

REPORT ON STEAM TURBINE MACHINERY. No. 47899

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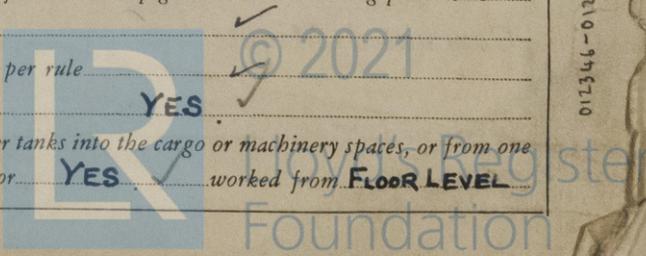
Report No. 1947 When handed in at Local Office 1947 Port of **NEW YORK**
 Survey held at **HOBOKEN NJ** Date, First Survey **4TH JUNE** Last Survey **23RD JULY 1947**
 on the **SINGLE SCREW "GRAVENCHON" EX "SEDAN"** (Number of Visits **8**) Tons { Gross **10296**
 Net **6154**
 made at **CHESTER PA** By whom built **SUN S.B. AND DRY DOCK CO.** Yard No. **462** When built **4, 1945**
 made at **LYNN MASS** By whom made **GENERAL ELECTRIC CO.** Engine No. When made **4, 1945**
 made at **BARBERTON OHIO** By whom made **BABCOCK AND WILCOX CO.** Boiler No. When made **4, 1945**
 Horse Power at Full Power **6000** Owners **GOVERNMENT DE LA REPUBLIQUE FRANCAISE** Port belonging to **LE HAVRE**
 Horse Power as per Rule **1324** Is Refrigerating Machinery fitted for cargo purposes **NO** Is Electric Light fitted **YES**
 for which Vessel is intended **PETROLEUM IN BULK**

M TURBINE ENGINES, &c.—Description of Engines **ONE CURTIS IMPULSE 10 STAGE TURBINE**
 Ahead **ONE** Direct coupled, single reduction geared } to propelling shafts. No. of primary pinions to each set of reduction gearing
 Astern **✓** double reduction geared }
 coupled to { Alternating Current Generator **3** phase **62** periods per second } rated **5400** Kilowatts **2370** Volts at **3715** revolutions per minute;
 Direct Current Generator }
 driving power for driving **ONE** Propelling Motor, Type **3 PHASE, 62 CYCLE, 80 POLE, REVOLVING-FIELD, SALIENT POLE, SYNCHRONOUS**
6000 BHP Kilowatts **2300** Volts at **90** revolutions per minute. Direct coupled, single or double reduction geared to **ONE** propelling shafts.

EXPANSION	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.
7/8"	34"	2										
1"	34"	1										
1 1/4"	34 3/8"	1										
1 5/8"	35 1/4"	1										
1 7/8"	42 1/2"	1										
1 3/8"	43 1/2"	1										
2 1/8"	45 1/2"	1										
2 1/2"	47"	1										
5 1/2"	49 1/2"	1										
9"	56"	1										

Horse Power at turbine **6000** Revolutions per minute, at full power, of Turbine Shaft **3715** 1st reduction wheel
90 main shaft
 Shaft diameter at journals { H.P. **5 AND 10"** I.P. Pitch Circle Diameter { 1st pinion 1st reduction wheel
 L.P. { 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 diameter { 1st Pinion Shaft, diameter at bearings External 1st { 2nd { diameter at bottom of pinion teeth { 1st { 2nd {
 Internal {
 Shaft, diameter at bearings { 1st diameter at wheel shroud { 1st Generator Shaft, diameter at bearings **10"**
 main Propelling Motor Shaft, diameter at bearings **18 1/2" 17 1/2"**
 Intermediate Shafts, diameter as per rule **16 1/2"** Thrust Shaft, diameter at collars as per rule **17.325**
 as fitted **16 3/8"** as fitted **18" 17 1/2"** Tube Shaft, diameter as per rule
 Shaft, diameter as per rule **18 5/8"** Is the screw shaft fitted with a continuous liner **YES** Bronze Liners, thickness in way of bushes as per rule **85"**
 as fitted **18 5/8"** as fitted **1 1/8"**
 Distance between bushes as per rule **65** 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
 as fitted **1** 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
 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
 appliance fitted at the after end of the tube shaft **NO** Length of Bearing in Stern Bush next to and supporting propeller **7'-3"**
 Propeller, diameter **19'-6"** Pitch **17'-6"** No. of Blades **4** State whether Moveable **NO** Total Developed Surface **138.3** square feet.
 Can the H.P. or I.P. Turbine exhaust direct to the
 No. of Turbines fitted with astern wheels **NONE** Feed Pumps { No. and size **2** CENT. **200 GPM** **1** SIMPLEX **10x7x24**
 How driven **TURBINE** **STEAM CYL.**
 connected to the Main Bilge Line { No. and size **2** - **BILGE @ 175 GPM** **1** - **GEN SERVICE @ 450 GPM**
 How driven **ELECTRIC MOTOR** **ELECTRIC MOTOR**
 Pumps, No. and size **ONE @ 10x7x10 DUPLEX** Lubricating Oil Pumps, including Spare Pump, No. and size **2** - **VERT ROTARY 60 GPM**
 independent means arranged for circulating water through the Oil Cooler **YES** Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge
 No. and size:—In Engine and Boiler Room **10 @ 3"** **2 @ 4"**
 Pumps, &c. **BOSWAIN'S STORE 2-1" EJECTORS CHAIN LOCKER 2" EJECTOR FOR PUMP ROOM** { **ONE 10x7x10 BILGE PUMP STEAM DUPLEX**
2 1/2" SECTION P4S DRY STORES 2 1/2" P4S PUMP ROOM
 Water Circulating Pump Direct Bilge Suctions, No. and size **1** - **18" DIA.** Independent Power Pump Direct Suctions to the Engine Room
 No. and size **2 @ 4"** Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes
 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**
 Sea Connections fitted direct on the skin of the ship **CHESTS OR SPOOL PIECES** Are they fitted with Valves or Cocks **VALVES**
 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**
 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**
 Pipes pass through the bunkers **NONE** How are they protected
 Pipes pass through the deep tanks **NONE** Have they been tested as per rule
 Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times **YES**
 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 **FLOOR LEVEL**

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BOILERS, &c.— (Letter for record **S**) Total Heating Surface of Boilers **9868**
 Is Forced Draft fitted **YES** No. and Description of Boilers **2 - BABCOCK & WILCOX, SINGLE PASS STRAIGHT TUBE** Working Pressure **50**
 Is a Report on Main Boilers now forwarded? **YES**
 Is **a Donkey** Boiler fitted? **No** If so, is a report now forwarded?
 Is **an Auxiliary** Boiler fitted? **No** If so, is a report now forwarded?
 Plans. Are ~~approved~~ plans forwarded herewith for Shafting **YES** Main Boilers **YES** Auxiliary Boilers Donkey Boilers
 (If not state date of approval)
 Superheaters **YES** General Pumping Arrangements **YES** Oil Fuel Burning Arrangements **YES**
 Spare Gear. State the articles supplied:— **AS PER RULE REQUIREMENTS**

The foregoing is a correct description,

Dates of Survey while building { During progress of work in shops - - } **AMERICAN BUREAU SURVEY**
 { 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 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 **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 **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 _____
 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.) **The machinery of this vessel was constructed under the Special Survey, and to the requirements, of the American Bureau of Shipbuilding and U.S. Coast Guards, and the materials and workmanship are considered satisfactory.**

The scantlings, and general arrangements have been checked as far as practicable and found to conform to available plans, copies of which are attached herewith.

For recommendations as to class etc please see Report 9 attached

The amount of Entry Fee	£	:	:	When applied for,
Special	£	See	✓	19
Donkey Boiler Fee	£	Report 9	:	When received,
Travelling Expenses (if any)	£	:	:	19

H. J. Daunders
 Engineer Surveyor to Lloyd's Register of Shipping.

NEW YORK OCT 1 1947

Committee's Minute

Assigned **LMC-7, 47.**

