

# REPORT ON MACHINERY.

No. 14606  
~~15570~~

REC'D NEW YORK Jan 25 1918

Received at London Office.....

Date of writing Report \_\_\_\_\_ When handed in at Local Office \_\_\_\_\_ Port of NEW YORK N.Y.

in - Survey held at SCHENECTADY N.Y. Date, First Survey \_\_\_\_\_ Last Survey \_\_\_\_\_ 19 \_\_\_\_\_

g. Book. \_\_\_\_\_ on the S/S Westlake (Number of Visits \_\_\_\_\_)

Tons { Gross \_\_\_\_\_ Net \_\_\_\_\_

Master \_\_\_\_\_ Built at \_\_\_\_\_ By whom built \_\_\_\_\_ When built \_\_\_\_\_

Engines made at SCHENECTADY N.Y. By whom made GENERAL ELECTRIC CO. when made 1918.

Boilers made at \_\_\_\_\_ By whom made \_\_\_\_\_ when made \_\_\_\_\_

Registered Horse Power \_\_\_\_\_ Owners \_\_\_\_\_ Port belonging to \_\_\_\_\_

Shaft Horse Power at Full Power 2500 Is Refrigerating Machinery fitted for cargo purposes \_\_\_\_\_ Is Electric Light fitted \_\_\_\_\_

**TURBINE ENGINES, &c.**—Description of Engines GEARED TURBINE (TURBINE. 12466) (GEAR. 2572) No. of Turbines ONE.

Diameter of Rotor Shaft Journals, H.P. 8" L.P. \_\_\_\_\_ Diameter of Pinion Shaft 4"

Diameter of Journals H.S. PINION 7" Distance between Centres of Bearings " GEAR 3 3/4" Diameter of Pitch Circle " GEAR 57.666"

Diameter of Wheel Shaft 14" Distance between Centres of Bearings L.S. PINION 5 1/2" Diameter of Pitch Circle of Wheel L.S. PINION 10.75"

Width of Face 14.35" Diameter of Thrust Shaft under Collars \_\_\_\_\_ Diameter of Tunnel Shaft \_\_\_\_\_ as per rule \_\_\_\_\_ as fitted \_\_\_\_\_

No. of Screw Shafts \_\_\_\_\_ Diameter of same \_\_\_\_\_ as per rule \_\_\_\_\_ as fitted \_\_\_\_\_ Diameter of Propeller \_\_\_\_\_ Pitch of Propeller \_\_\_\_\_

No. of Blades \_\_\_\_\_ State whether Moveable \_\_\_\_\_ Total Surface \_\_\_\_\_ Diameter of Rotor Drum, H.P. \_\_\_\_\_ L.P. \_\_\_\_\_ Astern \_\_\_\_\_

Thickness at Bottom of Groove, H.P. \_\_\_\_\_ L.P. \_\_\_\_\_ Astern \_\_\_\_\_ Revs. per Minute at Full Power, Turbine 3374.5 Propeller 90.

## PARTICULARS OF BLADING.

T	EXPANSION	ACTIVE			L. P.			ASTERN.		
		HEIGHT OF BLADES.	H. P. PITCH DIAMETER AT TIP.	NO. OF ROWS.	HEIGHT OF BLADES.	DIAMETER AT TIP.	NO. OF ROWS.	HEIGHT OF BLADES.	DIAMETER AT TIP.	NO. OF ROWS.
		<u>.75 - 1.25</u>	<u>2 - 1 1/2</u>	<u>2</u>			<u>.875 - 1.5</u>	<u>2 - 3</u>	<u>2</u>	
		<u>.625</u>	<u>3.9</u>	<u>1</u>			<u>2.375</u>	<u>2 - 3</u>	<u>1</u>	
		<u>1.25</u>	<u>3.10 1/2</u>	<u>1</u>						
		<u>2.5</u>	<u>H - 0</u>	<u>1</u>						
		<u>6</u>	<u>H - 2</u>	<u>1</u>						

Do. \_\_\_\_\_ and size of Feed pumps

Do. \_\_\_\_\_ and size of Bilge pumps

Do. \_\_\_\_\_ and size of Bilge suction in Engine Room.

In Holds, &c.

No. of Bilge Injections \_\_\_\_\_ sizes \_\_\_\_\_ Connected to condenser, or to circulating pump \_\_\_\_\_ Is a separate Donkey Suction fitted in Engine Room & size \_\_\_\_\_

Are all the bilge suction pipes fitted with roses \_\_\_\_\_ Are the roses in Engine room always accessible \_\_\_\_\_

Are all connections with the sea direct on the skin of the ship \_\_\_\_\_ Are they Valves or Cocks \_\_\_\_\_

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates \_\_\_\_\_ Are the Discharge Pipes 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 \_\_\_\_\_

Are all pipes carried through the bunkers \_\_\_\_\_ How are they protected \_\_\_\_\_

Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times \_\_\_\_\_

Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges \_\_\_\_\_

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

**BOILERS, &c.**—(Letter for record \_\_\_\_\_) Manufacturers of Steel \_\_\_\_\_

Total Heating Surface of Boilers \_\_\_\_\_ Is Forced Draft fitted \_\_\_\_\_ No. and Description of Boilers \_\_\_\_\_

Working Pressure \_\_\_\_\_ Tested by hydraulic pressure to \_\_\_\_\_ Date of test \_\_\_\_\_ No. of Certificate \_\_\_\_\_

Can each boiler be worked separately \_\_\_\_\_ Area of fire grate in each boiler \_\_\_\_\_ No. and Description of Safety Valves to \_\_\_\_\_

Area of each valve \_\_\_\_\_ Pressure to which they are adjusted \_\_\_\_\_ Are they fitted with easing gear \_\_\_\_\_

Smallest distance between boilers or uptakes and bunkers or woodwork \_\_\_\_\_ Mean dia. of boilers \_\_\_\_\_ Length \_\_\_\_\_ Material of shell plates \_\_\_\_\_

Thickness \_\_\_\_\_ Range of tensile strength \_\_\_\_\_ Are the shell plates welded or flanged \_\_\_\_\_ Descrip. of riveting: cir. seams \_\_\_\_\_

No. of seams \_\_\_\_\_ Diameter of rivet holes in long. seams \_\_\_\_\_ Pitch of rivets \_\_\_\_\_ Lap of plates or width of butt straps \_\_\_\_\_

Percentages of strength of longitudinal joint \_\_\_\_\_ Working pressure of shell by rules \_\_\_\_\_ Size of manhole in shell \_\_\_\_\_

No. of compensating ring \_\_\_\_\_ No. and Description of Furnaces in each Boiler \_\_\_\_\_ Material \_\_\_\_\_ Outside diameter \_\_\_\_\_

Length of plain part \_\_\_\_\_ Thickness of plates \_\_\_\_\_ Description of longitudinal joint \_\_\_\_\_ No. of strengthening rings \_\_\_\_\_

Working pressure of furnace by the rules \_\_\_\_\_ Combustion chamber plates: Material \_\_\_\_\_ Thickness: Sides \_\_\_\_\_ Back \_\_\_\_\_ Top \_\_\_\_\_ Bottom \_\_\_\_\_

Thickness of stays to ditto: Sides \_\_\_\_\_ Back \_\_\_\_\_ Top \_\_\_\_\_ If stays are fitted with nuts or riveted heads \_\_\_\_\_ Working pressure by rules \_\_\_\_\_

Material of stays \_\_\_\_\_ Diameter at smallest part \_\_\_\_\_ Area supported by each stay \_\_\_\_\_ Working pressure by rules \_\_\_\_\_ End plates in steam space \_\_\_\_\_

Material \_\_\_\_\_ Thickness \_\_\_\_\_ Pitch of stays \_\_\_\_\_ How are stays secured \_\_\_\_\_ Working pressure by rules \_\_\_\_\_ Material of stays \_\_\_\_\_

Diameter at smallest part \_\_\_\_\_ Area supported by each stay \_\_\_\_\_ Working pressure by rules \_\_\_\_\_ Material of Front plates at bottom \_\_\_\_\_

Thickness \_\_\_\_\_ Material of Lower back plate \_\_\_\_\_ Thickness \_\_\_\_\_ Greatest pitch of stays \_\_\_\_\_ Working pressure of plate by rules \_\_\_\_\_

Diameter of tubes \_\_\_\_\_ Pitch of tubes \_\_\_\_\_ Material of tube plates \_\_\_\_\_ Thickness: Front \_\_\_\_\_ Back \_\_\_\_\_ Mean pitch of stays \_\_\_\_\_

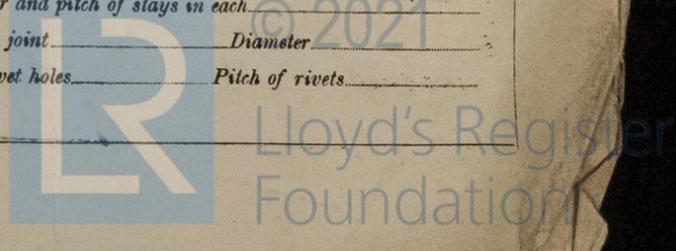
Clearance across wide water spaces \_\_\_\_\_ Working pressures by rules \_\_\_\_\_ Girders to Chamber tops: Material \_\_\_\_\_ Depth and \_\_\_\_\_

Thickness of girder at centre \_\_\_\_\_ Length as per rule \_\_\_\_\_ Distance apart \_\_\_\_\_ Number and pitch of stays in each \_\_\_\_\_

Working pressure by rules \_\_\_\_\_ Steam dome: description of joint to shell \_\_\_\_\_ % of strength of joint \_\_\_\_\_ Diameter \_\_\_\_\_

Thickness of shell plates \_\_\_\_\_ Material \_\_\_\_\_ Description of longitudinal joint \_\_\_\_\_ Diameter of rivet holes \_\_\_\_\_ Pitch of rivets \_\_\_\_\_

Working pressure of shell by rules \_\_\_\_\_ Crown plates: Thickness \_\_\_\_\_ How stayed \_\_\_\_\_



SUPERHEATER. Tg. 0 Date of Approval of Plan Tested by Hydraulic Pressure to

Date of Test Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler

Diameter of Safety Valve Pressure to which each is adjusted Is Easing Gear fitted

IS A DONKEY BOILER FITTED? If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:—

The foregoing is a correct description, General Electric Co. Manufacturer. per S. A. Berg.

Dates of Survey while building During progress of work in shops -- During erection on board vessel --- Total No. of visits Is the approved plan of main boiler forwarded herewith

Dates of Examination of principal parts—Casings Rotors Blading Gearing

Rotor shaft Thrust shaft Tunnel shafts Screw shaft Propeller

Stern tube Steam pipes tested Engine and boiler seatings Engines holding down bolts

Completion of pumping arrangements Boilers fixed Engines tried under steam

Main boiler safety valves adjusted Thickness of adjusting washers

Material and tensile strength of Rotor shaft STEEL 80,000 LBS 7" MINIMUM Identification Mark on Do. T.G.D.

Material and tensile strength of Pinion shaft " 100,000 " " " Identification Mark on Do. T.G.D.

Material of Wheel shaft STEEL Identification Mark on Do. T.G.D. Material of Thrust shaft Identification Mark on Do.

Material of Tunnel shafts Identification Marks on Do. Material of Screw shafts Identification Marks on Do.

Material of Steam Pipes Test pressure

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 Section 49 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. These engines have been constructed under special survey in accordance with the approved plans. The materials and workmanship are sound and good. The engines have been forwarded to Portland O. to be fitted on board.

Table with 4 columns: Fee Type, Amount (£), When applied for, When received. Rows include Entry Fee, Special, Donkey Boiler Fee, and Travelling Expenses.

Committee's Minute New York MAY 14 1918

Assigned See Sea App 581

Rpt. 13.

RE

Port of

No. in on the Reg. Book

Owners U.S.S.

Yard No. 16

DESCRIPTION

Two 15 KW-

Cylinders

Capacity of Dyn

Where is Dynam

Position of Main

Positions of au

Passage of

in passag

If fuses are fit

circuits

If vessel is wir

Are the fuses

Are all fuses f

are perman

Are all switches

Total number of

A 37

B 33

C 65

D 27

E 19

1 Mast

2

28

If arc lights, w

Where are the

DESCRIPTION

Main cable carr

Branch cables

Branch cables

Leads to lamps

Cargo light cabl

DESCRIPTION

Joints in cables

Painted

Are all the join

positions,

Are there any

How are the c

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

