

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

Date of writing Report 19 11 NOV 1948 When handed in at Local Office HULL 19 11 NOV 1948 Port of HULL

No. in Survey held at HULL Date, First Survey 20.9.48 Last Survey 29.10.1948
 Reg. Book. 52369 on the S.S. "BALTRADER". (Number of Visits 19)

Built at Hamburg By whom built Deutsche Werft A.G. Yard No. - When built 1945
 Engines made at -do- By whom made Ottensener Eisenwerk A.G. Engine No. - When made -do-
 Boilers made at - By whom made - Boiler No. - When made -

Registered Horse Power - Owners United Baltic Corporation, Ltd. Port belonging to London
 Nom. Horse Power as per Rule NHP=745 M.N. 318 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes
 Trade for which Vessel is intended General cargoes.

ENGINES, &c.—Description of Engines Double compound, steam reciprocating, Lentz. Revs. per minute 86
 Dia. of Cylinders (2) 1 1/2", (2) 3 7/16" Length of Stroke 25 7/16" No. of Cylinders 4 No. of Cranks 4
 Crank shaft, dia. of journals as per Rule Crank pin dia. 11 7/16" Crank webs Mid. length breadth 22 1/16" Thickness parallel to axis 6 5/8"
as fitted 11 7/16" Mid. length thickness 6 5/8" shrunk Thickness around eye-hole 5 1/4"
 Intermediate Shafts, diameter as per Rule Thrust shaft, diameter at collars as per Rule
as fitted 11 13/16" as fitted 11 1/4"
 Tube Shafts, diameter as per Rule Screw Shaft, diameter as per Rule Is the tube shaft fitted with a continuous liner -
as fitted - as fitted - screw
 Bronze Liners, thickness in way of bushes as per Rule Thickness between bushes as per Rule Is the after end of the liner made watertight in the propeller boss -
as fitted - as fitted - 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 tub shaft -
 If so, state type - Length of Bearing in Stern Bush next to and supporting propeller -
 Propeller, dia. 4300mm Pitch 3843mm No. of Blades 4 Material bronze whether Moveable No Total Developed Surface - sq. feet
 Feed Pumps worked from the Main Engines, No. - Diameter - Stroke - Can one be overhauled while the other is at work -
 Bilge Pumps worked from the Main Engines, No. - Diameter - Stroke - Can one be overhauled while the other is at work -
 Feed Pumps { No. and size 2 @ 8" x 6" x 16" Pumps connected to the { No. and size 2-1 @ 9" x 10" x 15", 1 @ 4" x 4" x 7"
 How driven Steam Main Bilge Line { How driven Steam Steam
 Ballast Pumps, No. and size 1 @ 9" x 10" x 15" Lubricating Oil Pumps, including Spare Pump, No. and size -
 Are two independent means arranged for circulating water through the Oil Cooler - Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge Pumps;—In Engine and Boiler Room E.R. 4 @ 3", B.R. 2 @ 3", 1 @ 2 3/4"
 In Pump Room - In Holds, &c. No. 1-2 @ 2 1/2", No. 2-3", No. 3 - 2 @ 3".

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1 - 7 7/8" Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1 @ 5"
 Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes Yes
 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 Yes
 Are all Sea Connections fitted direct on the skin of the ship Yes Are they fitted with Valves or Cocks valves and cocks.
 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 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 Yes
 What Pipes pass through the bunkers none How are they protected -
 What pipes pass through the deep tanks none 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 top deck

MAIN BOILERS, &c.—(Letter for record -) Total Heating Surface of Boilers 5275 (Blr. 3660 & spt. 1615)
 Which Boilers are fitted with Forced Draft Both Which Boilers are fitted with Superheaters Both
 No. and Description of Boilers 2 Capus (Water tube & Scotch combined) Working Pressure 216 lb/sq. in.
 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 domestic purposes only -
 PLANS. Are approved plans forwarded herewith for Shafting - Main Boilers - Auxiliary Boilers - Donkey Boilers -
 Superheaters - General Pumping Arrangements - Oil fuel Burning Piping Arrangements -

SPARE GEAR.

Has the spare gear required by the Rules been supplied -
 State the principal additional spare gear supplied -

The foregoing is a correct description.

Manufacturer.



During progress of work in shops - -
 Dates of Survey while building
 During erection on board vessel - - -
 Total No. of visits

Dates of Examination of principal parts—Cylinders 5/10/48. Slides - Covers 5/10/48.

Pistons 5/10/48. Piston Rods 5/10/48. Connecting rods 5/10/48.

Crank shaft 18/10/48. Thrust shaft 18/10/48. Intermediate shafts 18/10/48.

Tube shaft - Screw shaft - Propeller 5/10/48.

Stern tube - Engine and boiler seatings - Engines holding down bolts -

Completion of fitting sea connections examined 5/10/48.

Completion of ^{exam} of pumping arrangements 24/10/48. Boilers fixed - Engines tried under steam 24/10/48.

Main boiler safety valves adjusted 26/10/48. Thickness of adjusting washers P. 25/32", S. 1/2", P. 15/32", S. 13/32"

Crank shaft material Steel Identification Mark - Thrust shaft material Steel Identification Mark -

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

Screw shaft, material - Identification Mark - Steam Pipes, material steel Test pressure 550lbs. Date of Test 15.10.48.

Is an installation fitted for burning oil fuel No ✓ Is the flash point of the oil to be used over 150°F. -

Have the requirements of the Rules for the use of oil as fuel been complied with -

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 -

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 Hansa Type.

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

The machinery and boilers of this vessel are of German material and construction. The main and aux. machinery has been opened out, examined in its entirety and found or placed in satisfactory condition.

The screw shaft was not seen at this time.

The machinery of this vessel is eligible in my opinion to have a record of L.M.C. 10,48 made in the Register Book.

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

L. Tait Williams
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute THURS 23 DEC 1948

Assigned LMC 10.48

The Surveys are requested to be sent to the Committee's Minute.