

REPORT ON OIL ENGINE MACHINERY.

No. 20422

17 APR 1946

Received at London Office

t. 4b.

1946

of writing Report 20th Feb 46 When handed in at Local Office

Port of SYDNEY. - N.S.W.

in Survey held at Rhodes, Sydney, N.S.W.,

Date, First Survey 5th Feb

Last Survey 19th Feb 19 46

Book.

Number of Visits

on the ^{Single} Twin ^{Tripto} Screw vessel

"TANDJONG OEBAN"

Tons { Gross 195
Net 98

at Rhodes, N.S.W.,

By whom built Commonwealth Government Shipbuilding Estabtd. No. 4

Yard No. 65 When built 1946

ines made at Glasgow

By whom made British Auxiliaries Ltd.,

Engine No. E519 When made 1944

key Boilers made at ---

By whom made ---

Boiler No. -- When made --

ke Horse Power 200 (each)

Owners Nederlandsche Koloniale Petroleum Maat Schappij (M.K.P.M)

Port belonging to The Hague

n. Horse Power as per Rule 88

Is Refrigerating Machinery fitted for cargo purposes No

Is Electric Light fitted Yes

de for which vessel is intended Coastal Service Malay Peninsular & Nederlands East Indies.

ENGINES, &c. Type of Engines Atlas Polar Heavy Oil Engines 2 or 4 stroke cycle 2 Single or double acting single

imum pressure in cylinders Indicated Pressure 5.23 Kilos per sq. cm. Diameter of cylinders 180 m.m. Length of stroke 300 m.m. No. of cylinders 5 No. of cranks 5

of bearings, adjacent to the Crank, measured from inner edge to inner edge 8-1/16" Is there a bearing between each crank Yes

utions per minute 450 Flywheel dia. Weight Means of ignition Compression and of fuel used Light Diesoleum

nk shaft, { Solid forged dia. of journals as per Rule 120 m.m. as fitted 120 m.m. Crank pin dia. Crank Webs Mid. length breadth Mid. length thickness 2 3/4" approx. Thickness parallel to axis -- Thickness around eyehole --

wheel 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

Shaft, diameter as per Rule as fitted Screw Shaft, diameter as per Rule as fitted 4 1/4" Is the { screw } shaft fitted with a continuous liner { -- No.

ize Liners, thickness in way of bushes as per Rule as fitted 3/8" Thickness between bushes as per Rule as fitted -- Is the after end of the liner made watertight in the

ller boss Yes 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-corrosive --

wo 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

No If so, state type -- Length of Bearing in Stern Bush next to and supporting propeller 1' - 8"

propeller, dia. 47" Pitch 37 1/2" No. of blades 3 Material Bronze whether Moveable No Total Developed Surface 5.2 sq. feet

ethod of reversing Engines Direct Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes Means of lubrication

Thickness of cylinder liners Asbestos Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water-cooled or lagged with

conducting material Yes/ If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine Overhead

ling Water Pumps, No. Two Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes

ge Pumps worked from the Main Engines, No. Two Diameter Stroke Can one be overhauled while the other is at work Yes

aps connected to the Main Bilge Line { No. and Size two 2 3/4" x 1-11/16" & one 2 1/2" Auxiliary (Rotary Type) How driven 2 off Main Engines and 1 from Auxiliary Engine by V belt countershaft

he 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

ngements --- Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size 2 off each engine

two independent means arranged for circulating water through the Oil Cooler Yes Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge

ps, No. and size:—In Machinery Spaces One 2" dia. In Pump Room

olds, &c. Eight 2" dia. Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size One 2" dia

all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes Yes Are the Bilge Suctions in the Machinery Spaces

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

all Sea Connections fitted direct on the skin of the ship Yes Are they fitted with Valves or Cocks Valves

they fixed sufficiently 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

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 ---

at pipes pass through the bunkers None How are they protected ---

at pipes pass through the deep tanks None Have they been tested as per Rule ---

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

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

partment to another Yes Is the Shaft Tunnel watertight --- Is it fitted with a watertight door --- worked from ---

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

n Air Compressors, No. Two No. of stages Two Diameters Stroke Driven by Main Engines

liary Air Compressors, No. One No. of stages Two Diameters Stroke Driven by Aux. Engine.

ll Auxiliary Air Compressors, No. --- No. of stages Two Diameters --- Stroke --- Driven by ---

provision is made for first Charging the Air Receivers

venting Air Pumps, No. One (each Main eng) Diameter Stroke Driven by Main Engine

liary Engines crank shafts, diameter as per Rule as fitted No. One two-cylinder Position after end of engine room

the Auxiliary Engines been constructed under special survey Is a report sent herewith

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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 **Yes**
 Can the internal surfaces of the receivers be examined and cleaned **Yes** Is a drain fitted at the lowest part of each receiver **Yes**
Injection Air Receivers, No. **333** Cubic capacity of each **---** Internal diameter **---** thickness **---**
 Seamless, lap welded or riveted longitudinal joint **Yes** Material **---** Range of tensile strength **---** Working pressure **---**
Starting Air Receivers, No. **Four** Total cubic capacity **600 litres** External dia **438 m.m.** thickness **---**
 Seamless, lap welded or riveted longitudinal joint **Yes** Material **Steel** Range of tensile strength **---** Working pressure **---**
 Actual **350 lb**

IS A DONKEY BOILER FITTED? **No** 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 **(Plans as hereunder forwarded)** Separate Fuel Tanks **---**
 (If not, state date of approval)
 Donkey Boilers **---** General Pumping Arrangements **---** Pumping Arrangements in Machinery Space **Yes**
 Oil Fuel Burning Arrangements **---**

SPARE GEAR.

Has the spare gear required by the Rules been supplied **2 spare propellers and one spare tail shaft**
 State the principal additional spare gear supplied **Box of spares for main & auxiliary engines as per List forwarded**

Plans forwarded under separate cover :
1002/191B Arrangement & details of Sterntube and Tailshaft
2-866A Propeller
1002/205 Sheet I & Sheet 2, Arrangement of Bilge & Ballast piping.

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	Engines 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				

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 **- as per Rpt & Letter herewith**
 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 **No** If so, state name of vessel **---**

General Remarks (State quality of workmanship, opinions as to class, &c.) **An examination made of the machinery already installed and nearing completion at the Builders Yard, subsequently when vessel on slipway and afterwards under working conditions on full power trials.**
The machinery appears to be properly installed and in good condition throughout, and in my opinion will be eligible for record of L.M.C. 2,46 when the Special Survey is completed and Rules requirements complied with (See also Rpt. 9 and letters dated 20/2/46 regarding the case).

The amount of Entry Fee ... £ : : When applied for, :
 Special ... £ : : : 19
 Donkey Boiler Fee ... £ : : :
 Travelling Expenses (if any) £ : : : 19

[Signature]
 Engineer Surveyor to Lloyd's Register of Shipping

FRI. 31 MAY 1948

Committee's Minute

Assigned

See minute on p. 7



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Rpt. 13.
 Date of writing
 No. in Reg. Bo
 Built at
 Owners
 Electrical
 Is vessel
 Have plans
 Heating
 has the gove
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Certificate (if required) to be sent to
 (The Surveyors are requested not to write on or below the space for Committee's Minute.)