

REPORT ON OIL ENGINE MACHINERY.

No. 5369

of writing Report 18/8/26 When handed in at Local Office 19 Port of KOBE. Received at London Office 20 SEP 1926

in Survey held at KOBE Date, First Survey 14th Apr. 1925. Last Survey 16th Aug 1926

Book. Single on the Fun Triple Screw MOTOR SHIP CUBA MARU. Tons Gross 5950.
Net 3666.

at Kobe By whom built Kawasaki Dockyard Co. Ltd Yard No. 485 When built 1926

ines made at Clydebank By whom made John Brown & Co. Engine No. 5028 When made 1924.

ey Boiler made at Kobe By whom made Kawasaki Dockyard Co. Ltd Boiler No. 485 When made 1926.

e Horse Power 2500 Owners Kawasaki Kisen Kaisha Port belonging to KOBE.

Horse Power as per Rule 593. Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted Yes.

SEE ALSO GLASGOW RPT. N° 43856.

ENGINES, &c.—Type of Engines Cammellaird Lullagar 2 or 4 stroke cycle 2. Single or double acting Single.

um pressure in cylinders 500 lb. No. of cylinders 6. Diameter of cylinders 22" No. of cranks 6 Length of stroke 33"x2=66"

of bearings, adjacent to the Crank, measured from inner edge to inner edge 6'-0 15/16" Is there a bearing between each crank No.

ations per minute 98. Flywheel dia. 7'-6" Weight 9.4 tons Means of ignition Heat of Compression Kind of fuel used Diesel Fuel Oil.

Shaft, dia. of journals as per Rule 15.6" Crank pin dia. 16 1/2" Crank Webs Mid. length breadth shrunk Thickness parallel to axis shrunk
as fitted 16" Mid. length thickness shrunk Thickness around eyehole shrunk

eel Shafts, diameter as per Rule 12.86" FLYWHEEL- Thrust Shaft, diameter at collars as per Rule 15.6" & 13 1/2"
as fitted 14" as fitted 16" & 14."

Shafts, diameter as per Rule 14.22" Is the screw shaft fitted with a continuous liner Yes.
as fitted 15."

Liners, thickness in way of bushes as per Rule 3/4" Thickness between bushes as per rule 5/8" Is the after end of the liner made watertight in the
as fitted 7/8" as fitted 1 1/16"

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

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.

liners are fitted, is the shaft lapped or protected between the liners — Is an approved Oil Gland or other appliance fitted at the after
the tube shaft —

ller, dia. 16 1/3" Pitch 13 1/6" actual No. of blades 4 Material man. whether Moveable Yes Total Developed Surface 85 sq. feet
(to 16 1/3 MAX.)

nd of reversing Engines Compressed Air Is a governor or other arrangement fitted to prevent racing of the engine when detached Yes Means of lubrication
(Aspirator & Ramsay Governors)

ced. Thickness of cylinder liners 2 1/2" at Centre Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with
Exhaust pipe at back of engine - watercooled, remainder - lagged.

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

ing Water Pumps, No. Two for Jacket Cooling Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes.
Two for Piston Cooling.

Pumps fitted to the Main Engines, No. None Diameter — Stroke — Can one be overhauled while the other is at work —

s connected to the Main Bilge Line { No. and Size Two @ 100 tons/hour, and one (Ballast) @ 200 tons/hour
How driven by electric motors.

st Pumps, No. and size One @ 200 tons/hour Lubricating Oil Pumps, including Spare Pump, No. and size one 6" dia x 12" Str. Main Eng. driven
one (stand-by) duplex 5" dia x 6" Str.
@ 5000 galls per hour.

o independent means arranged for circulating water through the Oil Cooler Yes, by change-over cocks. Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge

, No. and size:—In Engine Room Four @ 3 1/2", one 7" & one 5".

ds, &c. In Nos 1, 2 & 3 Holds. each two 3 1/2"; In Deep Tank, two 3"; In No 4 Hold, two 4".

endent Power Pump Direct Suctions to the Engine Room Bilges, No. and size one 7" & one 5".

l the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes. Yes. Are the Bilge Suctions in the Machinery Space

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

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

y 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 all above.

y 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 Yes.

ipes pass through the bunkers — How are they protected —

ipes pass through the deep tanks Suction pipes for Fore Peak Tank and nos 1, 2 & 3 Holds. Have they been tested as per Rule Yes.

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

rrangement 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
tment to another Yes. Is the Shaft Tunnel watertight Yes. Is it fitted with a watertight door Yes worked from upper platform
of Engine Room.

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

Air Compressors, No. Two No. of stages Four each Diameters 25 1/2", 21 1/2", 7 3/4", 4 5/16" Stroke 19" Driven by Main Eng. Crank Shaft.

Wary Air Compressors, No. Two No. of stages Three Diameters 12 3/4", 10 3/4", 2 7/8" Stroke 7" Driven by Elec. Motors.

Auxiliary Air Compressors, No. One No. of stages Two Diameters 5", 1 1/16" Stroke 4" Driven by Steam Engine

nging Air Pumps, No. Six Diameter 56 1/2" x 23 1/2" rect. br. Stroke 33" Driven by oblique rods
from Main Eng. Crossheads.

22ary Engines crank shafts, diameter as per Rule 5.96 } SEE ALSO
as fitted 6 1/8" } YOKOHAMA RPT. N° 3687.

RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule Yes.

e internal surfaces of the receivers be examined Yes. What means are provided for cleaning their inner surfaces flanged covers or manholes.

re a drain arrangement fitted at the lowest part of each receiver Yes.

Pressure Air Receivers, No. Two { one working workg. 5.3 cub. ft. Internal diameter 11 3/4" working 5/8"
one stand-by. Stand-by 18.35" thickness Stand-by 4 1/16"

ss, lap welded or riveted longitudinal joint Seamless Material Steel Range of tensile strength 28-32 tons Working pressure by Rules 1100 lbs.

ing Air Receivers, No. THREE. Total cubic capacity 688 cub. ft. Internal diameter 4'-11" thickness 1 3/8"

ss, lap welded or riveted longitudinal joint riveted Material Steel Range of tensile strength 28-32 tons Working pressure by Rules 615 lbs.

009182 - 009191 - 0263

009182 - 009191 - 0260

Lloyd's Register
Foundation

IS A DONKEY BOILER FITTED? **YES**
HYDRAULIC TESTS:—

If so, is a report now forwarded? **YES**

DESCRIPTION.	DATE OF TEST.	WORKING PRESSURE.	TEST PRESSURE.	STAMPED.	REMARKS.
ENGINE CYLINDERS					See Glasgow Report No. 43856.
COVERS					
JACKETS					
PISTON WATER PASSAGES					
MAIN COMPRESSORS—1st STAGE					LLOYDS No 862. A.B.C. 29-4-26 & 1-5-26 900 LBS. A.W.R. WP 600 LBS.
2nd					
3rd					
AIR RECEIVERS—STARTING	29-4-26 & 1-5-26	600 lbs.	900 lbs.		See Glasgow Report No. 43856
INJECTION					
AIR PIPES	18-7-26 & 2-8-26 13-5-26 & 31-7-26 9-8-26	1000 lbs 35 lbs per ME. 150 lbs.	2200 lbs 100 lbs 400 lbs.		
FUEL PIPES	9-8-26				
FUEL PUMPS					
SILENCER					
WATER JACKET					
SEPARATE FUEL TANKS	27 th & 30 th April 1926	7.5 & 18 ft head	15 ft & 36 ft head	LLOYDS No 860 A.B.C.D.R.E. 27-4-26 & 30-4-26 A.W.R.	

PLANS. Are approved plans forwarded herewith for Shafting (If not, state date of approval)
Donkey Boiler **approved 12/9/25.** General Pumping Arrangements **approved 5/3/25.** Receivers **approved 16/11/25.** Oil Fuel Burning Arrangements **approved 21/3/26.** Separate Tanks **approved 11/3/26.**

SPARE GEAR See attached list. Will be sent by next mail **26/8/26**

The foregoing is a correct description.
KAWASAKI DOCKYARD COMPANY, LTD

Myamamoto

Manufacturer.

Dates of Survey while building
work in shops: 1925. Apr. 10, June 23, 24; July 1, 4, 7, 11, 17; Sept 4; Oct 12, 13, 30; Nov 16, 25; 1926. Jan 7, 18; Feb 8, 12; Mar 11, 17, 18, 20, 22, 24, 25, 26, 27, 29; Apr. 1, 2, 12, 15, 16, 17, 19, 20, 23, 27; June 17, 24; May 13; July 18, 31;
During erection on board vessel: 1926. May 12, 15, 24, June 3, 8, 10, 19, 21, 28; Aug 5, 9, 12, 13, 14, 16.
Total No. of visits **60.**

Dates of Examination of principal parts—Cylinders **See Glasgow Rpt. No. 43856.**
Crank shaft **working 2-4-26** Flywheel-Thrust shaft **2-4-26** Intermediate shafts **2-4-26** Engines holding down bolts **28-7-26**
Screw shaft **Spare 7-1-26** Propeller **16-4-26** Stern tube **23-4-26** Engine seatings **28-4-26** Engines tried under working conditions **9-8-26**
Completion of fitting sea connections **28-4-26** Completion of pumping arrangements **9-8-26**
Crank shaft, Material **Steel** Identification Mark **502.B.A** Flywheel shaft, Material **Steel** Identification Mark **LLOYDS No 676, 677, 678**
Flywheel.— Identification Mark **P.2811, LLOYDS No 682, HDB. 2-4-26.R.** Intermediate shafts, Material **Steel** Identification Mark **HDB. 2-4-26**
Thrust shaft, Material **Steel** Identification Mark **HDB. 2-4-26** Screw shaft, Material **Steel** Identification Mark **P.B. 173, LLOYDS No 812, HDB. 2-4-26**
Pulse shaft, Material **Steel** Identification Mark **P.B. 172, LLOYDS No 713, AW. 7-1-26**

Is the flash point of the oil to be used over 150° F. **Yes**
Is this machinery duplicate of a previous case **Yes** If so, state name of vessel **FLORIDA MARU.**

General Remarks (State quality of workmanship, opinions as to class, &c.)
The machinery has been built and installed under special survey in accordance with the Rules. The materials & workmanship, as could be seen, are good and sound.
The whole installation was tested under working conditions and found to work satisfactorily, and is eligible, in my opinion, to have the record in the Register Book + LMC 8.26, oil Engine, and "D.B. 120 lb"

(Certificate (if required) to be sent to the Committee's Minute.)

The amount of Entry Fee ... £ **Gen: 60** : When applied for, **19**
Special ... £ **320** :
Donkey Boiler Fee ... £ **65** : When received, **20-8-26**
Travelling Expenses (if any) £ :
Committee's Minute **FRI. 24 SEP 1926**

Assigned **Home 8 26**
Oil Engines DB 120 lb

A. Watt
Engine Surveyor to Lloyd's Register of Shipping
FRI. 15 OCT 1926