

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
 Received at London Office 1 MAR 1950
 No. in Survey held at Korsör Date, First Survey 12th Aug. 1949 Last Survey 17th Dec. 1949
 Reg. Book _____ Number of Visits 6
 on the Single Screw vessel EXPEDITION TRAWLER "GERDA" Tons Gross 113.51
Triple Quadruple
 Built at Korsör By whom built Skibsverftet, Lilla '95 Yard No. 609 When built 1949
 Engines made at Illinois, U.S. By whom made Caterpillar Tractor Co. Engines No. 75672 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 Yes
 Trade for which vessel is intended ✓

OIL ENGINES, &c. — Type of Engines Still Diesel, Type D1300, Valve in head 2 or 4 stroke cycle 4 Single or double acting Single

Maximum pressure in cylinders ✓ Diameter of cylinders 5 3/4" Length of stroke 8" No. of cylinders 6 No. of cranks 7

Mean Indicated Pressure ✓ Ahead Firing Order in Cylinders 1-5-3-6-2-4 with ✓ No. of bearings, adjacent to the crank, measured from inner edge to inner edge 4 23/64" to 1 25/32" Is there a bearing between each crank Yes Revolutions per minute 1000

Flywheel dia. ✓ Weight ✓ Moment of inertia of flywheel (lbs. in² or Kg. cm.²) ✓ Means of ignition Comp. Kind of fuel used Diesel fuel

Crank 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 ✓
Sept. built All built as fitted 3 3/4" ✓ Mid. length thickness ✓ Thickness around eye-hole ✓

Flywheel Shaft, diameter as per Rule ✓ BRONZE Intermediate Shafts, diameter as per Rule 3 1/2" Thrust Shaft, diameter at collars as per Rule ✓
as fitted ✓ BRONZE as fitted ✓ ✓

Tube Shaft, diameter as per Rule ✓ BRONZE Screw Shaft, diameter as fitted 3 1/4" Is the tube shaft fitted with a continuous liner No. ✓
as fitted ✓ ✓ ✓

Bronze Liners, thickness in way of bushes as per Rule ✓ Thickness between bushes as fitted ✓ Is the after end of the liner made watertight in the propeller boss ✓
as fitted ✓ ✓ ✓

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 ✓ Is an approved Oil Gland or other appliance fitted at the after end of tube shaft No. ✓

Propeller, dia. 160mm Pitch 780mm No. of blades 3 Material Bronze whether moveable No Total developed surface 13" sq. feet
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 ✓

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 Yes
PORT ✓ ✓ ✓

Bilge 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 main eng - 1 off electrically)
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 2 off gear type
✓ ✓ ✓

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 2 off 2" In pump room ✓
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 Yes

Are all Sea Connections fitted direct on the skin of the Ship Yes Are they fitted with valves or cocks locks 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 above

Are they each fitted with a discharge valve always accessible on the side 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 Yes
✓ ✓ ✓

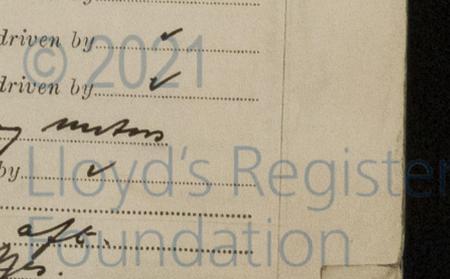
Is the arrangement of valves and their connections such as to prevent the possibility of water passing from the sea or from water tanks into the cargo or machinery spaces, or from one compartment to another Yes Is the shaft tunnel watertight ✓ Is it fitted with a watertight door ✓ worked from ✓

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 filled
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 ✓

Is that provision made for first charging the air receivers The engines are filled with electric starting motor
Savenging Air Pumps, No. ✓ diameter ✓ stroke ✓ driven by ✓

Auxiliary Engines crank shafts, diameter as per Rule 3 3/4" No. 2 Position beam room, aft
as fitted ✓ ✓ ✓ ✓ ✓
Have 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.....

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PLANS. Are approved plans forwarded herewith for shafting..... 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.....

The particulars are believed to be correct but are not guaranteed

KNUD E. HANSEN Consulting naval architect Bredgade 57 - Copenhagen K. Phone 7018, Telog. Adr. DESIGN. F. Balgaard 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...

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 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...

General Remarks (State quality of workmanship, opinions as to class, &c. With reference to the Secretary's letter of the 21st 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 shaft-shafting checked as given on the other side. The machinery and pumping arrangements installed in accordance with the Rules and the Secretary'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 Smith's B. Copy of Interim Certificate issued enclosed.

The amount of Entry Fee... Special... Donkey Boiler Fee... Travelling Expenses (if any)...

Committee's Minute Assigned LMC 12.49 (with endorsement) CERTIFICATE WRITTEN (3.5.50) Oil Eng

