

# REPORT ON STEAM TURBINE MACHINERY.

No. 51618.  
17 JUN 1942

Date of writing Report 15-6-42 When handed in at Local Office 16 JUN 1942 Port of HULL  
 No. in Survey held at Hull Date, First Survey 15.5.42. Last Survey 22.5.1942.  
 Reg. Book. 2157 on the S.S. HOBBERA, EX EMPIRE CHEETAH (Number of Visits 2)  
 26916 Built at Seattle, Wash. By whom built Skinner & Eddy Corp. Yard No. 21 Tons Gross 5507 Net 3412 3413  
 Engines made at Schenectady By whom made General Electric Co. Engine No. 13927 When built 1918  
 Boilers made at Seattle, Wash. By whom made Commercial Boiler Works Boiler No. 5375-67 When made 1918  
 Shaft Horse Power at Full Power 2500 Owners, Netherland Shipping & Trading Committee Ltd. Port belonging to  
 Nom. Horse Power as per Rule 509.7 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes  
 Trade for which Vessel is intended General Cargo.

## STEAM TURBINE ENGINES, &c. — Description of Engines

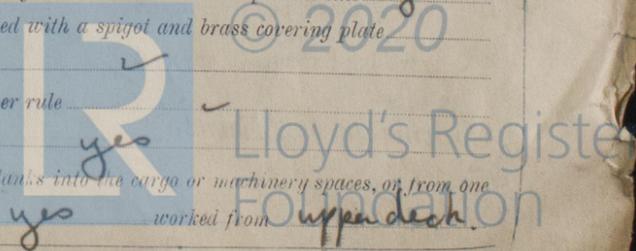
No. of Turbines Ahead Direct coupled, single reduction geared } to propelling shafts, No. of primary pinions to each set of reduction gearing  
 Astern double reduction geared }  
 direct coupled to Alternating Current Generator phase periods per second } rated Kilowatts Volts at revolutions per minute;  
 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.

TURBINE BLADING	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												

Shaft 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 }  
 Flexible Pinion Shafts, diameter { 1st 2nd } Pinion Shafts, diameter at bearings External Internal { 1st 2nd } diameter at bottom of pinion teeth { 1st 2nd }  
 Wheel Shafts, diameter at bearings { 1st main } diameter at wheel shroud, { 1st main } Generator Shaft, diameter at bearings Propelling Motor Shaft, diameter at bearings  
 Intermediate Shafts, diameter as per rule as fitted Thrust Shaft, diameter at collars as per rule as fitted  
 Tube 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 { }  
 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 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 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.

If Single Screw, are arrangements made so that steam can be led direct to the L.P. Turbine Can the H.P. or I.P. Turbine exhaust direct to the Condenser No. of Turbines fitted with astern wheels Feed Pumps No. and size Two vent. Worthington Simpson 10" x 7" x 24" How driven Steam driven ENG. BILGE PUMP 6 x 5 3/4 x 6 HORIZ. STEAM DRIVEN  
 Pumps connected to the Main Bilge Line No. and size Two:—F.B. 12 x 8 1/2 x 12 How driven STEAM DRIVEN Lubricating Oil Pumps, including Spare Pump, No. and size 3-6 x 7 1/2 x 6, 7 1/2 x 8 1/2 x 10  
 Ballast Pumps, No. and size One 12 x 10 x 12" F.B. 12 x 8 1/2 x 12 Are two independent means arranged for circulating water through the Oil Cooler yes Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge Pumps, No. and size:—In Engine and Boiler Room Six 2 3/4 dia. In Pump Room  
 In Holds, etc. Two 3 1/2 in No. 1, 2, 3, 4 & 5 Holds, One 3 1/2 in Tunnel well Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes yes  
 Main Water Circulating Pump Direct Bilge Suctions, No. and size One 10 dia Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size Two:—One 6 and One 4 Are 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 at  
 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 yes  
 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  
 What pipes pass through the bunkers none How are they protected  
 What pipes pass through the deep tanks no deep tank 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

W1133-0083



**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?

Is { a Donkey } Boiler fitted? If so, is a report now forwarded?  
 { an Auxiliary }

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

Plans. Are approved plans forwarded herewith for Shafting Main Boilers Auxiliary Boilers Donkey Boilers  
 (If not state date of approval)

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

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—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. 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 a duplicate of a previous case If so, state name of vessel

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

*[Handwritten notes and signatures in the Remarks section]*

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

*John Douglas*  
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUE 21 JUL 1942

Assigned *No action*



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