

10.12.59 Received London Port Piraeus No. 8228  
 No. of visits ~~XXXXXX~~ On vessel 28 First date 20.7.59 Last date 17.10.59

**ENTRY REPORT ON INTERNAL COMBUSTION MACHINERY**

Name "Georgios Manolakis" Gross tons 10061  
 Shipping Co. Ltd. Managers - Port of Registry Piraeus  
 By Deutsche Werft Reiherstiegwerft No. 1 Year Month 1939  
 By Masch. Augsburg-Nürnberg Eng. No. When  
 By - Blr. Nos. When  
 By - When

Service of ship, if limited for classification  
 Stable or similar cargo oil notation, if required  
 No. oil  
 Is ship intended to carry ~~XXXXXX~~ in bulk? Yes.  
 No. If so, is it for cargo purposes? - Type of refrigerant -  
 Machinery compartment isolated from the propelling machinery space? - Is the refrigerated cargo installation intended to be classed? -

Particulars should be given as fully and as clearly as possible. Where the answer is "No" or "None", say so! Ticks and other signs of doubtful meaning are not to be used. Where the plates are applicable to the installation, a black line may be inserted. If the main engines have been constructed at another port and are covered by a separate report, the particulars given in that report should be repeated below, but the port and report number should be stated.

No. of propellers 1 Brief description of propulsion system O.E. 6 cyl. DA 2S 600 mm. dia. x 1100  
 PROCATING ENGINES. Licence Name and Type No. M.A.N. Type diesel. D6 ZU 60/110.  
 No. of engines 6 Dia. of cylinders 600 m/m. stroke(s) 1100 2 or 4 stroke cycle 2 Single or double acting Double  
 Indicated BHP per engine 4100 at 116 RPM of engine and 116 RPM of propeller.  
 IP 5.3 kg./cm<sup>2</sup> (For DA engines give MIP top & bottom) Maximum cylinder pressure 45 kg./cm<sup>2</sup> Machinery numeral 820  
 Arranged in Vee or other special formation? No. If so, number of crankshafts per engine -

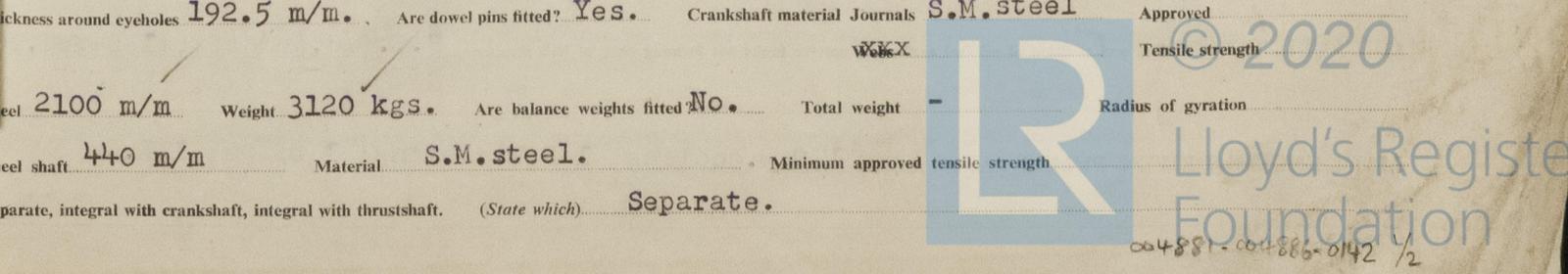
OPPOSED PISTON ENGINES. Is the engine of opposed piston type? No. If so, how are upper pistons connected to crankshaft? -  
 Scavenged through ports in the cylinders of ~~XXXXXX~~ Yes. No. and type of mechanically driven scavenge pumps or blowers per engine One through con. rod from crankshaft.  
 Gas driven scavenge blowers per engine None. Where exhaust gas driven blowers only are fitted, can the engine operate with one blower out of action? -  
 Emergency pump or blower is fitted, state how driven No. No. of scavenge air coolers None. Scavenge air pressure at full load lbs./sq. in. Scavenge manifold explosion relief valves fitted? Yes.

EXHAUST ENGINES. Are the undersides of the pistons arranged as supercharge pumps? - No. of exhaust gas driven blowers per engine -  
 No. of supercharge air coolers per engine - Supercharge air pressure - Can engine operate without supercharger? -

GENERAL. No. of valves per cylinder: Fuel 3 Inlet - Exhaust - Starting 2 Safety 2  
 Material of piston crowns cast iron Is the engine equipped to operate on heavy fuel oil? No.  
 Cylinders water Pistons water Fuel valves oil Overall diameter of piston rod for double acting engines 200 m/m.  
 with a sleeve? No. Is welded construction employed for: Bedplate? No. Frames? No. Entablature? No. Is the crankcase separated from the cylinder covers? Yes. Is the engine of crosshead or trunk-piston type? Yes. Total internal volume of crankcase - No. and total area of explosion relief devices? No. Are flame guards or traps fitted to relief devices? No. Is the crankcase readily accessible? Yes. If not, must the engine be removed for access, etc? No. Is the engine secured directly to the tank top or to a built-up structure? Yes. How is the engine started? Compressed air.  
 Can be directly reversed? Yes. If not, how is reversing obtained? -  
 Has been tested working in the shop? No. How long at full power? -

PROPELLER SHAFTING. Date of approval of torsional vibration characteristics of the propelling machinery system - State barred speed range(s), if imposed  
 Is a governor fitted? Yes. Is a torsional vibration damper or detuner fitted to the shafting? -  
 No. of main bearings 9 Are main bearings of ball or roller type? -  
 Distance between inner edges of bearings in way of crank(s) 885 m/m. Distance between centre lines of side cranks or eccentrics of opposed piston engines -

CRANKSHAFTS. Built, semi-built, solid. (State which) Semi-built.  
 Diameter of crankpins Centre 420 m/m. Breadth of webs at mid-throw 700 m/m. Axial thickness of webs 265 m/m.  
 Side - Web & Pins S.M. steel Minimum 45 kg./sq. cm.  
 thickness around eyeholes 192.5 m/m. Are dowel pins fitted? Yes. Crankshaft material Journals S.M. steel Approved  
 Tensile strength 2020  
 Diameter of flywheel shaft 2100 m/m Weight 3120 kgs. Are balance weights fitted No. Total weight - Radius of gyration -  
 Material S.M. steel. Minimum approved tensile strength -  
 Shaft: separate, integral with crankshaft, integral with thrustshaft. (State which) Separate.





GENERAL REMARKS

State if the machinery has been constructed and/or installed under special survey in accordance with the Rules, approved plans and Secretary's letters. State quality of materials and recommendations for classification, including any special notation to be assigned. Where existing machinery is submitted for classification the circumstances should be explained.

The Machinery and boilers of this vessel have been examined in accordance with Secretary's letter 24.9.59, approved plans and in accordance with the Society's Rules for Ships under survey. Scantlings of all machinery, boilers and piping have been verified at the Special Survey. Engine trials (manoeuvring and through the full range of rev) were witnessed and found satisfactory.

It is submitted that the machinery of this vessel is fit to be classed with the Society and have the notation LMC 10,59.

*J. Reed*  
Engineer Surveyor to Lloyd's Register

PARTICULARS OF IDENTIFICATION MARKS (Including Port of origin) of important Forgings and Castings. (Copies of certificates should be forwarded with report.)

- RODS
- CRANKSHAFT OR ROTORSHAFT
- FLYWHEEL SHAFT
- THRUSTSHAFT
- GEARING
- INTERMEDIATE SHAFTS
- SCREW AND TUBE SHAFTS
- PROPELLERS
- OTHER IMPORTANT ITEMS

Is the installation a duplicate of a previous case? If so, state name of vessel

Date of approval of plans for crankshaft Straight shafting Gearing Clutch

Separate oil fuel tanks Pumping arrangements Oil fuel arrangements

Cargo oil pumping arrangements Air receivers Donkey boilers

Dates of examination of principal parts:—

Fitting of stern tube Fitting of propeller Completion of sea connections Alignment of crank shaft in main bearings

Engine chocks & bolts Alignment of gearing Alignment of straight shafting Testing of pumping arrangements

Oil fuel lines Donkey boiler supports Steering machinery Windlass

Date of Committee Special Survey Fee Expenses

Decision *See Rpt 9*

FRIDAY - 4 MAR 1960

