OIL 2 or 4 stroke cycle 4 Single or double acting SINGLE
 Maximum pressure in cylinders 450 Diameter of cylinders 230 M/M Length of stroke 300 M/M No. of cylinders 6 No. of cranks 6
 Mean Indicated Pressure Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 282 M/M Is there a bearing between each crank yes

Revolutions per minute 600 Flywheel dia. 1040 M/M Weight 1400 LBS. Means of ignition COMPRESSION Kind of fuel used DIESEL OIL
 Crank Shaft, { Solid forged as per Rule 139 M/M Crank pin dia. 150 M/M Crank Webs Mid. length breadth 70 M/M Thickness parallel to axis
 { Semi built dia. of journals as fitted 140 M/M Mid. length thickness 204 M/M Thickness around eyehole
 { All built

Flywheel Shaft, diameter as per Rule CRANK SHAFT Intermediate Shafts, diameter as per Rule fitted Thrust Shaft, diameter at collars as per Rule IN WAY OF COLLAR
as fitted 150 M/M
 Tube Shaft, diameter as per Rule as fitted Screw Shaft, diameter as per Rule as fitted Is the tube 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 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
 If so, state type Oil Gland Length of Bearing in Stern Bush next to and supporting propeller 247.000
 Propeller, dia. 5'-2 1/2" Pitch 3'-11 1/2" No. of blades 4 Material BRONZE whether Moveable No. Total Developed Surface sq. feet

Method of reversing Engines CLUTCH Is a governor or other arrangement fitted to prevent racing of the engine when declutched yes Means of lubrication FORCED
 Thickness of cylinder liners 17 M/M Are the cylinders fitted with safety valves yes Are the exhaust pipes and silencers water cooled or lagged with non-conducting material
 If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine ABOUT 4.6

Cooling Water Pumps, No. one 90 M/M x 80 M/M 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 90 M/M Stroke 80 M/M Can one be overhauled while the other is at work yes
 Pumps connected to the Main Bilge Line { No. and Size one 90 M/M x 80 M/M
 { How driven MAIN ENGINES

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 Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size
 Are two independent means arranged for circulating water through the Oil Cooler Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge Pumps, No. and size:—In Machinery Spaces In Pump Room

In Holds, &c. Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes
led from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges
Are all Sea Connections fitted direct on the skin of the ship Are they fitted with Valves or Cocks
Are they fixed sufficiently high on the ship's side to be seen without lifting the platform plates Are the Overboard Discharges above or below the deep water line
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
What pipes pass through the bunkers How are they protected
What pipes pass through the deep tanks Have they been tested as per Rule

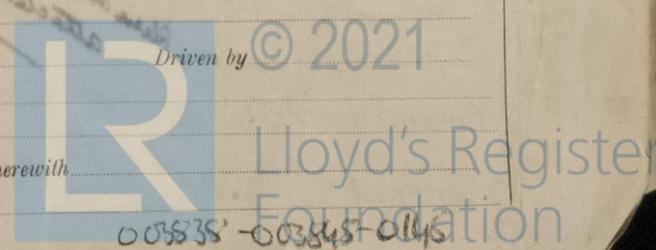
Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times
 Is the arrangement of valves and their connections such as to prevent the possibility of water passing from the sea or from water tanks into the cargo or machinery spaces, or from one compartment to another
 Is the Shaft Tunnel watertight 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
 Main Air Compressors, No. No. of stages Diameters Stroke Driven by
 Auxiliary Air Compressors, No. No. of stages Diameters Stroke Driven by
 Small Auxiliary Air Compressors, No. No. of stages Diameters Stroke Driven by

What provision is made for first Charging the Air Receivers Scavenging Air Pumps, No. Diameter Stroke Driven by
 Auxiliary Engines crank shafts, diameter as per Rule No. Position
as fitted

Have the Auxiliary Engines been constructed under special survey Is a report sent herewith

London Ref. No. 110623



005535-005545-0046

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. 112800 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?

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 (If not, state date of approval)

Receivers Separate Fuel Tanks

Donkey Boilers General Pumping Arrangements

Pumping Arrangements in Machinery Space

Oil Fuel Burning Arrangements

SPARE GEAR.

Has the spare gear required by the Rules been supplied *yes.*

State the principal additional spare gear supplied *3 nuzzles, one set of piston rings, one set of cylinder head studs and nuts, one set of rubber joint rings, one gudgeon pin and bush, one bottom end bearing with bolts and nuts, two main bearing bolts and nuts, one set of coupling bolts, three links for cam shaft chain, one fuel pump complete, one injection pipe, six brass bushes.*

The foregoing is a correct description.

Manufacturer.

Dates of Survey while building
 During progress of work in shops - -
 During erection on board vessel - - -
 Total No. of visits

Dates of Examination of principal parts—Cylinders ✓ Covers ✓ Pistons ✓ Rods ✓ Connecting rods -
 Crank shaft ✓ Flywheel shaft ✓ Thrust shaft ✓ Intermediate shafts ✓ Tube shaft ✓
 Screw shaft ✓ Propeller *19th Oct. 42.* Stern tube ✓ Engine sealings *13 Aug. 1942.* Engines holding down bolts *1st Oct. 1942.*

Completion of fitting sea connections ✓ Completion of pumping arrangements ✓ Engines tried under working conditions *3rd Nov. 1942.*
 Crank shaft, Material Identification Mark ✓ Flywheel shaft, Material Identification Mark ✓
 Thrust shaft, Material Identification Mark ✓ Intermediate shafts, Material Identification Marks ✓
 Tube shaft, Material Identification Mark ✓ Screw shaft, Material Identification Mark ✓
 Identification Marks on Air Receivers ✓

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 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 now been satisfactorily fitted on board tested under full working conditions and found in good condition. The workmanship is good. In my opinion this engine is eligible to have the record of #47C 11.42.*

London Papers - No 110623 attached.

The amount of Entry Fee .. £	When applied for,
Special £	19
Donkey Boiler Fee	When received,
Travelling Expenses (if any) £	19

R. B. Green
 Engineer-Surveyor to Lloyd's Register of Shipping.

Committee's Minute **TUE 15 DEC 1942**

Assigned *See Sub. Rpt 5793*



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