

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

DEC 12 1939

Date of writing Report 9-12-1939 When handed in at Local Office 9-12-1939 Port of Leith

No. in Survey held at Leith Date, First Survey 16-11-39 Last Survey 2-12-1939

Reg. Book. 25626 on the S.S. "CROWN ARUN" ex "HANNAH BÖGE"

Built at Kostock By whom built Neptunwerft, Kostock, G.M.B.H. Yard No. _____ Tons { Gross 2372 Net 1371 When built 1938

Engines made at Altona By whom made Ottensener, Mel., G.M.B.H. Engine No. _____ when made _____

Boilers made at _____ By whom made Neptun, G.M.B.H., Kostock Boiler No. _____ when made _____

Registered Horse Power _____ Owners Ministry of Shipping Port belonging to London

Nom. Horse Power as per Rule _____ Is Refrigerating Machinery fitted for cargo purposes No. Is Electric Light fitted YES

Trade for which Vessel is intended _____

ENGINES, &c.—Description of Engines Leitz Reciprocating & a Bauer-Wach Turbine Revs. per minute _____

Dia. of Cylinders 2(14 1/16) 2(31 1/2) Length of Stroke 31 1/2 No. of Cylinders 4 No. of Cranks 4

Crank shaft, dia. of journals as per Rule _____ as fitted 10.118 Crank pin dia. 10.118 Crank webs Mid. length breadth _____ Thickness parallel to axis _____ Mid. length thickness _____ Thickness around eye-hole _____

Intermediate Shafts, diameter as per Rule _____ as fitted 10.158 Thrust shaft, diameter at collars as per Rule _____ as fitted 10.236

Tube Shafts, diameter as per Rule _____ as fitted _____ Screw Shaft, diameter as per Rule _____ as fitted 13 Is the ~~tubo~~ screw shaft fitted with a continuous liner No.

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 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 shaft YES If so, state type Not known Length of Bearing in Stern Bush next to and supporting propeller 4'-6 3/4"

Propeller, dia. _____ Pitch _____ No. of Blades 4 Material Bronze whether Movable No. Total Developed Surface _____ 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 3 1/2 Stroke 14.125 Can one be overhauled while the other is at work YES

Feed Pumps { No. and size 2 Heuthe Worthington 7.087 + 5.315 + 13.78 Pumps connected to the { No. and size Main Engine, Ballast & Gen. Service Pumps How driven Steam Main Bilge Line { How driven _____

Ballast Pumps, No. and size one, 6.693 + 8.661 + 20.669 Lubricating Oil Pumps, including Spare Pump, No. and size one for the Turbine

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 1 Port, 1 Star in boiler room, 2 Star side of engine room, 2 Port side of engine room, 1 to tunnel well & 1 to forward end of tunnel.

In Holds, &c. Forward Hold, 1 Port, 1 Star; Aft Hold, 1 Port, 1 Star forward & 1 Port, 1 Star aft.

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1 at 5 1/4" O.D. Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size one at 4" O.D. 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 Both

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 _____

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 _____ 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 YES Is it fitted with a watertight door YES worked from Top of engine room

MAIN BOILERS, &c.—(Letter for record S) Total Heating Surface of Boilers 2933

Is Forced Draft fitted YES No. and Description of Boilers 2 cylindrical, single ended Working Pressure 228 lbs/sq"

IS A REPORT ON MAIN BOILERS NOW FORWARDED? YES

IS A DONKEY BOILER FITTED? No. If so, is a report now forwarded? _____

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. State the articles supplied:— Propeller, screw shaft & stern bush & as per rule requirement.

RETAIN

The foregoing is a correct description,

Manufacturer.



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Lloyd's Register Foundation

Rpt. 5
 Date of ...
 No. in Reg. Book. 5620
 Master.
 Engines
 Boilers
 Nominal
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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 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
 Main boiler safety valves adjusted 228 lbs/0" Thickness of adjusting washers PORT BOILER: P=1 1/2" S=2 3/32" SUP=1/16" STARBOARD BOILER: P=3 3/32" S=2 3/32" SUP=1/16"
 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 Test pressure Date of Test
 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
 Is this machinery duplicate of a previous case If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, &c.)
 The above information is forwarded for the consideration of the Committee.
 See report 9.

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 ... £	:	:	When applied for,
Special ... £	See Rpt. 9.	:	19
Donkey Boiler Fee ... £	:	:	When received,
Travelling Expenses (if any) £	:	:	19

J. Campbell
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI. 29 DEC 1939
 Assigned Lamb 12.39
 Spt. 72, Og. 11.29

