

REPORT ON MACHINERY.

No. 11065

Received at London Office SAT. 29 OCT. 1921

Date of writing Report 21st Oct. 1921 When handed in at Local Office 27th Oct. 1921 Port of Southampton

No. in Survey held at Southampton Date, First Survey 10th Nov. 1920. Last Survey 18th Oct. 1921
Reg. Book. (Number of Visits 25)

on the S.S. "BLACKCOCK" Gross 492.31 Tons Net 226.02 Tons When built 1921

Master Built at Southampton By whom built Day, Summers & Co. Ltd

Engines made at Southampton By whom made Day, Summers & Co. Ltd when made 1921

Boilers made at Southampton By whom made Day, Summers & Co. Ltd when made 1921

Registered Horse Power Owners General Steam Navigation Co. Ltd Port belonging to London

Nom. Horse Power as per Section 28 918 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted No

ENGINES, &c.—Description of Engines Triple Expn^m Surface Conden^m No. of Cylinders 3 No. of Cranks 3

Dia. of Cylinders 13 1/4"-22"-37" Length of Stroke 27" Revs. per minute 130 Dia. of Screw shaft as per rule 7.92" Material of screw shaft steel
as fitted 8"

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 2'-8"

Dia. of Tunnel shaft as per rule 6.9" Dia. of Crank shaft journals as per rule 7.23" Dia. of Crank pin 7 1/4" Size of Crank webs 5" Dia. of thrust shaft under rollers 7 1/4" Dia. of screw 9'-0" Pitch of Screw 9'-6" No. of Blades 4 State whether moveable No Total surface 35 sq ft

No. of Feed pumps 2 Diameter of ditto 2 1/2" Stroke 13 1/2" Can one be overhauled while the other is at work yes

No. of Bilge pumps 2 Diameter of ditto 2 1/2" Stroke 13 1/2" Can one be overhauled while the other is at work yes

No. of Donkey Engines 2 Sizes of Pumps 6x4x6 & 6x6x6 No. and size of Suctions connected to both Bilge and Donkey pumps In Engine Room 2-2" and stokehold 2-2" In Holds, &c. 2-2"

No. of Bilge Injections 1 sizes 3 1/2" Connected to condenser, or to circulating pump C. Pump. Is a separate Donkey Suction fitted in Engine room & size yes 2"

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 Both

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 Fuel Suctions How are they protected Steel plate guards

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 -

OILERS, &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 rivets 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 top Thickness of plates crown 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

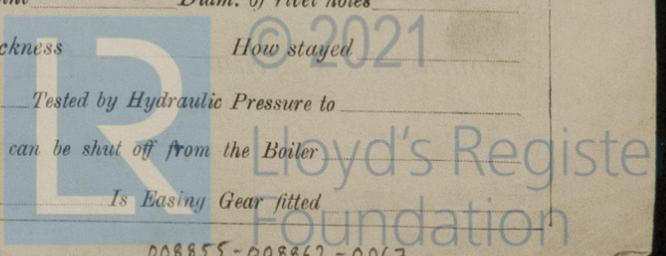
Pitch of rivets Working pressure of shell by rules Crown plates Thickness How stayed

UPERHEATER. 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

SEE SEPARATE REPORT



IS A DONKEY BOILER FITTED? **No**

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:— 2 Com^o Rod top-end bolts & nuts. 2 Com^o Rod bottom-end bolts & nuts. 2 Main bearing bolts & nuts. 1 Set of Coupling bolts. 1 Set of valves each for Feed pump, Bilge pump, Air pump, Circ. pump & Donkey pump. 1 Propeller. 2 cuts of wire of various sizes and a quantity of assorted bolts and nuts.

The foregoing is a correct description,

Lampbell R. Day
Manufacturer.



Dates of Survey while building	During progress of work in shops --	10, 20, 31	5, 7, 13, 22, 24	4, 25	5, 11, 12, 15	1921.
		11, 12	1	7	8	
		26, 1, 3, 5, 22, 26, 29	6, 7, 11, 18	10	1921.	
	During erection on board vessel --	8	9	10		
	Total No. of visits	25				

Is the approved plan of main boiler forwarded herewith **yes**

Dates of Examination of principal parts—Cylinders 5-8-21 Slides 25-7-21 Covers 25-7-21 Pistons 7-1-21 Rods 25-7-21
 Connecting rods 25-7-21 Crank shaft 25-7-21 Thrust shaft 25-7-21 Tunnel shafts ✓ Screw shaft 11-8-21 Propeller 5-9-21
 Stern tube 26-8-21 Steam pipes tested 6-10-21 Engine and boiler seatings 5-9-21 Engines holding down bolts 11-10-21
 Completion of pumping arrangements 11-10-21 Boilers fixed 26-9-21 Engines tried under steam 18-10-21
 Completion of fitting sea connections 5-9-21 Stern tube 3-9-21 Screw shaft and propeller 5-9-21
 Main boiler safety valves adjusted 11-10-21 Thickness of adjusting washers P = 11/32" S = 11/32"
 Material of Crank shaft **Iron** Identification Mark on Do. 389 25-7-21 Material of Thrust shaft **Steel** Identification Mark on Do. 854 LLOYDS MR.
 Material of Tunnel shafts ✓ Identification Marks on Do. — Material of Screw shafts **Steel** Identification Marks on Do. 388 LLOYDS 11-8-21 A.H.B.
 Material of Steam Pipes **Copper** Test pressure 360 lbs^a

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 **No** If so, state name of vessel

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

The Machinery has been built under Special Survey, and during section on board.
 The materials and workmanship are sound and good.
 The spare gear is in order with the rule requirements.
 On trial the machinery and boiler proved satisfactory and the same is eligible in my opinion to have notation + L.M.C. 10.21.

It is submitted that this vessel is eligible for THE RECORD + L.M.C. - 10.21. C.L.

L. G.
31/10/21. *Am.*

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

The amount of Entry Fee	£ 2 : 0 ✓	When applied for, Oct 27 th 1921
Special	£ 12 : 5 ✓	
Donkey Boiler Fee	£ ✓	When received, 29-10-1921
Travelling Expenses (if any)	£ ✓	

A. H. Boyle
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI. 4 NOV. 1921
 Assigned + L.M.C. 10.21
 C.L.



Rpt. 5
 Date of work
 No. in Reg. Book
 Master
 Engines m
 Boiler m
 Registered
 MULTI
 (Letter fo
 Boilers
 No. of Ce
 safety val
 Are they f
 Smallest o
 Material o
 Descrip. o
 Lap of pl
 rules 18
 boiler 3
 Description
 plates: M
 Top 8 1/2 X
 smallest p
 Pitch of st
 Area supp
 Lower back
 Pitch of tu
 water spac
 girder at c
 Working p
 separately
 holes ✓
 If stiffened
 Working p
 Dates of Survey while building
 GENER
 2
 2
 2
 and
 Survey
 Travelli
 Commit
 Assigned