

REPORT ON OIL ENGINE MACHINERY.

No. 8519
2 FEB 1952

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Writing Report 30/1952 When handed in at Local Office 19 Port of Stockholm
 Survey held at Grisslehamn and Gåshaga Date, First Survey 11.9. Last Survey 9.10. 1951.
 Number of Visits
 on the ^{Single} ~~Triple~~ ~~Quadruple~~ Screw vessel m.s. "BLENDA" (former Swedish War Vessel) Tons Gross 483 Net 302
 Built at Gothenburg By whom built AB Lindholmens Varv Yard No. - When built 1875
 Made at Lysekil By whom made Skandia-Verken AB Engine No. 222960 When made 1949
 Boilers made at - By whom made - Boiler No. - When made -
 Horse Power 300 Owners Partrederi E. Bernstrand-T. Jansson Port belonging to Stockholm
 Power as per Rule 112 Is Refrigerating Machinery fitted for cargo purposes No. Is Electric Light fitted Yes.
 for which vessel is intended Open sea.

ENGINES, &c. —Type of Engines 2 or 4 stroke cycle Single or double acting
 Maximum pressure in cylinders Diameter of cylinders Length of stroke No. of cylinders No. of cranks
 Indicated Pressure Ahead Firing Order in Cylinders Span of bearings, adjacent to the crank, measured inner edge to inner edge Is there a bearing between each crank Revolutions per minute
 Crank pin dia. Weight Moment of inertia of flywheel (lbs. in² or Kg. cm.²) Means of ignition Kind of fuel used
 dia. of journals as per Rule as fitted Crank pin dia. Crank webs Mid. length breadth Thickness parallel to axis
 as fitted Mid. length thickness shrunk Thickness around eyehole
 Main Shaft, diameter as per Rule as fitted Intermediate Shafts, diameter as per Rule as fitted Thrust Shaft, diameter at collars as per Rule as fitted
 Shaft, diameter as per Rule as fitted Screw Shaft, diameter as per Rule as fitted Is the { tube } shaft fitted with a continuous liner { screw }
 Liners, thickness in way of bushes as per Rule as fitted Thickness between bushes as per Rule as fitted Is the after end of the liner made watertight in the stern tube
 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-soluble
 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
 If so, state type Length of bearing in Stern Bush next to and supporting propeller
 Propeller, dia. Pitch No. of blades Material whether moveable Total developed surface sq. feet
 Moment of inertia of propeller (lbs. in² or Kg. cm.²) Kind of damper, if fitted
 Method of reversing Engines Is a governor or other arrangement fitted to prevent racing of the engine when declutched Means of location
 Thickness of cylinder liners Are the cylinders fitted with safety valves 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 to the engine
 Cooling Water Pumps, No. 1x164 lit/min. Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes
 Pumps worked from the Main Engines, No. 1x235 lit/min. Diameter 120 mm Stroke 64 mm Can one be overhauled while the other is at work -
 Pumps connected to the Main Bilge Line (No. and size 2 How driven One by main engine. One by aux. engine.
 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
 Bilge Pumps, No. and size 1 centrifugal. 600 lit/min. Power Driven Lubricating Oil Pumps, including spare pump, No. and size -
 Are there two independent means arranged for circulating water through the Oil Cooler - Suctions, connected to both main bilge pumps and auxiliary pumps, No. and size:—In machinery spaces 2 off 2 1/2" : One off 3" In pump room -
 In holds, &c. 2 off 2 1/2" ✓
 Independent Power Pump Direct Suctions to the engine room bilges, No. and size One off 2 1/2". One off 3" ✓
 Are all the bilge suction pipes in holds and tanks fitted with strum-boxes Yes ✓ Are the bilge suction pipes 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 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 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 -
 What pipes pass through the bunkers - How are they protected -
 What 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 bilge pump rooms 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 -
 If the vessel is 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. Crank case compr. No. of stages - diameters - stroke - driven by -
 Auxiliary Air Compressors, No. One ✓ No. of stages 2 diameters 95/40 mm stroke 125 mm driven by Aux. Engine
 Small Auxiliary Air Compressors, No. - No. of stages - diameters - stroke - driven by -
 What provision is made for first charging the air receivers Motor driving the auxiliary compressor is hand started.
 Reversing Air Pumps, No. - diameter - stroke - driven by -
 Auxiliary Engines crank shafts, diameter as per Rule 55 mm. No. 2 Position In E.R. Main on s.s., Harbour set p.s. as fitted 55 mm.
 Have the auxiliary engines been constructed under special survey Main yes, Harbour set no. Is a report sent herewith Yes.

22.2.52

Lloyd's Register Foundation

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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.....
 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 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..... 21.4.49 Receivers..... Separate fuel tank.....
 (If not, state date of approval)
 Donkey boilers..... General pumping arrangements..... 18.10.48 Pumping arrangements in machinery space..... 18.10.48
 Oil fuel burning arrangements.....
 Have Torsional Vibration characteristics been approved..... Yes Date of approval..... 20.4.49 and 13.6.49

SPARE GEAR.

Has the spare gear required by the Rules been supplied..... Yes.
 State the principal additional spare gear supplied..... Spare Cylinder, marked LLOYDS TEST 7 KG TB 4.10.51.

The foregoing is a correct description,

Shipbuilder.

GRISSEHAMNS VARV
T. Jansson & Co.

Dates of Survey while building
 During progress of work in shops - - - See Gothenburg Report No. 16830.
 During erection on board vessel - - - 11/9 - 9/10 1951.
 Total No. of visits..... 7
 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..... 17.5.51 Stern tube..... 27.9.49 Engine seatings..... 4.10.51 Engine holding down bolts..... 11.9.51
 Completion of fitting sea connections..... 17.5.51 Completion of pumping arrangements..... 4.10.51 Engines tried under working conditions..... 4.9.51
 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 S.M. Steel..... Identification mark..... LLOYDS HOA 27.9.51
 Identification marks on air receivers.....

Welded receivers, state Makers' Name.....
 Is the flash point of the oil to be used over 150°F..... Yes.
 Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with..... Yes
 Description of fire extinguishing apparatus fitted..... 3 Special Skum Kustos foam fire extinguishers of 12 litres each.
 Is the vessel (not being an oil tanker) fitted for carrying oil as cargo..... No.
 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.

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

This machinery has been fitted onboard under my supervision and to my satisfaction, and the workmanship was found to be good. The main and auxiliary engines and the pumping arrangement have been tried and tested and found to function satisfactorily.

Please, see also Gothenburg Report No. 16830 regarding this case.

A daily service tank, as per attached sketch, has been installed

Re. Stockholm letter of the 9.9.1948 regarding sounding pipes:-

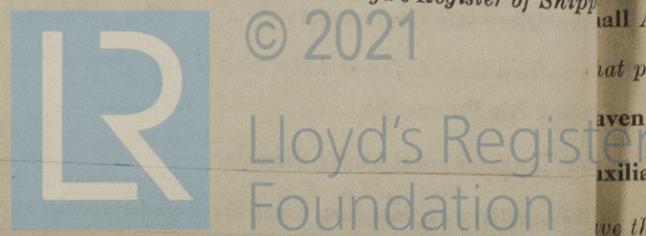
As pillars in vessel's centre line have been fitted, the sounding pipes to double bottom tanks are led the pillars.

The machinery of this vessel is eligible, in my opinion, to be classed in the B

Book with the notations of +LMC 10,51 and OG.

The amount of Entry Fee ... £ : :
 Special ... 1/3... Kr. 270:-- : When applied for 3% 192.
 Donkey Boiler Fee... £ : : When received 19
 Travelling Expenses (if any) Kr. 105:-- :
 Certificates in respect of fuel oil transfer pump, ballast pump and aux. compressor are attached here

Thorbjörn Jansson
 Engineer Surveyor to Lloyd's Register of Shipping



Committee's Minute

Assigned.....

TUES. 26 FEB 1952

Certificate (if required) to be sent to
 (The Surveyors are requested not to write on or below the space for Committee's Minute.)