

Rpt. 4b.

Completion of Amsterdam Rpt 4b No. 18909 REPORT ON OIL ENGINE MACHINERY.

10 SEP 1953
No. 19160

Date of writing Report Aug 24 1953 When handed in at Local Office 19 Port of AMSTERDAM
 No. in Survey held at Leiden Date, First Survey June 1 Last Survey Aug 22 1953
 Reg. Book. Number of Visits 7
 on the Single Screw vessel "BEKAKA" Tons {Gross 195
 Triple
 Quadruple
 Built at Leiden By whom built Scheepswaf, De Haard Yard No. 1427 When built 1953
 Engines made at AMSTERDAM By whom made N.V. Werkspoor Engine No. 1462 When made
 Donkey Boilers made at By whom made Boiler No. When made
 Brake Horse Power {Maximum 430 Owners Republic Indonesia Port belonging to Djakarta
 Service 430
 M.N. as per Rule 86 Is Refrigerating Machinery fitted for cargo purposes NO Is Electric Light fitted yes
 Trade for which vessel is intended Indonesian Archipelago

OIL ENGINES, &c. — Type of Engines TMAS 276 2 or 4 stroke cycle Single or double acting

Maximum pressure in cylinders Diameter of cylinders Length of stroke No. of cylinders No. of cranks
 Mean Indicated Pressure Span of bearings (i.e., distance between inner edges of bearings in way of a crank) Is there a bearing between each crank Revolutions per minute {Maximum Service
 Flywheel dia. Weight Moment of inertia of flywheel (lbs. in² or Kg. cm.²) Means of ignition Kind of fuel used
 " " " " balance wts. (" " " ")

Crank Shaft, {Solid forged
 Semi built
 All built} dia. of journals as per Rule as fitted Crank pin dia. Crank webs Mid. length breadth Mid. length thickness Thickness parallel to axis shrunk Thickness around eyehole

Flywheel Shaft, diameter as per Rule as fitted Intermediate Shafts, diameter as per Rule as fitted 190 mm Thrust Shaft, diameter at collars as per Rule as fitted

Tube Shaft, diameter as per Rule as fitted Screw Shaft, diameter as per Rule as fitted 190 mm Is the {tube screw} shaft fitted with a continuous liner {yes ✓}

Bronze Liners, thickness in way of bushes as per Rule as fitted 14 mm Thickness between bushes as per Rule as fitted 11 mm Is the after end of the liner made watertight in the propeller boss yes ✓ If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner

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 986 mm

Propeller, dia. 1515 mm Pitch 1195 mm No. of blades 4 Material Brass whether moveable NO Total developed surface 163,190 sq feet
 Moment of inertia of propeller including entrained water (lbs. in² or Kg. cm.²) Kind of damper, if fitted

Method of reversing Engines Is a governor or other arrangement fitted to prevent racing of the engine Means of lubrication Thickness of cylinder liners Are the cylinders fitted with safety valves Are the exhaust pipes and silencers water cooled or lagged 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 funnel Cooling Water Pumps, No. and how driven Working F.W.

S.W. Spare F.W. S.W. Is the sea suction provided with an efficient strainer which can be cleared within the vessel yes ✓
 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 1 elect. driven worm wheel pump type Houston Cap 30 m³/hr @ 15 mbar
 How driven back pressure + 1 hand pump cap 30 l/hr @ 15 mbar (above in eng. room)
 Is the 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 arrangements

Ballast Pumps, No. and capacity - Power Driven Lubricating Oil Pumps, including spare pump, No. and size 1 standby from elec. refl ✓
 Are two independent means arranged for circulating water through the Oil Cooler yes ✓ Branch Bilge Suctions

No. and size:—In machinery spaces 2 of 89 mm + 2 of 57 mm ✓ In pump room
 In holds, &c. 5 of 57 mm (2 aft - 3 fore) ✓

Direct Bilge Suctions to the engine room bilges, No. and size 1 of 89 mm ✓
 Are all the bilge suction pipes in holds and tunnel well fitted with strum-boxes yes 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 yes ✓

Are all Sea Connections fitted direct on the skin of the Ship yes ✓ Are they fitted with valves or cocks valves ✓ Are they 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

Are 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 -
 What pipes pass through the bunkers No pipes ✓ How are they protected -

What 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 yes ✓

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 yes ✓ Is the shaft tunnel watertight No tunnel Is it fitted with a watertight door - worked from -

If 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. No. of stages diameters stroke driven by

Auxiliary Air Compressors, No. 1 ✓ No. of stages 2 diameters 95-110 mm stroke 85 mm driven by aux. eng.
 Small Auxiliary Air Compressors, No. No. of stages diameters stroke driven by

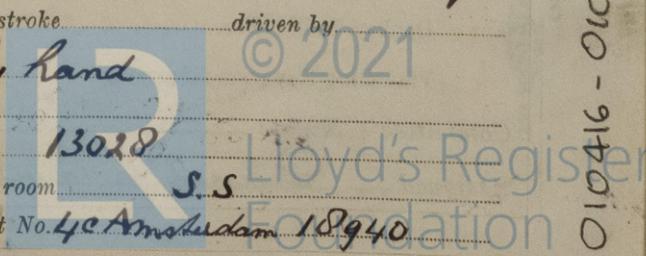
What provision is made for first charging the air receiver Aux engine can be started by hand
 Scavenging Air Pumps or Blowers, No. How driven

Auxiliary Engines Have they been made under survey yes ✓ Engine Nos. 13028 S.S.
 Makers name N.V. Kraamhout Amsterdam Position of each in engine room S.S.

Report No. 4c Amsterdam 18940

24/11/53

010416 - 010427 - 0278



Rpt. 4b.
Date of w
No. in
Reg. Book
Built at
Engines
Donkey
Brake Ho
M.N. as p
Trade for
IL EN
Maximum
Mean In
way of a
Flywheel
Crank
Shaft,
Flywheel
Tube Sh
Bronze
propeller
If the U
corrosiv
nd of s
propeller
moment
Method
lubricat
or lagge
ack to
W.
Bilge P
Pumps
s the c
arrange
Ballast
are two
No. and
n hold
Direct
are all
cessiv
are all
ufficie
re th
That
That
re all
s the
spaces
a w
tain
uxili
mall
hat
aver
uxili

AIR RECEIVERS:—Have they been made under survey
State full details of safety devices
Can the internal surfaces of the receivers be examined and cleaned
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 Receivers Separate fuel tanks
(If not, state date of approval)

Donkey boilers General pumping arrangements 26-2-52 Pumping arrangements in machinery space 26-2-52
Oil fuel burning arrangements 25-3-52
Have Torsional Vibration characteristics been approved yes Date and particulars of approval 12-11-52

SPARE GEAR.

Has the spare gear required by the Rules been supplied yes State if for "short voyages" only NO
State the principal additional spare gear supplied

The foregoing is a correct description, J. Bone p.m. Manufacturer.

Dates of Survey while building
During progress of work in shops - - -
During erection on board vessel - - -
Total No. of visits 8
Dates of examination of principal parts
Cylinders Covers Pistons Rods Connecting rods
Crank shaft Flywheel shaft Thrust shaft Intermediate shafts 1-6-53 Tube shaft
Screw shaft 31-1-53 Propeller 30-10-52 Stern tube 29-5-52 Engine seatings 6-7-53 Engine holding down bolts 28-7-53
Completion of fitting sea connections 5-6-53 Completion of pumping arrangements 12-8-53 Engines tried under working conditions 22-8-53
Crank shaft, material Identification mark Flywheel shaft, material Identification mark No. 733-738
Thrust shaft, material Identification mark Intermediate shafts, material S.M. steel Identification marks J.L.E.M.D.
Tube shaft, material Identification mark Screw shaft, material S.M. steel Identification mark 1104722HB

Welded receivers, state Makers' Name
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
Full description of fire extinguishing apparatus fitted in machinery spaces 1 extra chlon of 1 1/2 lbs + 2 foam of 9 lbs extinguishers
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
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 yes If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, Speed restrictions, &c.)
The machinery of this vessel has been built and fitted under special survey in accordance with approved plans, Secretary, Letters and Society Rules.
Materials tested as required and workmanship found good.
The machinery has been tried out under full load condition at a trial trip on Aug. 22-1953 (ME n = 375) and functioning satisfactory.
In my opinion the machinery of this vessel is eligible for the notation of + LMC (with date)
Copy cut Duzelder of F No. 3031 of screw shaft; Rotterdam No. 16303 of mid shafts; Rotterdam No. 16008 of stern tube, Rpt 14 B No. 18909 Amsterdam of ME, Rpt 14 C Amsterdam No. 18940 of aux engine and R'dam 14991 of propeller

The amount of Entry Fee ... £ 220.
Special ... £
Donkey Boiler Fee... £
Travelling Expenses (if any) £ 44.
When applied for 5-11-1953
When received 19

Engineer Surveyor to Lloyd's Register of Shipping

Certificates (if required) to be sent to the Secretary and requested not to write on or below the space for Committee's Minute.

Assigned Defered for completion Sec Dja. Rpt 9. No. 3929c.
THURSDAY 26 NOV 1953

