

REPORT ON MACHINERY.

No. 549

REC'D NEW YORK April 11-1918

Received at London Office

April 2 1918 When handed in at Local Office April 5th 1918 Port of Seattle Wash USA
held at Seattle Date, First Survey Dec 7-1917 Last Survey Feb 26 1918

Steel Screw Steamer "WEST ARROW" Builders Yard No 12 (Number of Vents 22) Gross 5852 Tons

Donkey Built at Seattle By whom built Shinner & Eddy Corporation When built 1918

Schenectady NY By whom made General Electric Company when made 1918

Seattle By whom made Commercial Boiler Works when made 1918

Power 2500 Owners US Shipping Board & Emergency Fleet Corp. Port belonging to Seattle

as per Section 28 417 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

Description of Engines Curtis type Turbine Reduction Gear No. of Cylinders 1 No. of Cranks 1

Length of Stroke 13.8 Revs. per minute 70 Dia. of Screw shaft 13.85 Material of screw shaft Steel

fitted with a continuous liner the whole length of the stern tube Yes Is the after end of the liner made water tight

boss Yes If the liner is in more than one length are the joints burned Yes If the liner does not fit tightly at the part

ings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive If two

the shaft lapped or protected between the liners Length of stern bush 4'-7"

as per rule 12.49 Dia. of Crank shaft journals as per rule 12.75 Dia. of Crank pin Size of Crank webs Dia. of thrust shaft under

as fitted 12.75 Dia. of screw 16-5 Pitch of Screw 13.6 No. of Blades 4 State whether moveable Yes Total surface 80.5

2 Diameter of ditto 8 Stroke 18 Can one be overhauled while the other is at work Yes

1 Duplex Diameter of ditto 5 3/4 Stroke 6 Can one be overhauled while the other is at work

lines 1 Duplex Sizes of Pumps 12 x 8 1/2 x 12 No. and size of Suctions connected to both Bilge and Donkey pumps

For 3 1/2 Boiler Room. For 3 1/2 In Holds, &c. No 1 Hold. Two 3 1/2 No 2 Hold. Two 3 1/2

For 3 1/2 Shaft Tunnel One 3 1/2

1 sizes 10 Connected to condenser to circulating pump Yes Is a separate Donkey Suction fitted in Engine room & size Yes 3 1/2

on pipes fitted with roses Yes Are the roses in Engine room always accessible Yes Are the sluices on Engine room bulkheads always accessible None

with the sea direct on the skin of the ship Yes Are they Valves or Cocks Valves

ntly high on the ship's side to be seen without lifting the stokehold plates Yes Are the Discharge Pipes above or below the deep water line

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 Yes

Bridge Fire Fresh water, Deck Machinery How are they protected Wood Casings

ied through the bunkers Steam & Exhaust

Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times Yes

n Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges Yes

Tunnel watertight Yes Is it fitted with a watertight door Yes worked from Engine Room Line of Upper Deck

(Letter for record Dec 11 1916 Manufacturers of Steel Carnegie Steel Co. Pittsburgh Pa. Illinois Steel Co. Chicago Ill.

Place of Boilers 8055 Is Forced Draft fitted No No. and Description of Boilers 3 Single and Scotch Marine

210 Tested by hydraulic pressure to 315 Date of test January 30 No. of Certificate TESTS LLOYD'S NO 131 123 30-1-15 JF

worked separately Yes Area of fire grate in each boiler 650 No. and Description of Safety Valves to

Kenheimer Area of each valve 9.6 Pressure to which they are adjusted 210 Are they fitted with easing gear Yes

en boilers or uptakes and bunkers 12 Mean dia. of boilers 14.10 1/16 Length 11' 0" Material of shell plates Steel

ange of tensile strength 62,000 lbs Are the shell plates welded or flanged No Descrip. of riveting: cir. seams Double

Bridge 11 1/4 Diameter of rivet holes in long. seams 1 3/16 Pitch of rivets 10 Impact plates width of butt straps 22 3/8

h of longitudinal joint rivets 9.5 plate 84.4 Working pressure of shell by rules 228 Size of manhole in shell 12" x 16"

ns (this information Flanged No. and Description of Furnaces in each boiler 3 Morrison Material Steel Outside diameter 48 7/8

op Thickness of plates crown 2 1/32 Description of longitudinal joint Welded No. of strengthening rings

Paint Furnace by the rules 222 Combustion chamber plates: Material Steel Thickness: Sides 1/16 Back 1/16 Top 1/16 Bottom 1/16

Sides 7 x 8 Back 7 1/4 x 7 3/4 Top 7 x 8 If stays are fitted with nuts or riveted heads 1 1/2 Nuts 1 1/2 Rivets Working pressure by rules 214

h girders on floor Area at smallest part 1 3/8 x 1 7/22 Area supported by each stay 56.25 Working pressure by rules 225 End plates in steam space:

ickness 1 1/4 Pitch of stays 16 3/8 x 18 How are stays secured Double Nuts Working pressure by rules 237 Material of stays Steel

8.29 Area supported by each stay 294.7 Working pressure by rules 237 Material of Front plates at bottom Steel

al of Lower back plate Steel Thickness 1 3/16 + 1/2 Double Greatest pitch of stays 12 Working pressure of plate by rules 330

Pitch of tubes 4 x 4 1/2 Material of tube plates Steel Thickness: Front 1/16 Back 1/16 Mean pitch of stays 8 1/4 x 12

Water spaces 13 Working pressures by rules 268 Girders to Chamber tops: Material Steel Depth and

d by the Rules centre 11' x 12" Length as per rule 34 Distance apart 8 Number and pitch of stays in each 4 - 7"

rules 292 Steam dome: description of joint to shell None % of strength of joint

Thickness of shell plates Material Description of longitudinal joint Diam. of rivet holes

Working pressure of shell by rules Crown plates Thickness How stayed

Type 3 Foster Date of Approval of Plan Tested by Hydraulic Pressure to 630 lbs

17 No 277 FWT Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler Yes

1 1/2 Pressure to which each is adjusted 211 Is Easing Gear fitted Yes

Whitcham

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WP-0214 WP-0215

IS A DONKEY BOILER FITTED?

No ✓

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:—

1 Duplex Lubricating Oil Pump installed complete ✓
1 Tail Shaft Complete ✓
1 Propeller Blade ✓
1 Set (8) Shaft Coupling Bolts and nuts ✓
1 Set Feed pump valves. ✓
40 Condenser tubes and ferrules ✓

20 Boiler tubes ✓
a quantity of assorted bolts and
Nuts and Gears. ✓
a quantity of assorted bolts, nuts and
Set of spare parts for electric gear
and steam engines ✓

The foregoing is a correct description,

Skinner Eddy Corporation
by C. D. McCallum

Manufacturer.

American Boiler
Co. H. J. Fox

Dates of Survey while building { During progress of work in shops -- Dec. 7-27 Jan. 2-5-7-8-11-16-19-21-30 (11)
During erection on board vessel -- Jan 7-8-16-21-24 Feb 2-8-14-20-25-26 (11)
Total No. of visits 22

Is the approved plan of main boiler forwarded here

" " " donkey " "

Dates of Examination of principal parts—Cylinders — Slides — Covers — Pistons —

Connecting rods — Crank shaft — Thrust shaft Jan 7-8 Tunnel shafts Dec 8-27 Screw shaft Jan 7-8

Stern tube Jan 2-16 Steam pipes tested Feb 20 Engine and boiler seatings Jan 16 Engines holding down bolts

Completion of pumping arrangements Feb 2 Boilers fixed Jan 30 Engines tried under steam Feb 2

Completion of fitting sea connections Jan 16 Stern tube Jan 19 Screw shaft and propeller Jan 3

Main boiler safety valves adjusted 210 Thickness of adjusting washers Port 599-252 Center 602-670

Material of Crank shaft — Identification Mark on Do. — Material of Thrust shaft Steel Identification Mark

Material of Tunnel shafts steel Identification Marks on Do. — Material of Screw shafts Steel Identification Marks

Material of Steam Pipes Steel ✓ Test pressure 630

Is an installation fitted for burning oil fuel. yes ✓ 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 duplicate of a previous case. yes ✓ If so, state name of vessel. LIEUTENANT DE MISSISSY

General Remarks (State quality of workmanship, opinions as to class, &c. The Turbine and reduction gear

by a Surveyor to the Society at Schenectady N.Y. and installed on board with shaft

fittings and connections under special survey in accordance with the approved

The Boilers built and installed under special survey together with all

and fittings in accordance with the approved plans.

Manufacturers. Serial No. Turbine 12486

" " " Gears 2585

NOTE: The steel for the Boilers tested at the Steel works by the American Boiler

A record of the Steel attached herewith.

It is submitted that
this vessel is eligible for
THE RECORD. + LMC 2. 18. / Geared

Fitted for oil fuel 2. 18. F.P. above 150°F.

The amount of Entry Fee ... \$ 70 : 05 :
Special ... \$ 204 : 25 :
Donkey Boiler Fee ... \$: :
Travelling Expenses (if any) \$ 51 : 50 :
New York

When applied for,

March 30 1918

When received,

19

Committee's Minute New York APR 16 1918

Assigned

+ dmlc. 2. 18.

Elec. Light

James Fowler
Engineer Surveyor to Lloyd's Register

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