

Rpt. 4b.

# REPORT ON OIL ENGINE MACHINERY.

No. 19889  
-7 OCT 1936

Date of writing Report 6th Oct 1936 When handed in at Local Office 6.10.36 Port of Grimsey Received at London Office 7 JAN 1937  
No. in Survey held at Lincoln Date, First Survey 22 March Last Survey 5th Oct 1936  
Reg. Book. Number of Visits 35

on the Single Triple Quadruple Screw vessel M. V. SAN CASIMIRO Tons Gross Net  
Built at Elasgow By whom built Blythwood & Co Ltd Yard No. 43 When built 1936  
Engines made at Lincoln By whom made Ruston & Hornsby, Ltd. Engine No. 178737 When made 1936  
Donkey Boilers made at ✓ By whom made ✓ Boiler No. ✓ When made ✓  
Brake Horse Power 60 Owners Anglo-Saxon Petroleum Co. Port belonging to London  
Nom. Horse Power as per Rule 18.6 Is Refrigerating Machinery fitted for cargo purposes ✓ Is Electric Light fitted ✓  
Trade for which vessel is intended ✓ [One engine - Size 3 VCRZ.]

OIL ENGINES, &c. Type of Engines airless injection, cold starting 2 or 4 stroke cycle 4 Single or double acting single  
Maximum pressure in cylinders 700 lbs. Diameter of cylinders 8" Length of stroke 10 3/4" No. of cylinders 3 No. of cranks 3  
mean 81.5 lbs. Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 9 1/8" Is there a bearing between each crank yes.  
Revolutions per minute 450 Flywheel dia. 3'-4" Weight 19 cwt Means of ignition Compression Kind of fuel used Crude oil.  
Crank Shaft, dia. of journals as approved. Crank pin dia. 4 3/4" Crank Webs Mid. length breadth 8" Thickness parallel to axis ✓  
as fitted 6" as fitted 6" as fitted 2 1/2" Thickness around eye hole ✓  
Flywheel Shaft, diameter as approved. Intermediate Shafts, diameter as per Rule Thrust Shaft, diameter at collars as per Rule  
as fitted 6" as fitted as fitted Is the tube ✓ shaft fitted with a continuous liner ✓  
Tube Shaft, diameter as per Rule Screw Shaft, diameter as per Rule Is the tube ✓ screw ✓

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  
as fitted as fitted as fitted 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 the 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  
Method of reversing Engines ✓ Is a governor or other arrangement fitted to prevent racing of the engine when declutched yes. Means of lubrication  
forced Thickness of cylinder liners 3/4" Are the cylinders fitted with safety valves yes Are the exhaust pipes and silencers water cooled or lagged with  
non-conducting material water 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. one. Is the sea suction provided with an efficient strainer which can be cleared within the vessel ✓  
What special arrangements are made for dealing with cooling water if discharged into bilges ✓

Bilge Pumps worked from the Main Engines, No. ✓ Diameter ✓ Stroke ✓ Can one be overhauled while the other is at work ✓  
Pumps connected to the Main Bilge Line No. and Size How driven

Ballast Pumps, No. and size ✓ Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size one geared. ✓  
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 ✓ In Pump Room ✓

In Holds, &c. ✓ Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size ✓  
Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes ✓ Are the Bilge Suctions 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 ✓

Are all Sea Connections fitted direct on the skin of the ship ✓ Are they fitted with Valves or Cocks ✓  
Are they fixed sufficiently 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 ✓  
Are they each fitted 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 ✓

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 all boiler mountings accessible at all times ✓

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 ✓ Is the Shaft Tunnel watertight ✓ Is it fitted with a watertight door ✓ 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. ✓ 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 ✓

Scavenging Air Pumps, No. ✓ Diameter ✓ Stroke ✓ Driven by ✓  
Auxiliary Engines crank shafts, diameter as per Rule No. ✓ Position ✓  
as fitted

IR RECEIVERS:—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 ✓

High Pressure Air Receivers, No. ✓ Cubic capacity of each ✓ Internal diameter ✓ thickness ✓  
Seamless, lap welded or riveted longitudinal joint ✓ Material ✓ of tensile strength ✓ Working pressure Actual by Rules

Starting Air Receivers, No. ✓ Total cubic capacity ✓ Internal diameter ✓ thickness ✓  
Seamless, lap welded or riveted longitudinal joint ✓ Material ✓ Range of tensile strength ✓ Working pressure Actual by Rules

Foundation

W1138-0097



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 11.11.32.  
(If not, state date of approval)

Receivers ✓

Separate Tanks ✓

Donkey Boilers ✓

General Pumping Arrangements ✓

Oil Fuel Burning Arrangements ✓

### SPARE GEAR.

Has the spare gear required by the Rules been supplied? yes

State the principal additional spare gear supplied ✓

Juston & Hornsby, Limited.

The foregoing is a correct description.

*E. W. G. R.*

Manufacturer.

Dates of Survey while building  
During progress of work in shops - 1936 Mar 2, 12, 19, 23, 26, 30 Apr 16, 23, 27, 30 May 4, 7, 11, 14, 25 Jun 3, 11, 15, 18, 22, 25, 29 Jul 2, 6, 13, 16, 20 Aug 4, Sep 3, 7, 10, 15.  
During erection on board vessel -  
Total No. of visits 35

Dates of Examination of principal parts—Cylinders 15.6.36. Covers 15.6.36. Pistons 6.8.36. Rods ✓ Connecting rods 16.4.36.

Crank shaft 15.6.36. Flywheel shaft 15.6.36. Thrust shaft ✓ Intermediate shafts ✓ Tube shaft ✓

Screw shaft ✓ Propeller ✓ Stern tube ✓ Engine seatings ✓ Engines holding down bolts ✓

Completion of fitting sea connections ✓ Completion of pumping arrangements ✓ Engines tried under working conditions 28.9.36.

Crank shaft, Material Sm. steel Identification Mark 3245C Flywheel shaft, Material Sm. steel Identification Mark 3245C

Thrust shaft, Material ✓ Identification Mark ✓ Intermediate shafts, Material ✓ Identification Marks ✓

Tube shaft, Material ✓ Identification Mark ✓ Screw shaft, Material ✓ Identification Mark ✓

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 ✓

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 M/V "ELUSA"

General Remarks (State quality of workmanship, opinions as to class, &c.) The workmanship + materials are good.

The engine has been built under Special Survey in accordance with the Rules + Approved plans.

Running trials were carried out at the maker's works under brake load with satisfactory results.

The engine was built for Messrs Peter Brotherhood, Ltd., + as stated is being supplied to Messrs John G. Kincaid + Co. Ltd.,

Engine now securely fitted on board + trials + found satisfactory.  
Wm. Edward Duncanson  
Greenock

9/3607/P/IV. 6084-36/IV-203.

The amount of Entry Fee

Special

Donkey Boiler Fee

Travelling Expenses (if any)

When applied for,

19

When received,

19

Committee's Minute

GLASGOW 6 JAN 1937

Assigned

See brk Rpt No. 20298

*H. L. Silditch*  
Engineer Surveyor to Lloyd's Register of Shipping.



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