

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

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Date of writing Report 3rd Nov. 1947 When handed in at Local Office Amsterdam Port of Amsterdam
 No. in Survey held at Amsterdam Date, First Survey 17th October Last Survey 30th Oct. 1947
 Reg. Book 31986 on the S/S "AMSTELDIEP" (ex "Robert Fruin") Tons {Gross 7229.49
 {Net 4429.65
 Built at Portland Or. By whom built Oregon Shipbuilding Corp. Yard No. 2011 When built 1943
 Engines made at Portland Or. By whom made The Iron Fireman Mfg. Co. Engine No. 100 When made 1943
 Boilers made at Saginaw Mich. By whom made The Wickes Boiler Co. Boiler No. 41-44 When made 1943
 Registered Horse Power 2500 I.H.P. Owners Royal Netherlands Government Port belonging to the Hague
 Nom. Horse Power as per Rule 658 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes
 Trade for which vessel is intended Ocean Trade

ENGINES, &c.—Description of Engines vertical triple expansion Revs. per minute 76
 Dia. of Cylinders 24 1/2" x 37" x 70" Length of Stroke 48" No. of Cylinders 3 No. of Cranks 3
 Crank shaft, dia. of journals 14" as per Rule 14" Crank pin dia. 14 1/4" Crank webs shrunk Mid. length breadth ✓ Thickness parallel to axis LP: 9 1/2"
 as fitted 14 1/4" Mid. length thickness ✓ Thickness around eye-hole PINS: 7 1/8"
 Intermediate Shafts, diameter 13.33" as per Rule 14" Thrust shaft, diameter at collars 14" as fitted 14 1/4"
 as fitted 13 1/2" as fitted 14 1/4"

Tube Shafts, diameter ✓ as per Rule ✓ Screw Shaft, diameter 14.87" as per Rule 15 1/4" as fitted ✓ Is the tube shaft fitted with a continuous liner yes
 as fitted ✓ as fitted 15 1/4" as fitted ✓ as fitted ✓
 Bronze Liners, thickness in way of bushes 0.754" as per Rule 13/16" as fitted ✓ Thickness between bushes ✓ 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 or other appliance fitted at the after end of the tube at no If so, state type ✓ Length of Bearing in Stern Bush next to and supporting propeller 5' 1" ✓

Propeller, dia. 18' 6" Pitch 16' No. of Blades 4 Material Bronce whether Moveable solid Total Developed Surface 118 sq. feet
 Feed Pumps worked from the Main Engines, No. none Diameter ✓ Stroke ✓ Can one be overhauled while the other is at work ✓
 Bilge Pumps worked from the Main Engines, No. 2 Diameter 4 1/2" Stroke 26" Can one be overhauled while the other is at work yes
 Feed Pumps { No. and size 2 SIMPLEX - each 46 T/H Pumps connected to the Main Bilge Line { No. and size 1 FIRE & BILGE PUMP - 128 T/H
 { How driven steam { How driven steam 1 BALLAST & GEN. SERV. PUMP - 128 T/H 2 M.E. Pumps

Ballast Pumps, No. and size 1 DUPLEX (see above) Lubricating Oil Pumps, including Spare Pump, No. and size none
 Are two independent means arranged for circulating water through the Oil Cooler ✓ Suctions, connected both to Main Bilge Pumps and Auxiliary Bilge Pumps:—In Engine and Boiler Room AFT: 2 (φ 3") - tunnel recess; 1 (φ 3") - tunnel well; 1 (φ 2 1/2") - dry tank: 2 (φ 3")
 In Pump Room cofferdam: 2 (φ 2 1/2") In Holds, &c. totally 10 (φ 3") ? Deep tanks.

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1 (φ 10") Independent Power Pump Direct Suctions to the Engine and/or Boiler Room Bilges, No. and size 2 (φ 5")
 Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes yes no bilges
 Are the Bilge Suctions in the Machinery Space led from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges DRAIN WELLS
 Are all Sea Connections fitted direct on the skin of the ship inlet chests Are they fitted with Valves or Cocks yes
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates yes Are the Overboard Discharges above or below the deep water line below
 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 no
 What Pipes pass through the bunkers ✓ How are they protected ✓
 What pipes pass through the deep tanks suct. & deliv. pipes of No. 5 & 6 DB 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 yes Is it fitted with a watertight door yes worked from locally (will be altered)

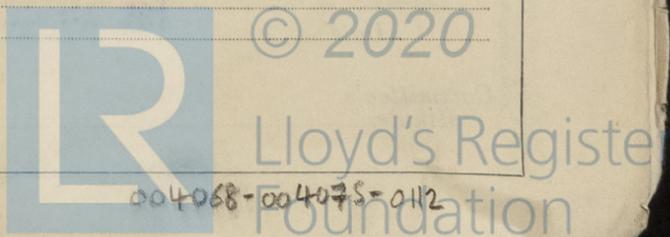
MAIN BOILERS, &c.—(Letter for record ✓) Total Heating Surface of Boilers 10,233 sq. ft
 Which Boilers are fitted with Forced Draft both Which Boilers are fitted with Superheaters both
 No. and Description of Boilers 2 Babcock & Wilcox type Working Pressure 240 lbs design 250 lbs Sft 230 lbs
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? yes
 IS A DONKEY BOILER FITTED? no If so, is a report now forwarded? ✓
 Can the donkey boiler be used for other than domestic purposes ✓

PLANS. Are approved plans forwarded herewith for Shafting ✓ Main Boilers yes Auxiliary Boilers ✓ Donkey Boilers ✓
 (If not state date of approval)
 Superheaters ✓ General Pumping Arrangements ✓ Oil fuel Burning Piping Arrangements ✓

SPARE GEAR.
 Has the spare gear required by the Rules been supplied yes, except a spare impellershaft for main circulating pump
 State the principal additional spare gear supplied spare tailshaft

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 Slides Covers

Pistons Piston Rods Connecting rods

Crank shaft Thrust shaft Intermediate shafts

Tube shaft Screw shaft Propeller

Stern tube Engine and boiler seatings Engines holding down bolts

Completion of fitting sea connections

Completion of pumping arrangements Boilers fixed Engines tried under steam 30-10-47

Main boiler safety valves adjusted 30-10-47 Thickness of adjusting washers Starb. boiler {STARB: 20,8 mm; PORT: 23,6 mm}; Port boiler {STARB: 23,6 mm; PORT: 20,8 mm}

Crank shaft material Identification Mark Thrust shaft material Identification Mark

Intermediate shafts, material Identification Marks Tube shaft, material Identification Mark

Screw shaft, material Identification Mark Steam Pipes, material steel Test pressure Date of Test

Is an installation fitted for burning oil fuel yes ✓ Is the flash point of the oil to be used over 150° F. yes ✓

Have the requirements of the Rules for the use of oil as fuel been complied with no (gutterways in boiler space not yet fitted)

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. yes ✓ If so, state name of vessel. "AMSTELLAND" A'dam Rpt N° 16444

General Remarks (State quality of workmanship, opinions as to class, &c.)

The machinery has been built under A.B.S. supervision.

The particulars have been verified as far as could be obtained on board and from drawings.

With regard to Circular N° 1871 and Secretary's letters on similar ships the following items remain to be dealt with to comply with the Rules

- a) Automatic feedwater regulators to be fitted to main boilers
- b) Gutterways with drainage arrangement to be made in boiler space in way of P & S settling tanks
- c) Spare impeller shaft for main circulating pump to be supplied
- d) Special Survey to be completed

The machinery is in a good condition. I am of opinion that this vessel is eligible to be classed with this Society with record of LMC (with date), subject to the above items (a-b-c-d) being dealt with at first available opportunity.

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

The amount of Entry Fee		on Survey Rpt. 9	When applied for,
Special	£	:	19
Donkey Boiler Fee	£	:	When received,
Travelling Expenses (if any)	£	:	19

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

Date 19 DEC 1944

Committee's Minute