

REPORT ON STEAM TURBINE MACHINERY. No. 3716

Received at London Office 26 OCT 1942

Date of writing Report Mar. 31, 1942 When handed in at Local Office

19

Port of Boston, Massachusetts

No. in Survey held at

Lynn, Mass.

Date, First Survey

Last Survey

19

Reg. Book.

on the

s/s 'FAIRPORT'

(Number of Visits)

Tons

Gross

Net

Built at Mobile, Ala.

By whom built Gulf S.B. Co.

Yard No. HP 45757

When built 1942

Engines made at Lynn, Mass.

By whom made General Electric Co.

Engine No. LP 45758

When made 1942

Boilers made at

By whom made

Boiler No.

When made

Shaft Horse Power at Full Power

Owners.

Port belonging to

Nom. Horse Power as per Rule

Is Refrigerating Machinery fitted for cargo purposes

Is Electric Light fitted

Trade for which Vessel is intended

STEAM TURBINE ENGINES, &c.—Description of Engines Cross Compound Turbines and double reduction gears

No. of Turbines Ahead 2 Direct coupled, single reduction geared to 1 propelling shafts. No. of primary pinions to each set of reduction gearing 2

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	.925"	29.645"	1	X	X	X	1.195"	35.203"	1	1.130"	37.418"	2
2ND	.680"	17.898"	1				1.735"	36.083"	1	3.94"	41.252"	1
3RD	.740"	18.018"	1				2.320"	37.028"	1			
4TH	.820"	18.178"	1				3.170"	38.528"	1			
5TH	.950"	18.438"	1				4.86"	40.97"	1			
6TH	1.000"	18.538"	1				7.25"	44.488"	1			
7TH	1.110"	18.758"	1				9.56"	48.073"	1			
8TH	1.230"	18.998"	1									
9TH	1.480"	19.498"	1									
10TH	1.710"	19.958"	1									
11TH	2.000"	20.538"	1									
12TH												

Shaft Horse Power at each turbine H.P. 3000 I.P. -- L.P. 3000

Revolutions per minute, at full power, of each Turbine Shaft HP 8.4" LP 12.6" LP 14.88"

Rotor Shaft diameter at journals H.P. 3.00" I.P. 5.5" L.P. 6.00"

Distance between centres of pinion and wheel faces and the centre of the adjacent bearings 1st pinion LP 15" 2nd pinion LP 26-1/2"

Flexible Pinion Shafts, diameter 1st 9.0" 2nd None

Wheel Shafts, diameter at bearings 1st 9.0" 2nd 21.0"

Intermediate Shafts, diameter as per rule as fitted

Tube Shaft, diameter as per rule as fitted

Screw Shaft, diameter as per rule as fitted

Bronze Liners, thickness in way of bushes as per rule 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 tube

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 L.P. Turbine exhaust direct to the

Condenser No. of Turbines fitted with astern wheels

Feed Pumps No. and size How driven

Pumps 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

Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge

In Pump Room

Main Water Circulating Pump Direct Bilge Suctions, No. and size

Independent Power Pump Direct Suctions to the Engine Room

Bilges, 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 line

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

