

REPORT ON OIL ENGINE MACHINERY.

No. 12002

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of writing Report 14 March 1956 When handed in at Local Office 14 April 1956 Port of Marseilles

Survey held at La Seyne sur Mer Date, First Survey 13 January 1955 Last Survey 14 March 1956

Book S-2 NE on the Twin Triple Screw vessel Motor Ship "ZAGORA" Number of Visits 22

Tons Gross 1678.63 Net 720.16

at La Seyne sur Mer By whom built Forges et Chateaux de la Mediterranee Yard No. 1310 When built 1956

ines made at Milwaukee, Wis. By whom made Nordberg Manufacturing Co Engine No. 1048-0648 When made 1955

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

se Horse Power { Maximum 2655 Owners Societe Generale Cherifienne de Navigation Port belonging to CASABLANCA

Service 581 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes

as per Rule 581 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes

le for which vessel is intended dry cargo vessel

ENGINES, &c. — Type of Engines Trunk piston, Vee type (45°) Intern. 2 or 4 stroke cycle 4 Single or double acting Single

imum pressure in cylinders 950 p.s.i. Comb. inlet inject. 45° single valve. Diameter of cylinders 13 in Length of stroke 16.5 in No. of cylinders 12 No. of cranks 6

n Indicated Pressure 195 p.s.i. Span of bearings (i.e., distance between inner edges of bearings in of a crank) 19.625 in Is there a bearing between each crank yes Revolutions per minute { Maximum 500 Service

heel dia. 50 in Weight 2630 lb Moment of inertia of flywheel 4688 Means of ignition Compus Kind of fuel used Diesel oil

ft. { Solid forged dia. of journals as per Rule 10 in Crank pin dia. 10 in Crank webs Mid. length breadth 15.5 in Thickness parallel to axis shrunk

ft. { Semi built dia. of journals as fitted 10 in Crank webs Mid. length thickness 4 in Thickness around eyehole

ft. { All built dia. of journals as fitted 10 in Crank webs Mid. length thickness 4 in Thickness around eyehole

heel Shaft, diameter as per Rule 255 mm Thrust Shaft, diameter at collars as fitted 330 mm

e Shaft, diameter as per Rule 317 mm Is the (tube screw) shaft fitted with a continuous liner no

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

eller boss If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner

heliner 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-

osive If two liners are fitted, is the shaft lapped or protected between the liners Is an approved Oil Gland fitted at the after

of stern tube No If so, state type as per approved plans Length of bearing in Stern Bush next to and supporting propeller 1550 mm

eller, dia. 3.510 Pitch 3.460 No. of blades 4 Material Bronze whether moveable no Total developed surface 4.20 m²

ent of inertia of propeller including entrained water (lbs. in² or Kg. cm²) 7.950 lb ft² Kind of damper, if fitted Spring coupling fitted

hod of reversing Engines direct Is a governor or other arrangement fitted to prevent racing of the engine yes Means of

ication forced Thickness of cylinder liners Are the cylinders fitted with safety valves yes Are the exhaust pipes and silencers water cooled

gged with non-conducting material yes If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned

to the engine Cooling Water Pumps, No. and how driven One M.E. driven SW Working F.W. One

Elect. Mot. Spare F.W. Elect. Mot. S.W. Elect. Mot. Ball the sea suction provided with an efficient strainer which can be cleared within the vessel yes

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

ps connected to the Main Bilge Line (No. and capacity of each 2 in 125 tons/hr each How driven by electric motors

e 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

gements

st Pumps, No. and capacity one 125 tons/hr Power Driven Lubricating Oil Pumps, including spare pump, No. and size one M.E. driven

two independent means arranged for circulating water through the Oil Cooler yes Branch Bilge Suctions

nd size:—In machinery spaces 3 in 125 (port, starboard) 80 mpm bore In pump room 2 in 125 (port, starboard) 80 mpm bore

olds, &c. 1 port 1 starboard in 125 1 hold aft; 1 port 1 starboard in 125 2 hold aft; 1 port 1 starboard in 125 3 hold aft. all at 80 mpm on plan

ct Bilge Suctions to the engine room bilges, No. and size 1 in 125 mpm bore and 2 in 80 mpm bore for flexible hoses

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

isible 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 Are they fixed

iently 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 below

hey 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

pipes pass through the bunkers How are they protected

pipes pass through the deep tanks 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

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

, or from one compartment to another yes Is the shaft tunnel watertight yes Is it fitted with a watertight door yes worked from main deck

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

Air Compressors, No. 2 No. of stages Two diameters stroke 44 mm 3 hr driven by elect. motor

ary Air Compressors, No. 1 No. of stages Two diameters stroke 10 mm 3 hr driven by elect. motor

Auxiliary Air Compressors, No. 1 (see overleaf) No. of stages Two diameters stroke 24 mm 3 hr driven by hand

provision is made for first charging the air receivers Hand compressor and (initially) pressure compressed air bottle

nging Air Pumps or Blowers, No. one Turbocharger How driven by the main engine exhaust gases (Turbo) Report No. Valenciennes Cert. 27-6-55

ary Engines Have they been made under survey yes Engine Nos. 208-209-210

Makers' name Societes du Nord at Maubeuge Position of each in engine room 2 on starboard side lower in

board) platform and one on port side lower platform

AIR RECEIVERS:—Have they been made under survey *Yes* State No. of report or certificate *112 Cert no 255*
State full details of safety devices *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 *Two* Total cubic capacity *4 cubic metres* Internal diameter *8 7/8 mm* thickness *12 mm*
Seamless, welded or riveted longitudinal joint *welded* Material *S.M. Steel* Range of tensile strength *42 kg/cm²* Working pressure *17.5 kg/cm²*
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 *Yes* Receivers *Yes* Separate fuel tanks *Yes*
Reduction gearing *Yes* General pumping arrangements *Yes* Pumping arrangements in machinery space *Yes*
Oil fuel burning arrangements *✓*
Have Torsional Vibration characteristics been approved *Yes* Date and particulars of approval *21 Oct. 1955*
SPARE GEAR. *for 500 RPM engine 150 " Prop*
Has the spare gear required by the Rules been supplied *Yes* State if for "short voyages" only *BSR not below 210 RPM*
State the principal additional spare gear supplied *also app for 516 or 600 RPM*

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building
During progress of work in shops - *4 visits: see Cleveland's Surveyor's Report no 1787 dated 14-9-55*
During erection on board vessel - *18 visits 1955 13 Jan. - 15 March - 30 May - 20 June - 23 July - 15 Sept - 10 & 26 Oct.*
Total No. of visits *22 visits*
Dates of examination of principal parts
Cylinders *10-3-56* Covers *10-3-56* Pistons *10-3-56* Rods *10-3-56* Connecting rods *10-3-56*
Crank shaft *10-3-56* Flywheel shaft *✓* Thrust shaft *10-3-56* Intermediate shafts *20-6-55* Tube shaft *✓*
Screw shaft *20-6-55* Propeller *23-7-55* Stern tube *23-7-55* Engine seatings *15-11-55* Engine holding down bolts *27-2-56*
Completion of fitting sea connections *23-7-55* Completion of pumping arrangements *24-2-56* Engines tried under working conditions *5-3-56 and 8 & 9-3-56*
Crank shaft, material *0.4. Steel* Identification mark *HOPE S128* Flywheel shaft, material *✓* Identification mark *HOPE S128*
Thrust shaft, material *✓* Identification mark *✓* Intermediate shafts, material *0.4. Steel* Identification marks *HOPE S128*
Tube shaft, material *✓* Identification mark *✓* Screw shaft, material *0.4. Steel* Identification mark *HOPE S128*
Identification marks on air receivers *FCM 82 T A/B WP 17.5 KGS CM2*
HOPE S128 29.750 KGS CM2 31-1-56 HST PF
Welded receivers, state Makers' Name *Forges et Chantiers de la Mediterranee*
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 *Yes*
Full description of fire extinguishing apparatus fitted in machinery spaces *2 hydraulic hoses, 4 portable (1 gal) and 1 on wheel (10 gal).*
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 *Yes*
What is the special notation desired *Strengthened for Navigation in Ice*
If the notation for ice strengthening is desired, state whether the requirements in this respect have been complied with *Yes*
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, Speed restrictions, etc.) *The main propulsion diesel engine and the reduction gearing have been built under survey and approved plans (see Cleveland's Rpt and Valenciennes Surv. Rpt. and Cert no 1787 & 465 respectively) forwarded herewith. The machinery has been installed under survey in accordance with the applicable requirements of the Rules, the approved plans and the Secretary's letters. The materials and the workmanship are good. The machinery was examined under working conditions during trials and under full service conditions during trials at sea with satisfactory results and in my opinion is eligible for classification with the notation of LMC N 3/56 and OG 3/56 subject to the emergency air compressors required to provide the initial charge of starting air being installed under survey during the next three months.*

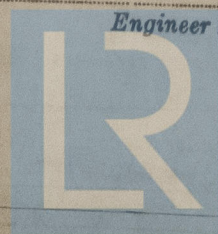
The amount of Entry Fee ... £ *131.00*
Special Survey Fee ... £ *128.200*
Donkey Boiler Fee ... *Spec. attch 5.000*
Travelling Expenses (if any) £ *38.000*

When applied for *22 March 56*
When received *✓* *19*

Committee's Minute *FRIDAY 18 MAY 1956*

Assigned *7 LMC 3. 56 - Subject.*

OG. (Tors. Endt.)



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