

REPORT ON MACHINERY

No. 13726

REC'D NEW YORK

JUNE 7. 1917

Received at London Office MON 16 JUL 1917

Survey held at Albany N.Y. Date, First Survey Aug. 21. 1916 Last Survey 19
 on the U.S.S. "War Knight" (Number of Visits)
 Built at Albany N.Y. By whom built General Electric Co. When built 1917
 Registered Horse Power 2400 Owners U.S. Navy when made 1917
 Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted

COMBINE ENGINES, &c.—Description of Engines Grand Turbine No. of Turbines One
 Diameter of Rotor Shaft Journals, H.P. 8" L.P. 4" Diameter of Pinion Shaft 7"
 Diameter of Journals H.S. PINION 4" Distance between Centres of Bearings H.S. PINION 25" Diameter of Pitch Circle H.S. GEAR 38"
 Diameter of Wheel Shaft 4" Distance between Centres of Bearings H.S. GEAR 38" Diameter of Pitch Circle of Wheel H.S. PINION 10.75"
 Diameter of Face 14.36" Diameter of Thrust Shaft under Collars H.S. WHEEL 54.25"
 Diameter of Screw Shafts 2.5" Diameter of same as per rule as fitted Diameter of Propeller as fitted
 State whether Moveable as fitted Total Surface as fitted Pitch of Propeller as fitted
 Diameter of Rotor Drum, H.P. as fitted L.P. as fitted Revs. per Minute at Full Power, Turbine 3380 Propeller 90

DETAILS OF BLADING.

EXPANSION	ACTIVE HEIGHT OF BLADES.			NO. OF ROWS.	L.P.			NO. OF ROWS.	ASTERN.			NO. OF ROWS.
	HEIGHT OF BLADES.	DIAMETER AT TIP.	PITCH		HEIGHT OF BLADES.	DIAMETER AT TIP.	PITCH		HEIGHT OF BLADES.	DIAMETER AT TIP.	PITCH	
May 14	7.5" - 1.25"	2.5" - 11.5"	2"	2					8.125" - 1.5"	3.5" - 3"	2"	2
May 19	1.25"	3.5" - 10.5"	1"	1					2.5"	3.5" - 3"	1"	1
oth	2.5"	4.5" - 9"	1"	1								
	6"	4.5" - 2"	1"	1								

Size of Feed pumps
 Size of Bilge pumps
 Size of Bilge suction in Engine Room
 In Holds, &c.

Bilge Injections sizes Connected to condenser, or to circulating pump Is a separate Donkey Suction fitted in Engine Room & size
 Are the bilge suction pipes fitted with roses Are the roses in Engine room always accessible
 Connections with the sea direct on the skin of the ship Are they Valves or Cocks
 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
 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
 Pipes are carried through the bunkers How are they protected
 Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times
 Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges
 Screw Shaft Tunnel watertight Is it fitted with a watertight door worked from

BOILERS, &c.—(Letter for record) Manufacturers of Steel
 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
 Is 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
 Distance between boilers or uptakes and bunkers or woodwork Mean dia. of boilers Length Material of shell plates
 Range of tensile strength Are the shell plates welded or flanged Descrip. of riveting: cir. seams
 Diameter of rivet holes in long. seams Pitch of rivets Lap of plates or width of butt straps
 Working pressure of shell by rules Size of manhole in shell
 No. and Description of Furnaces in each Boiler Material Outside diameter
 Thickness of plates Description of longitudinal joint No. of strengthening rings
 Combustion chamber plates: Material Thickness: Sides Back Top Bottom
 If stays are fitted with nuts or riveted heads Working pressure by rules End plates in steam space
 Diameter at smallest part Area supported by each stay Working pressure by rules Material of stays
 Thickness Pitch of stays How are stays secured Working pressure by rules Material of stays
 Area supported by each stay Working pressure by rules Material of Front plates at bottom
 Material of Lower back plate Thickness Greatest pitch of stays Working pressure of plate by rules
 Pitch of tubes Material of tube plates Thickness: Front Back Mean pitch of stays
 Working pressures by rules Girders to Chamber tops: Material Depth and
 Length as per rule Distance apart Number and pitch of stays in each
 Steam dome: description of joint to shell % of strength of joint Diameter
 Material Description of longitudinal joint Diameter of rivet holes Pitch of rivets
 Crown plates: Thickness How stayed

SUPERHEATER.

Type

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,

Manufacturer.

Dates of Survey while building

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

Aug. 21 Dec. 11 Feb. 2

Is the approved plan of main boiler forwarded herewith

" " " donkey " " "

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 fired

Engines tried under steam

Main boiler safety valves adjusted

Thickness of adjusting washers

Material and tensile strength of Rotor shaft

STEEL. 80,000 LBS PER SQ INCH MIN.

Identification Mark on Do.

E.M.S.

Material and tensile strength of Pinion shaft

" 100,000 " " " " "

Identification Mark on Do.

E.M.S.

Material of Wheel shaft

STEEL

Identification Mark on Do.

E.M.S.

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 surveyed under Special Survey in accordance with the approved plans. The materials and workmanship are sound and good. The engines have been forwarded to San Francisco to be fitted on board.

The amount of Entry Fee ... £

Special

Donkey Boiler Fee

Travelling Expenses (if any)

N.Y. \$12.93

Committee's Minute

New York JUN 12 1917

Assigned

See S. To Rpt 2525

R. Salmon

Engineer Surveyor to Lloyd's Register of Shipping



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