

Rpt. 4.

REPORT ON MACHINERY.

No. 79

Date of writing Report 2nd June 18

Received at London Office

THU JUN 6 - 1918

No. in Survey held at Belfast

Port of Belfast

Reg. Book.

Date, First Survey 26-6-17

Last Survey 28-5-1918

on the

S.S. War Lemur

(Number of Visits 45)

Master

Built at

Belfast

By whom built

Hauland & Wolff L^{td}

Tons

Gross

Net

When built

1918

Engines made at

Belfast

By whom made

when made

Boilers made at

Glasgow

By whom made

L. Brown & Co L^{td}

when made

Registered Horse Power

Owners The Shipping Controller

Port belonging to London

Nom. Horse Power as per Section 28

518

Is Refrigerating Machinery fitted for cargo purposes

No

Is Electric Light fitted

Yes

ENGINES, &c.—Description of Engines

Single Screw Triple Expanding Cylinders

3

No. of Cranks

3

Dia. of Cylinders

27"-44"-73"

Length of Stroke

48

Revs. per minute

78

Dia. of Screw shaft

as per rule 14.68

Material of

I. Steel

Is the screw shaft fitted with a continuous liner the whole length of the stern tube

Yes

Is the after end of the liner made water tight

in the propeller boss

If the liner is in more than one length are the joints burned

Yes

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

liners are fitted, is the shaft lapped or protected between the liners

Length of stern bush

Dia. of Tunnel shaft as per rule 13.3

Dia. of Crank shaft journals as per rule 13.9

Dia. of Crank pin 14 1/2

Size of Crank webs 28 x 9

Dia. of thrust shaft under collars 14 1/2

Dia. of screw 17 1/2

Pitch of Screw 16

No. of Blades 4

State whether moveable

Total surface 102 1/2 sq ft

No. of Feed pumps 2

Diameter of ditto 4

Stroke 24

Can one be overhauled while the other is at work

No. of Bilge pumps 2

Diameter of ditto 4

Stroke 24

Can one be overhauled while the other is at work

No. of Donkey Engines

In Engine Room 4-3 1/2

No. and size of Suctions connected to both Bilge and Donkey pumps

In Holds, &c. 9-3 1/2 & 1-3

No. of Bilge Injections / sizes 8

Connected to condenser, or to circulating pump

Is a separate Donkey Suction fitted in Engine room & size 1-3 1/2

Are all the bilge suction pipes fitted with roses

Are the roses in Engine room always accessible

Are the sluices on Engine room bulkheads always accessible

Are all connections with the sea direct on the skin of the ship

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

Are they each fitted with a Discharge Valve always accessible on the plating of the vessel

What pipes are carried through the bunkers

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

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 each boiler

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

long. seams

Diameter of rivet holes in long. seams

Pitch of rivets

Lap of plates or width of butt straps

Per centages of strength of longitudinal joint

Working pressure of shell by rules

Size of manhole in shell

Size 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

Pitch of stays to ditto: Sides

Back

Top

If stays are fitted with nuts or riveted heads

Working pressure by rules

Material of stays

Area 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

Area 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

Pitch 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

Diam. of rivet holes

Pitch of rivets

Working pressure of shell by rules

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

BEL72-0722(1/2)

IS A DONKEY BOILER FITTED? *No*

SPARE GEAR. State the articles supplied: - *See separate sheet*

If so, is a report now forwarded?

The foregoing is a correct description,
For HARLAND & WOLFF Ltd.

Dates of Survey while building
During progress of work in shops -
During erection on board vessel -
Total No. of visits

1917 June 26 - up till 28th May 1918

Manufacturer.

Is the approved plan of main boiler forwarded herewith?

Dates of Examination of principal parts - Cylinders 3 - Slides 17 - Covers 5 - Pistons 5 - Rods 5 -
Connecting rods 7-5-18 Crank shaft 13 - Thrust shaft 17 - Tunnel shafts 5 - Screw shaft 25-3-18 Propeller 15-3-18
Stern tube 15-3-18 Steam pipes tested 9-11-17 Engines and boiler seatings 10-5-18 Engines holding down bolts 13-5-18
Completion of pumping arrangements 24-5-18 Boilers fixed 10-5-18 Engines tried under steam 28-5-18
Completion of fitting sea connections 19-4-18 Stern tube 19-4-18 Screw shaft and propeller 1-5-18
Main boiler safety valves adjusted 24-5-18 Thickness of adjusting washers 4-12-18
Material of Crank shaft *Steel* Identification Mark on Do. *LL0108* Material of Thrust shaft *Do* Identification Mark on Do. *Do*
Material of Tunnel shafts *Do* Identification Marks on Do. *25-3-18* Material of Screw shafts *Do* Identification Marks on Do. *Do*
Material of Steam Pipes *W. Iron* Test pressure *640-lb*

Is an installation fitted for burning oil fuel? *No*

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 *War Ritten War Python etc*

General Remarks (State quality of workmanship, opinions as to class, &c.)
The machinery of the vessel has been constructed under Special Survey, and in accordance with the Rules, also as per Specifications and instructions issued by the Shipping Controller. The workmanship and the materials are of good description, and on trial under steam in Belfast Lough, the machinery worked satisfactorily. In our opinion, it is eligible for records + L.M.C. 5-18, with notation "Fixed Draft" + "Electric Light".

It is submitted that
this vessel is eligible for
THE RECORD. + LMC 5. 18. F.D.

The amount of Entry Fee ... £
Special ... £
Donkey Boiler Fee ... £
Travelling Expenses (if any) £

When applied for,
3-5-18

When received,
23-6-18

24-6-18

Committee's Minute

Assigned

+ L.M.C. 5. 18 F.D.

MACHINERY CERTIFICALLY
WRITTEN

Surveyor's Signature

Port of

Belfast

Continuation of Report No. 7969 dated 2nd June 1918 on the

P.P. War Lenuir

1 Ballast Pump 10 1/2" x 14" x 24"
1 General - 9 1/2" x 7" x 18"
1 Feed - 9 1/2" x 7" x 18"

1. Propeller C.I. Solid
1 - H.P. piston valve
2 - Top end bolts ✓
2 - Bottom - ✓
2 - Main bearing - ✓
3 - Crank shaft coupling bolts + nuts ✓
3 -
1 Feed pump suction valve ✓
1 - discharge - ✓
1 Bilge - ✓
1 - suction - ✓
3 Main feed check valves
3 Donkey -
24 Bolts + nuts ✓
6 Cylinder cover studs + nuts ✓
6 Steam chest - ✓
12 Junk ring - ✓
5 Saw round iron ✓
3 - flat - ✓
Spare fire bars etc

R. J. Berenoff

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Lloyd's Register

REG-0122(2/2)