

Report on Steam Turbine Machinery. No. 17267

Received at London Office 26 JUN 1945

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Date of writing Report 18th June 1945. When handed in at Local Office 20th July 1945 Port of NIDDERBROUGH.
Name of Vessel in Survey held at Haverton Hill-on-Tees. Date, First Survey 12th Oct. 1944 Last Survey 31st May, 1945.
Type of Book (Number of Visits 38.)
Name of Vessel on the S.S. "WAVE REGENT". Tons {Gross 2184 Net 4554
Built at Haverton Hill-on-Tees. By whom built Furness Shipbuilding Co. Yard No. 363 When built 1945-5
Engines made at West Hartlepool. By whom made Richardsons Westgarth & Co. Ltd. Engine No. 2752 When made 1945
Boilers made at -do- By whom made -do- Boiler No. 2752 When made 1945.
Shaft Horse Power at Full Power 6800 Owners Admiralty. Port belonging to London
Nom. Horse Power as per Rule 1210 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes
Trade for which Vessel is intended

STEAM TURBINE ENGINES, &c.—Description of Engines

At end of Turbine Direct coupled, single reduction geared } to propelling shafts. No. of primary pinions to each set of reduction gearing }
Direct coupled for Alternating Current Generator phase periods per second } rated Kilowatts Volts at revolutions per minute;
Direct Current Generator }
for supplying power for driving Propelling Motors, Type.
rated Kilowatts Volts at revolutions per minute. Direct coupled, single or double reduction geared to propelling shafts.

	H. P.			I. P.			L. P.			ASTERN.		
	HEIGHT OF BLADES.	DIAMETER AT TIP.	NO. OF ROWS.	HEIGHT OF BLADES.	DIAMETER AT TIP.	NO. OF ROWS.	HEIGHT OF BLADES.	DIAMETER AT TIP.	NO. OF ROWS.	HEIGHT OF BLADES.	DIAMETER AT TIP.	NO. OF ROWS.
1st Expansion												
2nd												
3rd												
4th												
5th												
6th												
7th												
8th												
9th												
10th												
11th												
12th												

Horse Power at each turbine H.P. I.P. L.P. Revolutions per minute, at full power, of each Turbine Shaft H.P. I.P. L.P. 1st reduction wheel main shaft.
Rotor Shaft diameter at journals H.P. I.P. L.P. Pitch Circle Diameter {1st pinion 1st reduction wheel 2nd pinion main wheel Width of Face {1st reduction wheel main wheel

Distance between centres of pinion and wheel faces and the centre of the adjacent bearings {1st pinion 1st reduction wheel 2nd pinion main wheel

Pinion Shafts, diameter at bearings External Internal 1st 2nd diameter at bottom of pinion teeth 1st 2nd

Wheel Shafts, diameter at bearings {1st diameter at wheel shroud, 1st Generator Shaft, diameter at bearings main Propelling Motor Shaft, diameter at bearings

Intermediate Shafts, diameter as per rule as fitted Thrust Shaft, diameter at collars as per rule as fitted

Shaft, diameter as per rule as fitted Screw Shaft, diameter as per rule as fitted Is the {tube screw} shaft fitted with a continuous liner {

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

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 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

If so, state type Length of Bearing in Stern Bush next to and supporting propeller

Propeller, diameter Pitch No. of Blades State whether Moveable Total Developed Surface square feet

Single Screw, are arrangements made so that steam can be led direct to the L.P. Turbine Can the H.P. or I.P. Turbines exhaust direct to the

No. of Turbines fitted with astern wheels Feed Pumps {No. and size How driven

Pump connected to the Main Bilge Line {No. and size How driven

Ballast Pumps, No. and size Lubricating Oil Pumps, including Spare Pump, No. and size

Two independent means arranged for circulating water through the Oil Cooler Suctions, connected both to Main Bilge Pumps and Auxiliary

Pumps, No. and size:—In Engine and Boiler Room In Pump Room

Holds, &c. Bilge Pump Room 3.24" Bone Peak 1.44"

Water Circulating Pump Direct Bilge Suctions, No. and size Independent Power Pump Direct Suctions to the Engine Room

Pipes, No. and size Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes

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

Are all Sea Connections fitted direct on the skin of the ship Are they fitted with Valves or Cocks

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Are the Overboard Discharges above or below the deep water

Are they each fitted with a Discharge Valve always accessible on the plating of the vessel Are the Blow Off Cocks fitted with a spigot and brass covering plate 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

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 Is the Shaft Tunnel watertight Is it fitted with a watertight door worked from

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

Is Forced Draft fitted..... No. and Description of Boilers.....

Working Pressure.....

Is a Report on Main Boilers now forwarded?

See Hantlepool Report No. 18619

Is { a Donkey } Boiler fitted? Yes

{ an Auxiliary }

If so, is a report now forwarded? See Middlesbrough Rpts Nos. 17790 & 17797.

Is the donkey boiler intended to be used for domestic purposes only.....

Plans. Are approved plans forwarded herewith for Shafting..... (If not, state date of approval)

Main Boilers.....

Auxiliary Boilers.....

Donkey Boilers.....

Superheaters.....

General Pumping Arrangements.....

Oil Fuel Burning Arrangements.....

SPARE GEAR.

Has the spare gear required by the Rules been supplied.....

State the principal additional spare gear supplied.....

As per rule requirements (see also attached list).

The foregoing is a correct description,

Dates of Survey while building

During progress of work in shops - - -
During erection on board vessel - - -
Total No. of visits.....

1944. Oct. 12, Nov. 3, 15, 30, Dec. 6, 1945. Jan. 9, 19, Feb. 3, 16, 19, 22, 26, 28, March

7, 12, 15, 16, 19, 21, April, 7, 10, 13, 15, 16, 19, 24, 25, 27, May, 2, 4, 11, 25, 24, 25, 26, 30.

Dates of Examination of principal parts—Casings.....

Rotors.....

Blading.....

Gearing.....

Wheel shaft.....

Thrust shaft.....

Intermediate shafts.....

Tube shaft.....

Screw shaft.....

Propeller.....

Stern tube.....

Engine and boiler seatings.....

Engine holding down bolts.....

Completion of fitting sea connections.....

Completion of pumping arrangements.....

Boilers fixed.....

Engines tried under steam.....

Main boiler safety valves adjusted.....

Thickness of adjusting washers.....

Rotor shaft, Material and tensile strength.....

Identification Mark.....

Flexible Pinion Shaft, Material and tensile strength.....

Identification Mark.....

Pinion shaft, Material and tensile strength.....

Identification Mark.....

1st Reduction Wheel Shaft, Material and tensile strength.....

Identification Mark.....

Wheel shaft, Material.....

Identification Mark.....

Thrust shaft, Material.....

Identification Mark.....

Intermediate shafts, Material.....

Identification Marks.....

Tube shaft, Material.....

Identification Marks.....

Screw shaft, Material.....

Identification Marks.....

Steam Pipes, Material.....

Test pressure.....

Date of test.....

Is an installation fitted for burning oil fuel.....

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.....

Yes

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 a duplicate of a previous case.....

Yes

If so, state name of vessel.....

"WAVE GOVERNOR".

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

These engines and boilers were fitted on board this vessel in accordance with the approved plans and rule requirements and on completion the machinery was tried out under working conditions and found satisfactory and in my opinion is now eligible for record of R.M.C. 15.45 and notation of TS/CL 15.45. forced draught and superheated.

Certificate (if required) to be sent to

The amount of Entry Fee ... £	:	:	When applied for.
Special	IMO	£ 26 - 1 - 6d.	25.3.19.47.
Donkey Boiler Fee ... £	:	:	When received.
Supervision.			
Travelling Expenses (if any) £	6-10-4d.	:	19.

L. Norman Stuart

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute.....

FRI. 13 JUL 1945

Assigned.....

+ Lmc 6.45



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