

# REPORT ON OIL ENGINE MACHINERY.

No. 1399

Received at London Office

9 MAR 1950

Report made by 19 When handed in at Local Office 19

Port of Cleveland, Ohio

Survey held at Milwaukee, Wisconsin

Date, First Survey Aug. 3

Last Survey Dec. 7, 1949

M.T. ISLAS GEORIAS

Number of Visits 10

on the Twin Screw Vessel Argentine Vessel - (2) Main Propulsion Engine

Tons { Gross -- Net --

Uddevalla, Sweden By whom built Uddevallavarvet Aktiebolag

Yard No. 113 When built --

at Milwaukee, Wisconsin By whom made Nordberg Mfg. Co.

Engine No. TSM-2975 When made 1949

ers made at -- By whom made --

Boiler No. -- When made --

Power 8500 Total

Owners --

Port belonging to --

Power as per Rule 2062

Is Refrigerating Machinery fitted for cargo purposes -- Is Electric Light fitted --

high Vessel is intended --

GINES, &c. Type of Engines Crosshead type, Solid injection motor driven scavenge blowers 2 or 4 stroke cycle 2 Single or double acting S

Pressure in cylinders 800 p.s.i.

Diameter of cylinders 29" Length of stroke 40" No. of cylinders 7 No. of cranks 7

Pressure 80 p.s.i.

Is there a bearing between each crank Yes

per minute 160 Flywheel dia. 84.625"

Weight 2600 lbs. Means of ignition Compress. Kind of fuel used Diesel

as per Rule --

Mid length breadth 27" Thickness parallel to axis --

as fitted 20"

Crank pin dia. 20" Crank Webs Mid length thickness 9.75" Thickness around eyehole --

as per Rule --

Intermediate Shafts, diameter as per Rule -- Thrust Shaft, diameter at collars as per Rule --

as fitted --

as fitted 14.25"

as per Rule --

Screw Shaft, diameter as per Rule -- Is the tube shaft fitted with a continuous liner { --

as fitted --

as fitted --

as per Rule --

Thickness between bushes as per Rule -- Is the after end of the liner made watertight in the

as fitted --

as fitted --

If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner --

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 --

ve 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 --

Pitch -- No. of blades -- Material -- whether Moveable -- Total Developed Surface -- sq. feet

Reversing Engines Rot. Camshaft Is a governor or other arrangement fitted to prevent racing of the engine when detached Yes Means of lubrication

Thickness of cylinder liners 1.25" MIN. Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with

material -- If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine --

er Pumps, No. -- Is the sea suction provided with an efficient strainer which can be cleared within the vessel --

worked from the Main Engines, No. -- Diameter -- Stroke -- Can one be overhauled while the other is at work --

ected to the Main Bilge Line { No. and Size -- How driven --

water led to the bilges -- If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping

Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size --

endent means arranged for circulating water through the Oil Cooler -- Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge

d size: In Machinery Spaces -- In Pump Room --

Power Pump Direct Suctions to the Engine Room Bilges, No. and size --

Suction pipes in Holds and Tunnel Well fitted with strum-boxes -- Are the Bilge Suctions in the Machinery Spaces

accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges --

connections fitted direct on the skin of the ship -- Are they fitted with Valves or Cocks --

ufficiently high on the ship's side to be seen without lifting the platform plates -- Are the Overboard Discharges above or below the deep water line --

itted with a Discharge Valve always accessible on the plating of the vessel -- Are the Blow Off Cocks fitted with a spigot and brass covering plate --

s through the bunkers -- How are they protected --

s through the deep tanks -- Have they been tested as per Rule --

ocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times --

ent 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

Cont. to another -- Is the Shaft Tunnel watertight -- Is it fitted with a watertight door -- worked from --

o't, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork --

compressors, No. -- No. of Stages -- Diameters -- Stroke -- Driven by --

Compressors, No. -- No. of Stages -- Diameters -- Stroke -- Driven by --

ry Air Compressors, No. -- No. of Stages -- Diameters -- Stroke -- Driven by --

is made for first Charging the Air Receivers --

r Pumps, No. Two Centrifugal Diameter 20" dia. impeller Stroke 1175 c.f.m. Driven by motors

as per Rule -- No. Four sets Busch-Sulzer 320 K.W.

ines crank shafts, diameter as fitted Journals 7" Crankpins 6" Position Diesel Generators

ry Engines been constructed under special survey Yes Is a report sent herewith No. Clv. Rpt. 1348



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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 ☐ Is a drain fitted at the lowest part of each receiver ☐  
**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.** ☐ Total cubic capacity ☐ Internal diameter ☐ thickness ☐  
Seamless, lap welded or riveted longitudinal joint ☐ Material ☐ Range of tensile strength ☐ Working pressure ☐ by Rules ☐ Actual ☐

**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 Sept. 19. 49 N.Y. Receivers ☐ Separate Fuel Tanks ☐  
(If not, state date of approval) ☐

Donkey Boilers ☐ General Pumping Arrangements ☐ Pumping Arrangements in Machinery Space ☐

Oil Fuel Burning Arrangements ☐

### SPARE GEAR.

Has the spare gear required by the Rules been supplied ☐ To Rule Requirements ☐

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 - - Aug. 3, 11, 17, 26, Sept. 8, 14, 22, Oct. 3, 13, Dec. 7, 1949  
During erection on board vessel - -  
Total No. of visits 10  
Dates of Examination of principal parts—Cylinders 26-8-49 8-9-49 14-9-49  
Crank shaft 3-10-49 Flywheel shaft 26-8-49 Thrust shaft 26-8-49 Intermediate shafts 3-10-49 Rods 3-10-49 Connecting rods 3-10-49  
Screw shaft 3-10-49 Propeller 26-8-49 Stern tube 26-8-49 Engine seatings 26-8-49 Engines holding down bolts 26-8-49  
Completion of fitting sea connections 26-8-49 Completion of pumping arrangements 26-8-49 Engines tried under working conditions 26-8-49  
Crank shaft, Material O.H. Forged Steel Identification Mark LLOYDS 6017-5873 Flywheel shaft, Material 26-8-49 Identification Mark LLOYDS 6062-6035  
Thrust shaft, Material O.H. Forged Steel Identification Mark LLOYDS 6054-6035 Intermediate shafts, Material 26-8-49 Identification Marks LLOYDS 6049  
Tube shaft, Material 26-8-49 Identification Mark 26-8-49 Screw shaft, Material 26-8-49 Identification Mark 26-8-49  
Identification Marks on Air Receivers 26-8-49

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 ☐

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 ☐ Yes ☐ If so, state name of vessel Uddevala Hulls No. 111

**General Remarks** (State quality of workmanship, opinions as to class, &c. These two main engines and thrust shafts have been constructed under Special Survey and to approved drawings in accordance with the Rules of this Society. The materials have been tested by the Surveyors with satisfactory results and the workmanship found to be of good quality throughout. Each engine was rotated by the turning gear and on completion was placed in storage at the manufacturer's Works, shipped to the shipbuilder in the Spring of 1950 for installation aboard the vessel. It is recommended that the vessel be assigned the record of \*LMC (with date), subject to two engines and thrusts being installed aboard the vessel and tested under working conditions to the satisfaction of the Society's Surveyors.

T.V.C. approved for a service speed of 140 RPM. Secs letter of 15-8-49  
(possible restricted range)

The amount of Entry Fee £1640.00 : When applied for, ☐  
Special £ : ☐ Feb. 19. 50  
Donkey Boiler Fee £ : When received, ☐  
Travelling Expenses (if any) £ 320.00 : ☐

Committee's Minute NEW YORK FEB 15 1950

Assigned Transmit to London

R. S. Høegensen  
Engineer Surveyor to Lloyd's Register