

Rpt.

REPORT ON MACHINERY.

No. 31068

Received at London Office

Date of writing Report

10

When handed in at Local Office

10/5/19 Port of

MON. APR. 12. 1919

No. in Survey held at Hull

Date, First Survey

15/5/18 Last Survey

6-5-1919

Reg. Book.

on the SS. "PHILIP GODBY"

(Number of Visits 56)

Gross 290

Net 127

Master

Built at Beverley

By whom built Cook, Welton & Gemmell & Co. Ltd.

When built 1919

Engines made at Hull

By whom made Amos & Smith & Co. (No. 2966)

when made 1919

Boilers made at Hull

By whom made Amos & Smith & Co. (No. 2965)

when made 1919

Registered Horse Power

Owners H. Smethurst

Port belonging to Grimsby.

Nom. Horse Power as per Section 28

87.86

Is Refrigerating Machinery fitted for cargo purposes

No.

Is Electric Light fitted

No.

ENGINES, &c.—Description of Engines

Triple expansion

No. of Cylinders

No. of Cranks

Dia. of Cylinders 12½"-21" & 35"

Length of Stroke 26"

Revs. per minute 109

Dia. of Screw shaft

as per rule 7.5"

Material of iron

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

Yes.

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

✓

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

✓

Length of stern bush

34"

Dia. of Tunnel shaft

as per rule 6.58"

Dia. of Crank shaft journals

as per rule 6.95"

Dia. of Crank pin

7½"

Size of Crank webs

14" x 4½"

Dia. of thrust shaft under

collars

7½"

Dia. of screw

9'-6"

Pitch of Screw

11'-1½"

No. of Blades

4

State whether moveable

No.

Total surface

35.5 sq

No. of Feed pumps

2

Diameter of ditto

2½"

Stroke

12"

Can one be overhauled while the other is at work

Yes.

No. of Bilge pumps

2

Diameter of ditto

2½"

Stroke

12"

Can one be overhauled while the other is at work

Yes.

No. of Donkey Engines

2 ejector

Sizes of Pumps 6" x 3" x 6" & 6" x 4" x 6"

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

In Engine Room One 2" engine room one 2" aft & one 2" fore

In Holds, &c. One 2" from forehold one 2" from

slush well also separate 2" ejector suction from slushwell

No. of Bilge Injections

one sizes 3½"

Connected to condenser, or to circulating pump

Is a separate Donkey Suction fitted in Engine room & size 2" ejector

Are all the bilge suction pipes fitted with roses

Yes.

Are the roses in Engine room always accessible

Yes.

Are the sluices on Engine room bulkheads always accessible

✓

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

Yes.

Are they Valves or Cocks

Valves & Cocks.

Are they fixed sufficiently 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

above

Are they each fitted 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.

What pipes are carried through the bunkers

Forward Suctions

How are they protected

wood casings.

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

Yes.

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

Yes.

Is the Screw Shaft Tunnel watertight

✓

Is it fitted with a watertight door

✓

worked from

✓

BOILERS, &c.—(Letter for record

S)

Manufacturers of Steel

Port Talbot Steel Co. Ltd. - Port Talbot

Total Heating Surface of Boilers

1590 sq

Is Forced Draft fitted

no.

No. and Description of Boilers

one single ended.

Working Pressure

180 lbs.

Tested by hydraulic pressure to

360 lbs.

Date of test

12/4/19

No. of Certificate

3351

Can each boiler be worked separately

✓

Area of fire grate in each boiler

48.75 sq

No. and Description of Safety Valves to

each boiler

two spring loaded

Area of each valve

4.90"

Pressure to which they are adjusted

185 lbs.

Are they fitted with easing gear

Yes.

Smallest distance between boilers or uptakes and bunkers or woodwork

11½"

Mean dia. of boilers

162"

Length

10'-6½"

Material of shell plates

steel

Thickness

1½"

Range of tensile strength

28/32 tons

Are the shell plates welded or flanged

no.

Descrip. of riveting: air. seams

double

long. seams

TRDBS.

Diameter of rivet holes in long. seams

1½"

Pitch of rivets

8"

Top of plates or width of butt straps

17"

Per centages of strength of longitudinal joint

rivets 89.3

plate 85.5

Working pressure of shell by rules

182 lbs.

Size of manhole in shell

16" x 12"

Size of compensating ring

9" x 13½"

No. and Description of Furnaces in each boiler

3 plain

Material

steel

Outside diameter

40½"

Length of plain part

top 76"

Thickness of plates

crown 25/32"

Description of longitudinal joint

welded.

No. of strengthening rings

—

Working pressure of furnace by the rules

188

Combustion chamber plates: Material

steel

Thickness: Sides

1/16"

Back

3/32"

Top

1/16"

Bottom

7/8"

Pitch of stays to ditto: Sides

9½" x 9½"

Back

9" x 9"

Top

9½" x 9½"

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

182

Material of stays

steel

Area at smallest part

2.070"

Area supported by each stay

90.250"

Working pressure by rules

206

End plates in steam space:

Material

steel

Thickness

1/16"

Pitch of stays

17½" x 17"

How are stays secured

DN4W

Working pressure by rules

181

Material of stays

steel

Area at smallest part

6.10"

Area supported by each stay

2950"

Working pressure by rules

215

Material of Front plates at bottom

steel

Thickness

31/32"

Material of Lower back plate

steel

Thickness

15"

Greatest pitch of stays

14" x 9"

Working pressure of plate by rules

219

Diameter of tubes

3½"

Pitch of tubes

5" x 4¾"

Material of tube plates

steel

Thickness: Front

31/32"

Back

7/8"

Mean pitch of stays

10"

Pitch across wide water spaces

14"

Working pressures by rules

184

Girders to Chamber tops: Material

steel

Depth and

thickness of girder at centre

8½" x 13½"

Length as per rule

32"

Distance apart

9½"

Number and pitch of stays in each

two 9½"

Working pressure by rules

197

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

✓

W433-0181

IS A DONKEY BOILER FITTED? **No.**

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:—

Two top & two bottom end bolts & nuts, one set coupling bolts & nuts, two main bearing bolts & nuts, one set each of Air Reed & Bilge Pump Valves, one set piston studs & nuts, three condenser tubes, three boiler tubes, one escape valve spring of each size, two donkey pump suction & delivery valves, a quantity of assorted bolts & nuts, & iron of assorted sizes.

The foregoing is a correct description,

FOR AMOS & SMITH LTD.

J. Prackebury

Manufacturer.

Dates of Survey while building
During progress of work in shops -- 19.8.16, 15.10.16, 7.12.16, 20.2.17, 27.4.17, 3.8.17, 11.15.17, 26.30.17, 3.13.18, 22.29.18, 2.5.19
During erection on board vessel -- 11.14.17, 18.2.18, 20.6.18, 28.8.18, 14.2.19, 18.12.18, 20.2.19, 19.10.19, 3.11.19, 13.20.21, 27.2.25
Total No. of visits 56
Is the approved plan of main boiler forwarded herewith **previously sent.**

Dates of Examination of principal parts—Cylinders 24/12/18 Slides 24/12/18 Covers 24/12/18 Pistons 3/1/19 Rods 27/1/19
Connecting rods 6/3/19 Crank shaft 20/1/19 Thrust shaft 28/1/19 Tunnel shafts ✓ Screw shaft 18/9/18 Propeller 18/9/18
Stern tube 18/9/18 Steam pipes tested 28/4/19 Engine and boiler seatings 4/4/19 Engines holding down bolts 26/4/19
Completion of pumping arrangements 6/5/19 Boilers fixed 26/4/19 Engines tried under steam 29/4/19
Completion of fitting sea connections 22/9/18 Stern tube 22/9/18 Screw shaft and propeller 22/9/18
Main boiler safety valves adjusted 29/4/19 Thickness of adjusting washers P 3/8" S 3/8"
Material of Crank shaft **steel** Identification Mark on Do. **WNS** Material of Thrust shaft **steel** Identification Mark on Do. **WNS**
Material of Tunnel shafts ✓ Identification Marks on Do. ✓ Material of Screw shafts **iron** Identification Marks on Do. **PF**
Material of Steam Pipes **Solid drawn copper** Test pressure **360 lbs**

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 duplicate of a previous case **Yes** If so, state name of vessel **"Betty Johnson"**

General Remarks (State quality of workmanship, opinions as to class, &c.)

The machinery of this vessel has been constructed under Special Survey in accordance with the approved plans & the Rules of the Society. The materials & workmanship are good. The boiler & steam pipe have been tested as above & found sound & good. The machinery has been properly fitted & secured on board the vessel & on completion was tested at full power for two hours as required by the Admiralty & found satisfactory. The safety valves have been adjusted under steam & accumulation did not exceed 8 lbs.

In my opinion the vessel is eligible for the record + LMC 5, 19.

It is submitted that this vessel is eligible for THE RECORD + LMC 5, 19.

The amount of Entry Fee ... £ 2 : - :
Special ... £ 26 : 2 :
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) £ : :
When applied for, 10/5/19
When received, 14.5.19

W.N. Stone
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI. 16 MAY. 1919

Assigned

+ LMC 5.19



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