

# REPORT ON OIL ENGINE MACHINERY.

No 5793.

Received at London Office

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Date of writing Report 9<sup>th</sup> Nov 1942, When handed in at Local Office DUBLIN. Port of DUBLIN.  
 To. in Survey held at DUBLIN. Date, First Survey 7<sup>th</sup> SEPT. Last Survey 3<sup>rd</sup> Nov. 1942.  
 eg. Book. Number of Visits 10

8136 on the Single Twin Triple Quadruple Screw vessel "GOLDFINDER". Tons Gross 294 Net 166  
 Built at HARBURG By whom built G. RENCK JUN K. G. Yard No. 1938-6 When built 1938-6  
 Engines made at BEDFORD. By whom made W. H. ALLEN SONS & Co. Ltd Engine No. 142/44143 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.

IL 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 as fitted 140 M/M Crank pin dia. 150 M/M Crank Webs Mid. length breadth 70 M/M Mid. length thickness 204 M/M Thickness parallel to axis ✓ Thickness around eye-hole ✓  
 { Semi built dia. of journals ✓ as fitted 140 M/M Crank Webs Mid. length breadth 70 M/M Mid. length thickness 204 M/M Thickness parallel to axis ✓ Thickness around eye-hole ✓  
 { All built ✓ as fitted 140 M/M Crank Webs Mid. length breadth 70 M/M Mid. length thickness 204 M/M Thickness parallel to axis ✓ Thickness around eye-hole ✓

Flywheel Shaft, diameter as per Rule ✓ as fitted CRANK SHAFT. Intermediate Shafts, diameter as per Rule ✓ as fitted ✓ Thrust Shaft, diameter at collars as per Rule ✓ 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 ✓ Length of Bearing in Stern Bush next to and supporting propeller ✓

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 W.L.

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 ✓ 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 ✓

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 ✓ as fitted ✓ No. ✓ Position ✓

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



# 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, 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

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

14th 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 Report No 110623 attached.

The amount of Entry Fee

Special

Donkey Boiler Fee

Travelling Expenses (if any)

When applied for,

19

When received,

19

Committee's Minute

TUE 15 DEC 1942

Assigned

See Sub. Rpt 5793

R. B. Green

Engineer-Surveyor to Lloyd's Register of Shipping.



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