Form 4b.

REPORT ON OIL ENGINE MACHINERY.

No. 19557 / 14466

Received at London Office 2 - JUL 1954

Date of writing Report 28/6 1954 When handed in at Local Office 19 Port of Amsterdam

Class in Reg. Book. Survey held at Amsterdam Date, First Survey 4th Dec 1953 Last Survey 19th May 1954. Number of Visits 8.

Single / on the Twin / Triple / Quadruple Screw vessel "Oceanpolder" Tons Gross / Net

Built at Waterhuizen By whom built J. Pattje Yard No. 219 When built

Engines made at Amsterdam By whom made M.V. Werkspoor Engine No. 1734 When made 1954.

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

Brake Horse Power Maximum 1100 Service / Owners Gebr van Uden Port belonging to Rotterdam.

N. as per Rule 220 Is Refrigerating Machinery fitted for cargo purposes / Is Electric Light fitted /

Grade for which vessel is intended Ocean going.

ENGINES, &c. —Type of Engines TMAS 398 2 or 4 stroke cycle 4 Single or double acting single

Maximum pressure in cylinders 50 kg/cm² Diameter of cylinders 390 m/m Length of stroke 680 m/m No. of cylinders 8 No. of cranks 8

Mean Indicated Pressure 6.84 kg/cm² Span of bearings (i.e., distance between inner edges of bearings in way of a crank) 492 m/m Is there a bearing between each crank Yes Revolutions per minute Maximum 275 Service

Flywheel dia. 1500 m/m Weight 1240 kg Moment of inertia of flywheel (lbs. in² or Kg.cm.²) / Means of ignition Compr. Kind of fuel used diesel

" " " " balance wts. (" " " " " ") /

Crank Shaft, Solid forged / ~~Semi-built~~ / ~~All built~~ dia. of journals as per Rule appr. as fitted 310 m/m Crank pin dia 300 m/m 115 hole Crank webs Mid. length breadth 500 m/m Mid. length thickness 125 m/m shrunk Thickness parallel to axis / Thickness around eyehole /

Flywheel Shaft, diameter as per Rule appr. as fitted 360 m/m Intermediate Shafts, diameter as per Rule / as fitted / Thrust Shaft, diameter at collars as per Rule appr. as fitted 280 m/m

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

Bronze Liners, thickness in way of bushes as per Rule / as fitted / Thickness between bushes as per Rule / as fitted / 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 / Lwk 16/7/54

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 / 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 direct Is a governor or other arrangement fitted to prevent racing of the engine Yes Means of lubrication forced Thickness of cylinder liners 30 m/m Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled ~~jacketted with non-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 / **Cooling Water Pumps**, No. and how driven 2 - M.E. driven Working F.W. one - 55 G/h. Spare F.W. one - 55 G/h 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 / **Power Driven Lubricating Oil Pumps**, including spare pump, No. and size one

Are two independent means arranged for circulating water through the **Oil Cooler** / **Branch Bilge Suctions** /

Bore and size:—In machinery spaces / In pump room /

Holds, &c. /

Direct Bilge Suctions to the engine room bilges, No. and size /

Have all the bilge suction pipes in holds and tunnel well fitted with strum-boxes / 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 /

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 the pipes pass through the bunkers / How are they protected /

Do the 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 /

In 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. One No. of stages 2 diameters 180/150 m/m stroke 100 m/m driven by M-E.

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

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

What provision is made for first charging the air receivers /

Scavenging Air Pumps or Blowers, No. / How driven /

Auxiliary Engines Have they been made under survey / Engine Nos /

Makers name / Position of each in engine room /

Report No. /

AIR RECEIVERS:—Have they been made under survey Yes ✓ State No. of report or certificate Glasgow C 2777 - C

State full details of safety devices Spring loaded safety valves.

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. ✓ Cubic capacity of each ✓ Internal diameter ✓ thickness ✓

Seamless, welded or riveted longitudinal joint ✓ Material ✓ Range of tensile strength ✓ Working pressure ✓

Starting Air Receivers, No. 2 ✓ Total cubic capacity 3600 Cu. Ft. Internal diameter 30 3/4" ✓ thickness 5/8" ✓

Seamless, welded or riveted longitudinal joint welded Material M.S. Range of tensile strength 29.4-31.4 t/sq in. Working pressure 440 ✓

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 ✓ (If not, state date of approval) Receivers 4-5-54 Separate fuel tanks

Donkey boilers ✓ General pumping arrangements ✓ Pumping arrangements in machinery space ✓

Oil fuel burning arrangements ✓

Have Torsional Vibration characteristics been approved yes ✓ Date and particulars of approval 21/6/54 for 2752

SPARE GEAR.

Has the spare gear required by the Rules been supplied Yes. State if for "short voyages" only ✓

State the principal additional spare gear supplied As per Rule.

The foregoing is a correct description,
WERKSPOOR N.V.
Manufacturer.

Dates of Survey while building

During progress of work in shops - - 1953: 4/12, 12/12, 31/12; 1954: 18/1, 22/2, 26/4, 13/5, 19/5.

During erection on board vessel - - - ✓

Total No. of visits 8

Dates of examination of principal parts—Cylinders 28/12/53, 29/12/53, 31/12/53 Covers 18/9/51, 20/4/52, 24/6/53, 13/7/53, 19/9/53, 28/10/53 Pistons 4/12/53, 12/12/53 Rods ✓ Connecting rods 8/1/54, 1[illegible]

Crank shaft 22/2/54 Flywheel shaft 26/2/54 Thrust shaft 24/4/53 Intermediate shafts ✓ Tube shaft ✓

Screw shaft ✓ Propeller ✓ Stern tube ✓ Engine seatings ✓ Engine holding down bolts ✓

Completion of fitting sea connections ✓ Completion of pumping arrangements ✓ Engines tried under working conditions 13/5/54

Crank shaft, material S.M. Steel. Identification mark. LLOYDS J.O. 364-365-31-10-53 Flywheel shaft, material S.M. Steel. Identification mark LLOYDS W.B. 7 AMS 200

Thrust shaft, material S.M. Steel Identification mark LLOYDS AMS. N° 1941 H.A. 24-4-53. Intermediate shafts, material ✓ Identification marks ✓

Tube shaft, material ✓ Identification mark ✓ Screw shaft, material ✓ Identification mark ✓

Identification marks on air receivers ✓ JOB 5600 BBW 1953 N° 1315 LLOYDS TEST 710 LBS W.P. 440 LBS J.McB 3-9-53
JOB 5611 BBW 1953 N° 1326 " " 710 " W.P. 440 " J.McB 3-9-53.

Welded receivers, state Makers' Name Messrs. Marshall & Anderson Ltd. Motherwell. ✓

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.)

The engine has been built under Special Survey in accordance with approved pl
Society's Rules and Secretarial Letters. The materials have been tested as requ
and the workmanship found good. The engine has been tried on makers testbed
under full load conditions and found satisfactory and in my opinion the ves
where this engine is intended for will be eligible for notation + LMC with dat
when fitted and tried on board.
Copy certificates; crank - thrust - flywheel and compressor end shafts together with
air receivers attached.""

8.11.54

The amount of Entry Fee ... £ 76560
Special ... ... £
Donkey Boiler Fee... £
Travelling Expenses (if any) £ 4 -

When applied for 30-6-1954
When received 19

FRIDAY 3 DEC 1954

Committee's Minute

Assigned

Jacobs.
Engineer Surveyor to Lloyd's Register of Shipp

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