

REPORT ON OIL ENGINE MACHINERY.

No. 1955 ~~1952~~

Received at London Office

H A M B U R G

Writing Report 14th Aug. 19 52 When handed in at Local Office 19 52 Port of H A M B U R G

Survey held at H A M B U R G Date, First Survey 23rd July Last Survey 24th July 19 52 Number of Visits two

Type of vessel Single on the Twin Triple Quadruple Screw vessel M.V. "KAMERUN" Tons Gross 3912 Net 2189

Place of origin Flensburg By whom built Flensburger Schiffsb. Ges. Yard No. 533 When built 1951

Made at Augsburg By whom made M.A.N. Engine No. D501511 When made

Boilers made at Flensburg By whom made Flensburger Schiffsb. Ges. Boiler No. 1255 When made 1951

Horse Power Maximum 3300 at 3350 Service 125 R.P.M. Owners Deutsche Afrikanische Schifffahrtsges. Port belonging to Hamburg

Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes

Type of Engines M.A.N. K 5 Z 70/120 2 or 4 stroke cycle 2 Single or double acting single

Maximum pressure in cylinders 50 Atm. Diameter of cylinders 700 mm Length of stroke 1200 mm No. of cylinders 5 No. of cranks 5

Indicated Pressure 6.2 Atm. Span of bearings (i.e., distance between inner edges of bearings in a crank) Is there a bearing between each crank. Revolutions per minute Maximum 125 Service 115

Moment of inertia of flywheel (lbs. in² or Kg. cm²) Means of ignition compr. Kind of fuel used Diesel oil

Weight " " " " balance wts. (" " " ")

Solid forged dia. of journals as per Rule Crank pin dia. Crank webs Mid. length breadth shrunk Thickness parallel to axis

Semi built dia. of journals as fitted Crank webs Mid. length thickness shrunk Thickness around eyehole

All built Intermediate Shafts, diameter as per Rule 352 mm Thrust Shaft, diameter at collars as fitted

Screw Shaft, diameter as per Rule 390 mm Is the tube screw shaft fitted with a continuous liner

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 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 two liners are fitted, is the shaft lapped or protected between the liners Is an approved Oil Gland fitted at the after stern 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

Moment of inertia of propeller including entrained water (lbs. in² or Kg. cm²) Kind of damper, if fitted

Method of reversing Engines direct Is a governor or other arrangement fitted to prevent racing of the engine yes Means of starting forced Thickness of cylinder liners Are the cylinders fitted with safety valves yes Are the exhaust pipes and silencers water cooled

Are the exhaust pipes and silencers water cooled with non-conducting material yes 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. and how driven 3 Electr. Working F.W. 1

Spare F.W. 1 or S.W. 1 Is the sea suction provided with an efficient strainer which can be cleared within the vessel

Pumps worked from the Main Engines, No. and capacity none Can one be overhauled while the other is at work

connected to the Main Bilge Line No. and capacity of each Two - 1 x 30 cubic m per h and 1 x 150 cubic m/h How driven electric driven

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

Pumps, No. and capacity 1 x 150 m³/h Power Driven Lubricating Oil Pumps, including spare pump, No. and size 2 x 22 m³/h

Independent means arranged for circulating water through the Oil Cooler yes Branch Bilge Suctions boiler 1 x 51.5 mm

In pump room 1 x 51.5 mm

diameters, &c. No. 1 - 2 x 82.5 mm, No. 2 - 2 x 82.5 mm, No. 3 - 2 x 82.5 mm, No. 4 - 2 x 82.5 mm

Bilge Suctions to the engine room well 1 x 125 mm

Are the bilge suction pipes in holds and tunnel well 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 wells no, mud boxes situated on pump side of bronze valve chest.

Sea Connections fitted direct on the skin of the Ship yes Are they fitted with valves or cocks yes Are they fixed permanently high on the ship's side to be seen without lifting the platform plates no, 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

How are they protected pipes pass through the bunkers none Have they been tested as per Rule

pipes pass through the deep tanks

All pipes, cocks, valves and pumps in connection with the machinery and all boiler mountings accessible at all times

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

Food vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork

Air Compressors, No. none No. of stages - diameters - stroke - driven by clutch coupled to aux. diesel

Primary Air Compressors, No. 2 - 2 cyl. No. of stages 2 diameters HP 65 mm 2 x LP 70 mm stroke 150 mm driven by generator sets

Emergency Auxiliary Air Compressors, No. 1 No. of stages 2 diameters - stroke - driven by Oil Eng.

provision is made for first charging the air receivers Emergency diesel driven air compressor being hand started.

Generating Air Pumps or Blowers, No. 1 How driven main engine

Primary Engines Have they been made under survey Germanischer Lloyd Engine Nos. 430478 - 82 - 77

Makers name M.A.N. (Type G 3 V 33) Position of each in engine room port side engine room

Report No.

Lloyd's Register Foundation

006160-006174-0224

AIR RECEIVERS:—Have they been made under survey to **Germanischer Lloyd** State No. of report or certificate.....

State full details of safety devices. **ordinary spring loaded**

Can the internal surfaces of the receivers be examined and cleaned **yes** 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. **2** Total cubic capacity **2x4500 ltrs.** Internal diameter..... thickness.....

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

IS A DONKEY BOILER FITTED **yes** If so, is a report now forwarded **no** (**8m² heating surface - WP 5 Atm.**)

Is the donkey boiler intended to be used for domestic purposes only **no - for heating vegetable cargo dl tanks only**

PLANS. Are approved plans forwarded herewith for shafting..... Receivers..... Separate fuel tank.....

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

Oil fuel burning arrangements.....

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

SPARE GEAR.

Has the spare gear required by the Rules been supplied **yes** State if for "short voyages" only **not for short voyages**

State the principal additional spare gear supplied **Spare screw shaft.**

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.....

Full description of fire extinguishing apparatus fitted in machinery spaces.....

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.....

What is the special notation desired.....

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, Speed restrictions, &c.)..... This report is submitted for the information of the Committee.

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The amount of Entry Fee ... £

Special ... £ SEE Rat 9. When applied for 19

Donkey Boiler Fee... £ When received 19

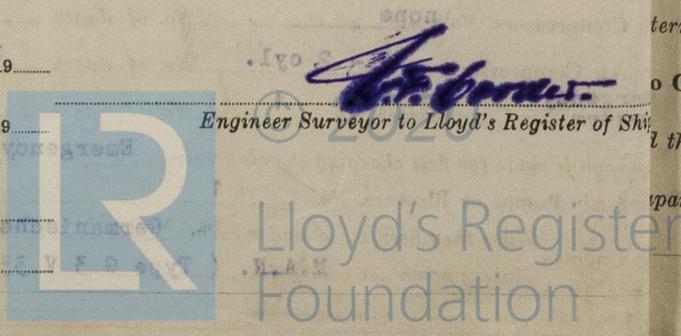
Travelling Expenses (if any) £

Committee's Minute

Assigned

THURS 16 OCT 1952

Deferred



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