

REPORT ON OIL ENGINE MACHINERY.

No. 12109

Received at London Office

10/vi. 1938

When handed in at Local Office

17/6/38

Port of Trieste

Trieste

No. in Survey held at Reg. Book.

TRIESTE

Date, First Survey 7th June 1937

Last Survey 9th June 1938

Number of Visits 128

39579 on the

Single Triple Quadruple

Screw vessel

M/S. OMALA

Tons Gross 6256 Net 3594

built at MONFALCONE By whom built CANT. RIUNITI ADRIATICA Yard No. 1202 When built 1938
 engines made at TRIESTE By whom made CANT. RIUNITI ADRIATICO Engine No. 257 When made 1938
 key Boilers made at NEW CAST. O.T. By whom made B.N. HANTHOORN LESHIE & CO Boiler No. 9968 When made 1938
 Brake Horse Power 2800 Owners N.V. Petroleum Maatschappij 'La Corona' Port belonging to 'S Davaehage
 Nom. Horse Power as per Rule 377 Is Refrigerating Machinery fitted for cargo purposes NO Is Electric Light fitted YES
 Trade for which vessel is intended CARRYING PETROLEUM IN BULK.

ENGINES, &c.—Type of Engines NEATSPOR 6. CYLINDER 2 or 4 stroke cycle 4 Single or double acting S.A
 Maximum pressure in cylinders 52 1/2 lb/cm² Diameter of cylinders 650 mm Length of stroke 1100 mm No. of cylinders 6 No. of cranks 6
 Mean Indicated Pressure 9.53 kg/cm² Is there a bearing between each crank YES
 Revolutions per minute 120 Flywheel dia. 2260 mm Weight 6000 kg Means of ignition COMPRESSION Kind of fuel used DIESEL
 Crank Shaft, dia. of journals as per Rule 443.8 as fitted 460 Crank pin dia. 460 mm Crank Webs Mid. length breadth 870 mm Thickness parallel to axis 267 mm
 as fitted 460 Mid. length thickness 267 mm Thickness around eye-hole 204 mm
 Wheel Shaft, diameter as per Rule — as fitted — Intermediate Shafts, diameter as per Rule 314.4 mm as fitted 318 Thrust Shaft, diameter at collars as per Rule 329.4 mm as fitted 340 mm
 Propeller Shaft, diameter as per Rule — as fitted — Screw Shaft, diameter as per Rule 344 mm as fitted 370 mm Is the tube shaft fitted with a continuous liner YES
 Bronze Liners, thickness in way of bushes as per Rule 19 mm as fitted 19 mm Thickness between bushes as per Rule 14.25 mm as fitted 15 mm Is the after end of the liner made watertight in the
 hull boss YES If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner —
 Does the liner do 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 —
 Are two liners 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 —
 If so, state type — Length of Bearing in Stern Bush next to and supporting propeller 1180 mm
 Propeller, dia. 14270 mm Pitch 3530 mm No. of blades 4 Material BRONZ whether Moveable NO Total Developed Surface 5.75 M²
 Method of reversing Engines COMP. AIR Is a governor or other arrangement fitted to prevent racing of the engine when disengaged YES Means of lubrication
GRADED Thickness of cylinder liners 55 mm Are the cylinders fitted with safety valves YES Are the exhaust pipes and silencers water cooled or lagged with
 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 —

Working Water Pumps, No. 2 SEA WATER, 2 F.W. 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 350 mm Stroke ROTAT. Can one be overhauled while the other is at work YES
 Pumps connected to the Main Bilge Line No. and Size 2 ROTATIVE 367/4 EACH GENERAL SERVICE 8 1/8 x 10"
 How driven 2 MAIN ENGINE, 1 STEAM INDEPENDENT
 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 —

Oil Pumps, No. and size (3) 8x8x10, 6x6x6 Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size 1 ROTATIVE 407/4, 1 DUPLICATION 8x8x10"
 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 2 @ 3 1/2" 2 IN ER. COFFERDAM @ 3 1/2" WITH DEC. PUMP FROM COFF. FRAME 43-44 @ 4 1/2" In Pump Room 1 @ 2" FORWARD
 Holds, &c. DEEP TANK TOP 3 @ 2", PEAK TANK TOP 2 @ 2", FORWARD COFFERDAM 3 @ 2 1/2", 4 CARGO PUMPS - 12x10x24"
 Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size ONE 5" & one 6 1/2" emergency
 Are all the Bilge Suction pipes in Holds and ~~Tunnels~~ Well fitted with strum-boxes YES Are the Bilge Suctions in the Machinery Spaces
 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 VALVES & COCKS
 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
 Do the pipes pass through the bunkers COFFERDAM SUNCTION AT FRAME 43-44 How are they protected O.F. BUNKER
 Do the 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 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 — Is it fitted with a watertight door — worked from —
 In a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork —

Auxiliary Air Compressors, No. NONE No. of stages — Driven by 1 DIESEL ENG.
 Auxiliary Air Compressors, No. 2 No. of stages 2 CAPACITY 120 C.F. @ 350 LBS. 410 REV. Driven by 1 STEAM ENG.
 Small Auxiliary Air Compressors, No. — No. of stages — Driven by —
 Ventilating Air Pumps, No. — Diameter — Stroke — Driven by —
 Auxiliary Engines crank shafts, diameter as per Rule PLEASE SEE REP ATTACHED. 2 GENERATORS (1 DIESEL START. FORN. 1 STEAM START. FT)
 as fitted FOR AUX DIESEL ENGS. 2 COMPRESS. (1 DIESEL PORT AFT 1 STEAM PORT FORN.)

AIR RECEIVERS:—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.

High Pressure Air Receivers, No. NONE 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. TWO Total cubic capacity 23 M³ Internal diameter 1458/1520 mm thickness 21 mm.

Seamless, lap welded or riveted longitudinal joint Riv. O.S.T. Material STEEL Range of tensile strength 44-55 kg Working pressure 25-30 kg/cm² by Rules 25-30 kg/cm² Actual 25 kg/cm²

IS A DONKEY BOILER FITTED? YES. If so, is a report now forwarded? YES.

Is the donkey boiler intended to be used for domestic purposes only? —

PLANS. Are approved plans forwarded herewith for Shafting 4/3/37, 23/3/37 Receivers 10/5/1937 Separate Fuel Tanks —

Donkey Boilers — General Pumping Arrangements 1/6/1937 Pumping Arrangements in Machinery Space 1/6/1937.

Oil Fuel Burning Arrangements 1.6.1937 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,

W. Crowl

Manufacturer.

Dates of Survey while building: During progress of work in shops— 1937 June 7, 26, 30, July 1, 3, 6, 8, 12, 15, 19, 21, 29, Aug. 2, 10, 17, 21, 24, 30, Sep. 21, 28, Oct. 1, 2, 4, 5, 7, 9, 12, 13, 14, 15, 16, 21, 22, 25, 26, 29, Nov. 2, 5, 10, 13, 15, 17, 19, 24, 26, 30, Dec. 2, 7, 9, 15, 16, 16, 21, 22, 30, 31, 1938 Jan. 5, 10, 12, 14, 19, 19, 20, 26, 28, 31, Feb. 3, 8, 9, 10, 12, 15, 16, 18, 21, 23, 24, 25, 28, Mar. 2, 9, 10, 12, 14, 17, 17, 19, 22, 23, 24, 26, 28, 30, Apr. 1, 7, 11, May 12, 14, 23, 24, 1938 Jan. 29, Feb. 12, 21, 22, Apr. 4, 6, 6, 12, 22, 25, May 2, 6, 7, 12, 14, 16, 19, 23, 24, 31, June 4, 8, 9

Dates of Examination of principal parts—Cylinders 18/7/1937 Covers 20/10/1937 Pistons 10/3/38 Rods 17/6/37 Connecting rods 13/5/37

Crank shaft 26/7/1937 Flywheel shaft — Thrust shaft 23/11/37 Intermediate shafts 23/11/37 Tube shaft —

Screw shaft 23/11/1937 Propeller 22/9/1937 Stern tube 21.2.38 Engine seatings 11.3.38 Engines holding down bolts 7.5.38

Completion of filling sea connections 22.2.38 Completion of pumping arrangements 19.5.38 Engines tried under working conditions 8.6.38

Crank shaft, Material STEEL Identification Mark LLOYD'S No. 4199-4200 Flywheel shaft, Material — Identification Mark —

Thrust shaft, Material STEEL Identification Mark LLOYD'S No. 4209 H.P.B. Intermediate shafts, Material STEEL Identification Marks LLOYD'S No. 424 H.P.B.

Tube shaft, Material — Identification Mark 27.4.37 Screw shaft, Material STEEL Identification Mark H.P.B. - 23.11.37

Is the flash point of the oil to be used over 150° F. YES. SPARE SCREW SH. LLOYD'S - 41 H.P.B. 23.11.37

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 YES. If so, have the requirements of the Rules been complied with YES.

If the notation for Ice Strengthening is desired, state whether the requirements in this respect have been complied with YES See No. 30-6-38.

Is this machinery duplicate of a previous case yes. If so, state name of vessel M/S. Polonium.

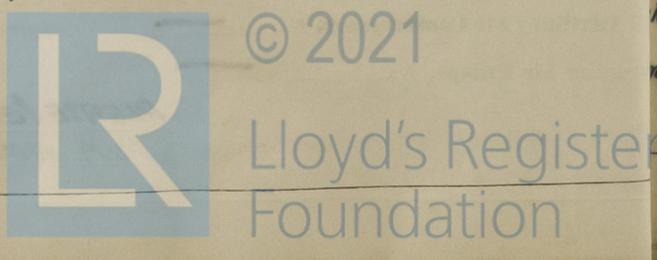
General Remarks (State quality of workmanship, opinions as to class, &c.) This Engine has been constructed and fitted on board this vessel under Special Survey in accordance with the Rules, approved plans and Secretary's letters. The material and workmanship are good. The main engine and auxiliaries have been tested under full working condition and found satisfactory and in our opinion the machinery is eligible to have in the Society Register Book the notation of + LMC - 6.38.

*For Pailers and Auxiliaries please see attached Report.

The amount of Entry Fee ... 463- When applied for, 13/6/38
Special ... 7543-
Donkey Boiler Fee ... 300- When received, 23.6.38
Travelling Expenses (if any) 815- 24.6

Committee's Minute + dmb 6.38
Assigned DB-180th
oil by G.

W. J. P. ...
Engineer Supervisor to Lloyd's Register of Shipping



Vertical stamp: Certificate (if required) to be sent to ...

TUE 28 JUN 1938