

REPORT ON OIL ENGINE MACHINERY.

No. 12991

Date of writing Report 12th Feb. 1950 When handed in at Local Office 19 Port of Cape Hagen
No. in Survey held at Koror Date, First Survey 12th Aug. 1949 Last Survey 17th Dec. 1949
Reg. Book. Single on the Twin Triple Quadruple Screw vessel EXPEDITION TRAWLER "GERDA" Tons Gross 113.51 Net 28.89
Built at Koror By whom built Shibamoto, Lilloo' 95 Yard No. 609 When built 1949
Engines made at Illinois, U.S. By whom made Caterpillar Tractor Co. Engines No. 75673 When made ✓
Donkey Boilers made at ✓ By whom made ✓ Boiler No. ✓ When made ✓
Brake Horse Power 2x120 Owners General R.W. Johnson Port belonging to New York
M.N. Power as per Rule (2x30) 39 Is Refrigerating Machinery fitted for cargo purposes ✓ Is Electric Light fitted ✓
Trade for which vessel is intended ✓

OIL ENGINES, &c. — Type of Engines Full Diesel, Type D1300, Valve in head 2 or 4 stroke cycle 4 Single or double acting SingleMaximum pressure in cylinders ✓ Diameter of cylinders 5 3/4" Length of stroke 8" No. of cylinders 6 No. of cranks 7Mean Indicated Pressure ✓ Ahead Firing Order in Cylinders 1-5-3-6-2-4 Wicks Span of bearings, adjacent to the crank, measured from inner edge to inner edge 4 23/64" to 1 25/32" Span 7 1/2" Is there a bearing between each crank Yes Revolutions per minute 1000 Kind of fuel used Distill fuelFlywheel dia. ✓ Weight ✓ Moment of inertia of flywheel (lbs. in² or Kg. cm.²) ✓ Means of ignition Comp. Kind of fuel used Distill fuelCrank Shaft, Solid forged dia. of journals as per Rule 3 3/4" Crank pin dia. 3 7/8" Crank webs Mid. length breadth ✓ Thickness parallel to axis ✓ Mid. length thickness ✓ Thickness around eye-hole ✓Flywheel Shaft, diameter as per Rule BRONZE as per Rule Intermediate Shafts, diameter as fitted 3 1/2" Thrust Shaft, diameter at collars as fitted ✓Tube Shaft, diameter as per Rule BRONZE as per Rule Screw Shaft, diameter as fitted 3 3/4" Is the tube shaft fitted with a continuous liner No. ✓Bronze Liners, thickness in way of bushes as per Rule ✓ Thickness between bushes as per Rule ✓ 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 tube shaft No. ✓ If so, state type ✓Propeller, dia. 160mm Pitch 780mm No. of blades 3 Material Bronze whether moveable No Total developed surface ✓ sq. feetMoment of inertia of propeller (lbs. in² or Kg. cm.²) 16x12 Kind of damper, if fitted ✓Method of reversing Engines Reverse Gear Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes Means of lubrication forced Thickness of cylinder liners 7/16" Are the cylinders fitted with safety valves No 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 ✓Cooling Water Pumps, No. 2 Is the sea suction provided with an efficient strainer which can be cleared within the vessel YesBilge Pumps worked from the Main Engine, No. 1 Diameter centrifugal Stroke ✓ Can one be overhauled while the other is at work ✓Pumps connected to the Main Bilge Line No. and size 2 off centrifugal - 1 off hand pump How driven 1 off by main eng - 1 off electricallyIs 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 2 off gear typeAre 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 2 off 2" In pump room ✓In holds, &c. 4 off 1 1/2"Independent Power Pump Direct Suctions to the engine room bilges, No. and size 2 off 2"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 YesAre all Sea Connections fitted direct on the skin of the Ship Yes Are they fitted with valves or cocks ✓ Are they fixed efficiently 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 aboveAre 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 ✓That pipes pass through the bunkers ✓ How are they protected ✓That 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 YesIs 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 ✓On a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork Drip trays fittedMain 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 ✓That provision is made for first charging the air receivers The engines are fitted with electric starting motorsSavenging Air Pumps, No. ✓ diameter ✓ stroke ✓ driven by ✓Auxiliary Engines crank shafts, diameter as per Rule 3 3/4" No. 2 Position hugon room, aftHave the auxiliary engines been constructed under special survey No Is a report sent herewith Yes

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, welded or riveted longitudinal joint..... Material..... Range of tensile strength..... Working pressure.....

Starting Air Receivers, No..... Total cubic capacity..... Internal diameter..... thickness.....

Seamless, welded or riveted longitudinal joint..... Material..... Range of tensile strength..... Working pressure.....

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..... No plans available..... Receivers..... Separate fuel tanks.....

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

Oil fuel burning arrangements.....

Have Torsional Vibration characteristics been approved..... Date of approval.....

SPARE GEAR.

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

State the principal additional spare gear supplied..... About-double the amount as required fitted on board.

The particulars are believed to be correct but are not guaranteed

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F. Rahgeard Petersen

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.....

Welded receivers, state Makers' Name.....

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.....)

E of the 2nd April last the machinery has not been constructed under the supervision of the Society's Surveyors. The engines have been opened up examined and found in good condition and showed no sign of having been in service before. The dimensions of the main - and straight shafting checked as given on the other side. The machinery and pumping arrangements installed in accordance with the Rules and the Society's letters. The workmanship is good. The engines and the pumping arrangements have been tested under full power working condition and found to work satisfactorily.

Recommend the vessel's machinery to have notation of LMC 12.49 and Tinsley B. Copy of Interim Certificate issued enclosed.

The amount of Entry Fee ... £ ...

Special ... £ ...

Donkey Boiler Fee... £ ...

Travelling Expenses (if any) £ ...

When applied for.....

When received.....

Committee's Minute.....

Assigned.....

(with endorsement)

CERTIFICATE WRITTEN.

(3.5.50)

Oil Eng

FM 14 APR 1950

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