

## REPORT ON OIL ENGINE MACHINERY.

No. 386.

Received at London Office SEP 15 1938

of writing Report 7-9-1938 When handed in at Local Office

19 Port of Groningen

in Survey held at Foxhol 3 Delfzijl

Date, First Survey 2-5-1938 Last Survey 6-9-1938

Book.

Number of Visits 16

on the <sup>Single</sup>  
Twin  
Triple  
Quadruple

Screw vessel

steel yacht "AMULTEE"

Tons <sup>Gross</sup>  
Net

built at Foxhol

By whom built J. Smits, Jr.

Yard No. 217 When built 1930/4

engines made at Cologne

By whom made Humboldt, Deutz, etc.

Engine No. 49777/84 When made 1938

Boilers made at

By whom made

Boiler No. 49777/378 When made

Horse Power 110 each

Owners M<sup>r</sup> Peter Cremer

Port belonging to LEITH

Horse Power as per Rule 2 x 26.6 Is Refrigerating Machinery fitted for cargo purposes no

Is Electric Light fitted yes

for which vessel is intended sea going pleasure yacht

ENGINES, &amp;c.—Type of Engines 5 A 6 M 210

2 or 4 stroke cycle 4 Single or double acting single

m pressure in cylinders 55 kg/cm<sup>2</sup>

Diameter of cylinders 170 mm

Length of stroke 200 mm

No. of cylinders 6

No. of cranks 6

indicated Pressure 6 kg/cm<sup>2</sup>

bearings, adjacent to the Crank, measured from inner edge to inner edge 191.5 mm

Is there a bearing between each crank yes

ons per minute 750 Flywheel dia. 600

Weight 270 kg

Means of ignition sol. injection Kind of fuel used Diesel oil

Solid forged  
Semi built  
All builtdia. of journals  
as per Rule  
as fitted 120 mm

Crank pin dia. 110 mm

Crank Webs

Mid. length breadth 247 mm  
Mid. length thickness 43 mmThickness parallel to axis  
Thickness around eyeholeel Shaft, diameter  
as per Rule  
as fittedIntermediate Shafts, diameter  
as per Rule  
as fitted 70 mmThrust Shaft, diameter at collars  
as per Rule  
as fitted 70 mmshaft, diameter  
as per Rule  
as fittedScrew Shaft, diameter  
as per Rule  
as fitted 70 mmIs the <sup>tube</sup>  
screw shaft fitted with a continuous liner noLiners, thickness in way of bushes  
as per Rule  
as fittedThickness between bushes  
as per Rule  
as fitted

Is the after end of the liner made watertight in the

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

ner 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

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

no If so, state type

Length of Bearing in Stern Bush next to and supporting propeller 280 mm

er, dia. 800 mm Pitch 620 mm No. of blades 3

Material cast iron whether Moveable no

Total Developed Surface 0.201 59 Hkls  
sq. feet

of reversing Engines none

Is a governor or other arrangement fitted to prevent racing of the engine when declutched yes

Means of lubrication

Thickness of cylinder liners 14.5 mm

Are the cylinders fitted with safety valves yes

Are the exhaust pipes and silencers water cooled or lagged with

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

Water Pumps, No. one See note below

Is the sea suction provided with an efficient strainer which can be cleared within the vessel yes

umps worked from the Main Engines, No. ONE Diameter 80 mm Stroke 28 mm Can one be overhauled while the other is at work yes

connected to the Main Bilge Line

No. and Size

one rotary pump 2" cap. 18 Ton

one 2" semi rotary pump

How driven

elect. motor

by hand

oling 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

Pumps, No. and size one 2" rotary pump

Main engine and/or Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size 2-38.5 lts/min

independent means arranged for circulating water through the Oil Cooler yes

Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge

No. and size:—In Machinery Spaces one 1 1/2" and two 2"

In Pump Room

adent Power Pump Direct Suctions to the Engine Room Bilges, No. and size one of 1 1/2" and one of 2"

The Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes yes

Are the Bilge Suctions in the Machinery Spaces

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

ea Connections fitted direct on the skin of the ship yes

Are they fitted with Valves or Cocks Values

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

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

as pass through the bunkers

How are they protected

as pass through the deep tanks

Have they been tested as per Rule

Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times yes

angement 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

ent to another yes

Is the Shaft Tunnel watertight

Is it fitted with a watertight door

worked from

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

r Compressors, No.

No. of stages

Diameters

Stroke

Driven by

y Air Compressors, No.

No. of stages

Diameters

Stroke

Driven by

Auxiliary Air Compressors, No. ONE

No. of stages two

Diameters 76/41 mm

Stroke 80 mm

Driven by elect. motor

ovision is made for first Charging the Air Receivers with small auxiliary air compressor driven by elect. motor

iving Air Pumps, No.

Diameter

Stroke

Driven by

Auxiliary Engines crank shafts, diameter

as per Rule

as fitted 45

No. one 16 BHP. Jumbos 25 C.S.A. heavy oil engine

Position in Engine room Port side starboard

Is a report sent herewith see note on back

re the Auxiliary Engines been constructed under special survey no

NOTE: TWO MEANS ARE PROVIDED FOR CIRCULATING THE COOLING WATER. THROUGH EACH MAIN ENGINE.

W307-0215



**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.

2

Total cubic capacity 240 litres

outside

Internal diameter

18 3/8

thickness

8 mm

Seamless, lap welded or riveted longitudinal joint

seamless

Material S.M. Steel

Range of tensile strength 62.7 kg/cm<sup>2</sup>

Working pressure

by Rules 62 kg/cm<sup>2</sup>

Actual 35 kg/cm<sup>2</sup>

**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

22-4-38

Receivers

Separate Fuel Tanks 25-8

(If not, state date of approval)

Donkey Boilers

General Pumping Arrangements 18-8-38

Pumping Arrangements in Machinery Space 18-8-38

Oil Fuel Burning Arrangements

18-8-38

**SPARE GEAR.**

Has the spare gear required by the Rules been supplied

State the principal additional spare gear supplied 3 piston rings, 6 injection valves complete

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building  
During progress of work in shops -  
During erection on board vessel - 2.16.31-5-38; 1.2.16.24-6-38; 13.19-7-1938; 4.8.11.30-8-38; 1.6-9-38  
Total No. of visits 16.

Dates of Examination of principal parts—Cylinders 2-5-38 Covers 2-5-38 Pistons 2-5-38 Rods 2-5-38 Connecting rods 2-5-38

Crank shaft 2-5-38 Flywheel shaft - Thrust shaft 16-6-38 Intermediate shafts 16-5-38 Tube shaft -

Screw shaft 16-4-38 Propeller 21-7-38 Stern tube 21-7-38 Engine seatings 13-5-38 Engines holding down bolts 16-6-38

Completion of fitting sea connections 22-4-38 Completion of pumping arrangements 1-9-38 Engines tried under working conditions 1-9-38

Crank shaft, Material - Identification Mark - Flywheel shaft, Material - Identification Mark

Thrust shaft, Material - Identification Mark - Intermediate shafts, Material S.M. Steel Identification Marks 260YD 30

Tube shaft, Material - Identification Mark - Screw shaft, Material S.M. Steel Identification Mark 260YD 30

Identification Marks on Air Receivers 440YD'S N°45 70 ATM W.P. 35 kg/cm<sup>2</sup> 4 W. 30-8-38 440YD'S N°47 70 ATM W.P. 30 kg/cm<sup>2</sup> 4 W. 30-8-38

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 not desired

Is this machinery duplicate of a previous case no If so, state name of vessel

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

These heavy oil engines (with 16 BHP. Junkers 2 SCSA. heavy oil engines) have been examined and surveyed as instructed by the letters, found in accordance with the plans and instructions thereto. The material used in the construction was found good and the workmanship satisfactory. The engines have been fitted in accordance with the approved plans and Secretary's letters. The machinery examined during the trial and working satisfactorily. I am of opinion that this vessel is eligible for the notation

L.M.C. 9-38 T.S. 9-38  
NOTE: The vessel is contracted by Messrs Gehr. Nustern & Co at Delfzijl. built in their yard N°217. at the yard of Messrs J. Brunt & Son at Roskhol and fitted out at the contractors yard.

The amount of Entry Fee ... £ ... When applied for, ...  
Special ... £ 102.00 7-9-1938  
Donkey Boiler Fee ... £ ... When received, ...  
Travelling Expenses (if any) £ 27.00 10/10-1938

Committee's Minute

Assigned

Am. 9.38  
oil inf.

CERTIFICATE WRITTEN

Engineer Surveyor to Lloyd's Register of Shipping



Lloyd's Register Foundation