

REPORT ON OIL ENGINE MACHINERY.

No. 246

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No. in Survey held at Groningen Date, First Survey 14-4-1938 Last Survey 22-6-1938 Reg. Book. Number of Visits 10

on the Single Twin Triple Quadruple Screw vessel

"ALOUETTE"

Tons ^{Gross} 275.74 _{Net} 92.81

Built at Groningen By whom built Scheepswerk "Gideon" Yard No. 162 When built 1938/6
Engines made at Cologne By whom made J. Koster & Co. Engine No. 439489/194 When made 1937
Donkey Boilers made at - By whom made - Boiler No. - When made -
Brake Horse Power 300 Owners The General Steam Navigation Co. Ltd. Port belonging to LONDON
Nom. Horse Power as per Rule 71 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes
Trade for which vessel is intended Sea going trade

OIL ENGINES, &c.—Type of Engines SEE DUSSELDORF REPORT NO 211 Heavy oil engine 2 or 4 stroke cycle 4 Single or double acting single

Maximum pressure in cylinders _____ Diameter of cylinders 11" Length of stroke 17 1/16" No. of cylinders _____ No. of cranks _____

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge _____ Is there a bearing between each crank _____

Revolutions per minute _____ Flywheel dia. _____ Weight _____ Means of ignition _____ Kind of fuel used _____

Crank Shaft, Solid forged Semi built All built dia. of journals _____ as per Rule _____ as fitted _____ Crank pin dia. _____ Crank Webs _____ Mid. length breadth _____ Thickness parallel to axis _____ Mid. length thickness _____ shrunk _____ Thickness around eyehole _____

Flywheel 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 _____

Tube Shaft, diameter _____ as per Rule _____ as fitted _____ Screw Shaft, diameter _____ as per Rule _____ as fitted 130 mm Is the tube screw shaft fitted with a continuous liner no

Bronze Liners, thickness in way of bushes _____ as per Rule _____ as fitted 11.5 mm Thickness between bushes _____ as per Rule _____ as fitted 130 mm Is the after end of the liner made watertight in the propeller boss yes rubber ring If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner two separate liners

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 yes
If two liners are fitted, is the shaft lapped or protected between the liners no Is an approved Oil Gland or other appliance fitted at the after end of the tube shaft no If so, state type _____ Length of Bearing in Stern Bush next to and supporting propeller 670 mm

Propeller, dia. 1750 Pitch 1.120 mm No. of blades four Material Bronze whether Moveable no Total Developed Surface 1.0567 sq. feet
Method of reversing Engines directly by hand Is a governor or other arrangement fitted to prevent racing of the engine when declutched yes Means of lubrication forced Thickness of cylinder liners _____ Are the cylinders fitted with safety valves yes Are the exhaust pipes and silencers water cooled or lagged with non-conducting material water cooled 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 yes
Bilge Pumps worked from the Main Engines, No. one Diameter 100 mm Stroke 0.5 mm Can one be overhauled while the other is at work yes

Pumps connected to the Main Bilge Line { No. and Size one à 50 tons/hour and one à 10 tons/hour How driven 15 B.H.P. auxiliary Deutz engine and by main 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 _____

Ballast Pumps, No. and size one 3" rotary pump Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size two à 80 lbs/min
Are two independent means arranged for circulating water through the Oil Cooler yes Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge Pumps, No. and size:—In Machinery Spaces 3 à 2" and one à 2 1/2" In Pump Room _____

In Holds, &c. 2 à 2" and two à 2" in tunnel well (one forward and one aft)
Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size one à 2 1/2"

Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes yes 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 yes

Are all Sea Connections fitted direct on the skin of the ship yes Are they fitted with Valves or Cocks Valves and cocks
Are they fixed sufficiently 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 one sounding pipe Have they been tested as per Rule yes

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 yes Is it fitted with a watertight door yes worked from bridge deck

If a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork _____

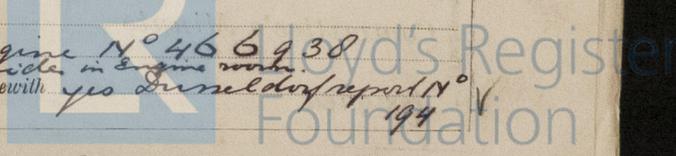
Main Air Compressors, No. ✓ No. of stages _____ Diameters _____ Stroke _____ Driven by _____
Auxiliary Air Compressors, No. one No. of stages two Diameters 3 3/4" x 1 1/8" Stroke 3 1/4" Driven by 15 BHP Deutz Heavy oil engine

Small Auxiliary Air Compressors, No. one No. of stages two Diameters 1 1/2" Stroke 0.5 mm Driven by main engine
What provision is made for first Charging the Air Receivers small auxiliary air compressor driven by 15 BHP Heavy oil engine started by hand

Scavenging Air Pumps, No. _____ Diameter _____ Stroke _____ Driven by _____
Auxiliary Engines crank shafts, diameter _____ as per Rule _____ as fitted 75 mm No. _____ Position one engine No 466438 on Port side in engine room Is a report sent herewith yes Dusseldorf report No 194

Have the Auxiliary Engines been constructed under special survey yes

B.S.B. 1-7-38



012066-012077-0018

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. *two* Total cubic capacity *2 x 500 lbs* Internal diameter *450 mm* thickness *12 mm*
 Seamless, lap welded or riveted longitudinal joint *lap welded* Material *S.H. steel* Range of tensile strength _____ Working pressure by Rules _____ Actual *30 kg/cm²*

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 *23-11-1937* Receivers *60244 21-7-32* Separate Fuel Tanks *9-4-37* *Part*
 (If not, state date of approval) _____
 Donkey Boilers General Pumping Arrangements *22-2-1930* Pumping Arrangements in Machinery Space *22-2-1930*
 Oil Fuel Burning Arrangements *22-2-1930*

SPARE GEAR.

Has the spare gear required by the Rules been supplied *yes*
 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 - - } _____
 { During erection on board vessel - - } *14, 20, 27-4-30; 6, 21, 28-5-30; 17, 21, 22-6-30*
 Total No. of visits _____

Dates of Examination of principal parts—Cylinders _____ Covers _____ Pistons _____ Rods _____ Connecting rods _____
 Crank shaft _____ Flywheel shaft _____ Thrust shaft *21-5-30* Intermediate shafts *21-5-30* Tube shaft _____
 Screw shaft *27-4-30* Propeller *27-4-30* Stern tube *27-4-30* Engine seatings *6-5-30* Engines holding down bolts *28-5-30*
 Completion of fitting sea connections *27-4-30* Completion of pumping arrangements *22-6-30* Engines tried under working conditions *21 and 22-6-30*

Crank shaft, Material _____ Identification Mark _____ Flywheel shaft, Material _____ Identification Mark _____
 Thrust shaft, Material *S.H. steel* Identification Mark *4040'S N°471* Intermediate shafts, Material *S.H. steel* Identification Marks *155. H/Jan 14-4*
 Tube shaft, Material _____ Identification Mark _____ Screw shaft, Material *S.H. steel* Identification Mark *4040'S N°487*

Identification Marks on Air Receivers *4513* *2 1016*
4040'S TEST
60 ATM.
W.P. 30 ATM.
4.3.15-10-37 *V.S. 25-10-37*

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*
 Is the vessel (not being an oil tanker) fitted for carrying oil as cargo *no* 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. *Kingfisher*

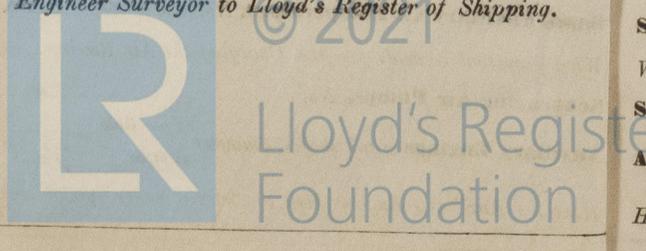
General Remarks (State quality of workmanship, opinions as to class, &c.)

The machinery has been fitted in accordance with the approved plans and Secretary's letters.
Machinery examined during the trial and found working satisfactory.
We are of opinion that this vessel is eligible for notation of + LMC 6-30 oil Engine

The amount of Entry Fee .. £ : : When applied for, _____
 Special £ : : 19 _____
 Donkey Boiler Fee £ : : When received, _____
 Travelling Expenses (if any) £ *33.00* *2/9* 19 *38*

Committee's Minute *TUE 5 JUL 1938* *MMR 5/9.*
 Assigned *+ LMC 6.38*

Aes-jre
J.H. Kehring
 Engineer Surveyor to Lloyd's Register of Shipping.



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