

REPORT ON OIL ENGINE MACHINERY.

No. 2156

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 No. in Survey field at Gdansk Date, First Survey 9/8/48 Last Survey 19/10 19 48
 Reg. Book. 18213
 on the Twin Screw vessel "TURNIA"
 Built at Rochester N.Y. By whom built Odenbach Shipbuilding Corp. Yard No. When built 1944
 Engines made at Olean N.Y. By whom made Clark Bros Inc. Engine Nos 32052 When made
 Donkey Boilers made at By whom made Boiler No. When made
 Brake Horse Power Owners Polish Government Port belonging to Gdynia
 Nom. Horse Power as per Rule 220 ✓ *MN = 245* Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes
 Trade for which vessel is intended Service between Poland & Northern European Ports

OIL ENGINES &c. — Type of Engines Airless Injection 2 or 4 stroke cycle 2 ✓ Single or double acting single ✓
 Maximum pressure in cylinders 800 lb. Diameter of cylinders 12 1/2 ✓ Length of stroke 16" ✓ No. of cylinders 4 ✓ No. of cranks 5 ✓ *crank pin*
 Mean Indicated Pressure 95 lb. Is there a bearing between each crank yes ✓
 Span of bearings, adjacent to the crank, measured from inner edge to inner edge 16 1/2
 Revolutions per minute 240 Flywheel dia. Weight Means of ignition Kind of fuel used Diesel
 Crank Shaft, Solid forged dia. of journals as per Rule 7.9 Crank pin dia. 7.9 Crank webs Mid. length breadth 11.0 Thickness parallel to axis —
 as fitted 7.9 Mid. length thickness 5.1 shrunk Thickness around eye hole —
 Flywheel Shaft, diameter as per Rule Intermediate Shafts, diameter as per Rule Thrust Shaft, diameter at collars as fitted 5.75
 as fitted 5.75
 Tube Shaft, diameter as per Rule Screw Shaft, diameter as per Rule Is the ~~tube~~ screw shaft fitted with a continuous liner {No. for & aft section
 as fitted none as fitted 5.75 ✓
 Bronze Liners, thickness in way of bushes as per Rule 7/16 Thickness between bushes as per Rule — Is the after end of the liner made watertight in the
 as fitted 7/16 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 not joined
 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 No Is an approved Oil Gland or other appliance fitted at the after
 end of tube shaft no If so, state type Length of bearing in Stern Bush next to and supporting propeller 24" ✓
 Propellers dia. 62" ✓ Pitch 62" No. of blades 3 Material MN Bronze whether moveable No Total developed surface 9.32 sq. feet
 Method of reversing Engines compressed Is a governor or other arrangement fitted to prevent racing of the engine when declutched yes ✓ Means of
 lubrication forced Thickness of cylinder liners .91" 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 Cooling Water Pumps, No 2 ✓ *ME driven - Fore & Aft* 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 none Diameter — Stroke — Can one be overhauled while the other is at work —
 Pumps connected to the Main Bilge Line {No. and size 2 ✓
 How driven Electric drive
 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 1 Power Driven Lubricating Oil Pumps, including spare pump, No. and size ME driven gear pumps
 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 - (5) 2" 10 2" 6" Tunnel well In pump room —
 In holds, &c. —
 Independent Power Pump Direct Suctions to the engine room bilges, No. and size 2 - (2) 3"
 Are all the bilge suction pipes in holds and tunnel well fitted with strum-boxes Yes ✓ Are the bilge suction 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 yes ✓ 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 below ✓
 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 —
 What pipes pass through the bunkers none ✓ How are they protected —
 What pipes pass through the deep tanks none ✓ 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 no tunnel Is it fitted with a watertight door no 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. 2 ✓ No. of stages 2 diameters 5" stroke 3.2" driven by ME
 Auxiliary Air Compressors, No. 1 ✓ No. of stages 2 diameters 5.5 stroke 33 25 driven by Elect. motor
 Small Auxiliary Air Compressors, No. 1x — No. of stages — diameters — stroke — driven by —
 Aux. air compressor ✓
 What provision is made for first charging the air receivers —
 Scavenging Air Pumps, No. 2 ✓ diameter 22" stroke 15.75 driven by M.E.
 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

AIR RECEIVERS:—Have they been made under survey.....No.....State No. of report or certificate.....-

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.....No.....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.....2✓.....Total cubic capacity.....-.....Internal diameter.....-.....thickness......59".....

Seamless, lap welded or riveted longitudinal joint.....Butt welded.....Material.....Steel.....Range of tensile strength.....-.....Working pressure.....-.....by Rules.....-.....Actual.....-

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.....-.....Receivers.....-.....Separate fuel tanks.....-

Donkey boilers.....-.....General pumping arrangements.....-.....Pumping arrangements in machinery space.....-

Oil fuel buring arrangements.....-

SPARE GEAR.

Has the spare gear required by the Rules been supplied.....Yes✓

State the principal additional spare gear supplied.....

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.....Stern tube.....Engine seatings.....Engine holding down bolts.....

Completion of fitting sea connections.....Completion of pumping arrangements.....Engines tried under working conditions.....

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.....Yes✓

Description of fire extinguishing apparatus fitted.....CO2✓

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.....No.....If so, state name of vessel.....-

General Remarks (State quality of workmanship, opinions as to class, &c.....)

The main and auxiliary machinery has been examined and is in good condition.

The workmanship is good. The machinery of this vessel is such that in our opinion it is eligible for acceptance in a classed vessel.

The amount of Entry Fee.....see GdY.Rpt.9.....No. 2156.....

Special£.....

Donkey Boiler Fee... ..£.....

Travelling Expenses (if any) £.....

When applied for.....19.....

When received.....19.....

Committee's Minute.....

Assigned.....

Engineer Surveyor to Lloyd's Register of Shipping.

Lloyd's Register Foundation