

REPORT ON OIL ENGINE MACHINERY.

No. 19384

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No. in Reg. Book. 99636 on the Twin Triple Quadruple Screw vessel M/V "FAK FAK" in "PLYM"

Survey held at Amsterdam Date, First Survey 17th Nov. 1953 Last Survey 21st Jan. 1954 Number of Visits 4

Gross 74 Tons Net 45 Tons

Built at PORT KEMBLA NSW By whom built A.E. GOODWIN LTD. Yard No. When built 1948

Engines made at Amsterdam By whom made Messrs. Kromhout Engine No. 3784/5 When made 1954

Donkey Boilers made at By whom made Boiler No. When made

Brake Horse Power { Maximum 2 x 80 Service 2 x 80 Owners Neth. New Guinea Petroleum Co. Port belonging to ROTTERDAM THE HAGUE

M.N. as per Rule 32 Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted

Trade for which vessel is intended FOR COASTING SERVICE INDONESIAN ARCHIPELAGO

OIL ENGINES, &c. — Type of Engines Heavy Oil, 8 Cyl. S.K. 2 or 4 stroke cycle 4 Single or double acting Single

Maximum pressure in cylinders 55 kg/cm² Diameter of cylinders 108 mm Length of stroke 152.4 mm No. of cylinders 8 No. of cranks 8

Mean Indicated Pressure 77 kg/cm² Span of bearings (i.e., distance between inner edges of bearings in way of a crank) 121 mm Is there a bearing between each crank yes Revolutions per minute { Maximum Service 1000 propeller 1000

Flywheel dia. 660 mm Weight 275 kg Moment of inertia of flywheel (lbs. in² or Kg. cm²) Means of ignition Comp. Kind of fuel used Diesel

Crank Shaft, { Solid forged Semi-built All built } dia. of journals as per Rule 81.55 mm as fitted 81.55 mm Crank pin dia. 73.02 mm Crank webs Mid. length breadth 109.6 mm shrunk Thickness parallel to axis Mid. length thickness 26.15 mm Thickness around eye-hole

Flywheel Shaft, diameter as per Rule Intermediate Shafts, diameter as per Rule Input 49.6 mm as fitted Output 65 mm Thrust Shaft, diameter at collars as per Rule 65 mm as fitted

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

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 propeller boss If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner 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-errosive. If two liners are fitted, is the shaft lapped or protected between the liners Is an approved Oil Gland fitted at the after end of stern tube 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 Moment of inertia of propeller including entrained water (lbs. in² or Kg. cm²) Kind of damper, if fitted

Method of reversing Engines Gear Is governor or other arrangement fitted to prevent racing of the engine Means of lubrication Grease Thickness of gaskets 75 mm Are the cylinders fitted with safety valves Are the exhaust pipes and silencers water cooled 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. and how driven 1 ME driven gear type Working F.W. Spare F.W. S.W. Is the sea suction provided with an efficient strainer which can be cleared within the vessel

Bilge Pumps worked from the Main Engines, No. and capacity Can one be overhauled while the other is at work

Pumps connected to the Main Bilge Line { No. and capacity of each How driven

Is the cooling 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 arrangements

Ballast Pumps, No. and capacity ME Power Driven Lubricating Oil Pumps, including spare pump, No. and size 1-gear type 1.7 T/h

Are two independent means arranged for circulating water through the Oil Cooler Branch Bilge Suctions and size: — In machinery spaces In pump room

Holds, &c. Direct Bilge 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 suction 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

Do all pipes pass through the bunks How are they protected

Do all 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

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

Air Compressors, No. No. of stages diameters stroke driven by

Auxiliary Air Compressors, No. No. of stages diameters stroke driven by

All Auxiliary Air Compressors, No. No. of stages diameters stroke driven by

Is provision made for first charging the air receivers

Refrigerating Air Pumps or Blowers, No. How driven

Have they been made under survey Engine Nos. Position of each in engine room

Auxiliary Engines Makers name Report No.

1100-10900-265200

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AIR RECEIVERS:—Have they been made under survey

State No. of report or certificate

State full details of safety devices

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, welded or riveted longitudinal joint

Material

Range of tensile strength

Working pressure

Starting Air Receivers, No.

Total cubic capacity

Internal diameter

Thickness

Seamless, welded or riveted longitudinal joint

Material

Range of tensile strength

Working pressure

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

31-12-53

Receiver

Separate fuel tanks

(If not, state date of approval)

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.

Are the spare gear required by the Rules been supplied

State if for "short voyages" only

State the principal additional spare gear supplied

The foregoing is a correct description,

KNOWHOUT MURDER FABRIK

Manufacturer.

Dates of Survey while building

During progress of work in shops

During erection on board vessel

Total No. of visits

Date of examination of principal parts

Cylinders 17-11-53

Covers 17-11-53

Pistons 20-11-53

Connecting rods 20-11-53

Crank shaft 20-11-53

Flywheel shaft

Thrust shaft

Intermediate shafts

Tube shaft

Screw shaft

Propeller

Stern tube

Engine seatings

Engine holding down bolts

Completion of fitting of connections

Completion of pumping arrangements

Engines tried under working conditions 14/21-54

Crank shaft, material

Identification mark

HA. 20-11-53

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)

These engines have been built under special survey in accordance with approved plans, Society Rules and Secretary's letter. All materials have been tested as required and the workmanship found good. After completion the engines have been tried on makers test bed under full load conditions and found working satisfactorily.

The engines have been shipped to Borong (New Guinea)
Copy certificate of crankshafts attached hereto

The amount of Entry Fee

fl. 225.50.

Special

When applied for

31-3-1954

Donkey Boiler Fee

When received

10

Travelling Expenses (if any)

fl. 3-

Committee's Minute

Assigned

W. H. H. H.

Engineer Surveyor to Lloyd's Register of Shipping.

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