

REPORT ON MACHINERY.

No. 24384

Received at London Office

15 SEP 1926

Date of writing Report Sept 13 1926 When handed in at Local Office HULL Port of HULL

No. in Survey held at Hull Date, First Survey Mar 18th 1926 Last Survey Sept 13th 1926

Reg. Book. on the Shel S.S. "SHERINGHAM" (Number of Visits 2) Tons { Gross 1088
Net 429

Master By whom built Barclay S.B. & Co. Ltd. When built 1926

Engines made at Hull By whom made Barclay S.B. & Co. Ltd. when made 1926

Boilers made at Hull By whom made Barclay S.B. & Co. Ltd. when made 1926

Registered Horse Power 349 Owners London & North Eastern Ry. Co. Port belonging to Harwich

Com. Horse Power as per Section 28 349 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes

ENGINES, &c.—Description of Engines Triple Expansion No. of Cylinders 3 No. of Cranks 3

Dia. of Cylinders 22.35.60 Length of Stroke 39 Revs. per minute 105 Dia. of Screw shaft 3.8 Material of Steel

Is the screw shaft fitted with a continuous liner the whole length of the stern tube no Is the after end of the liner made water tight

the propeller 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

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

ers are fitted, is the shaft lapped or protected between the liners yes Length of stern bush 5'-0"

Dia. of Tunnel shaft 11.3 Dia. of Crank shaft journals 11.8 Dia. of Crank pin 13 Size of Crank webs 22 x 7 1/8 Dia. of thrust shaft under

bars 12 1/2 Dia. of screw 3'-3" Pitch of Screw 15'-3" No. of Blades 4 State whether moveable no Total surface 54 sq. ft.

No. of Feed pumps 2 Diameter of ditto 4" Stroke 20" Can one be overhauled while the other is at work yes

No. of Bilge pumps 2 Diameter of ditto 4" Stroke 20" Can one be overhauled while the other is at work yes

No. of Donkey Engines 2 Sizes of Pumps 2 G.S. 4 x 4 x 8 No. and size of Suctions connected to both Bilge and Donkey pumps

Engine Room 2 @ 2 1/2" In Boiler Room 3 @ 2 1/2" In Holds, &c. 1 @ 3" In Hold 1 @ 3"

No. of Bilge Injections 1 sizes 4 1/2" Connected to condenser, or to circulating pump CP Is a separate Donkey Suction fitted in Engine room & size 1 @ 3 1/2"

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 none

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

That pipes are carried through the bunkers Fore hold 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 yes Is it fitted with a watertight door yes worked from Upper Deck

BOILERS, &c.—(Letter for record 8) Manufacturers of Steel Steel Co. of Scotland, Ironingham & S. Co.

Total Heating Surface of Boilers 5880 Is Forced Draft fitted yes No. and Description of Boilers Three Single ended

Working Pressure 205 lb. sq. in. Tested by hydraulic pressure to 358 lb. sq. in. Date of test 6.4.26 No. of Certificate 3599

In each boiler be worked separately yes Area of fire grate in each boiler 58.54 sq. ft. No. and Description of Safety Valves to

each boiler 2 @ 11 High Lift Area of each valve 3.94 Pressure to which they are adjusted 205 lb. sq. in. Are they fitted with easing gear yes

Smallest distance between boilers or uptakes and bunkers or woodwork 15" Mean dia. of boilers 3'-6" Length 11'-6" Material of shell plates Steel

Thickness 1 1/4" Range of tensile strength 38,322 lbs. Are the shell plates welded or flanged yes Descrip. of riveting: cir. seams DR.

g. seams T.R. DR. Diameter of rivet holes in long. seams 1 1/4" Pitch of rivets 8 1/2" Lap of plates or width of butt straps 18 3/8"

Percentage of strength of longitudinal joint 89 Working pressure of shell by rules 205 Size of manhole in shell 16" x 12"

of compensating ring 6 3/4" x 1 1/4" No. and Description of Furnaces in each boiler 3 Brighton Material Steel Outside diameter 40 1/8"

Length of plain part 10" Thickness of plates 3 1/2" Description of longitudinal joint Welded No. of strengthening rings 15

Working pressure of furnace by the rules 215 Combustion chamber plates: Material Steel Thickness: Sides 3/4" Back 3/4" Top 2 3/32" Bottom 1 5/16"

Pitch of stays to ditto: Sides 8 1/2" x 6 1/2" Back 8 1/2" x 6 1/2" Top 8 1/2" x 8 1/4" If stays are fitted with nuts or riveted heads yes Working pressure by rules 222

Material of stays Iron Area at smallest part 1.48 sq. in. Area supported by each stay 58.5 Working pressure by rules 208 End plates in steam space:

Material Steel Thickness 1 3/16" Pitch of stays 8" x 1 1/8" How are stays secured by rivets Working pressure by rules 212 Material of stays Steel

Area at smallest part 6.1 Area supported by each stay 308 Working pressure by rules 218 Material of Front plates at bottom Steel

Thickness 7/8" Material of Lower back plate Steel Thickness 7/8" Greatest pitch of stays 3" x 8 3/8" Working pressure of plate by rules 260

Diameter of tubes 2 1/2" Pitch of tubes 3 3/4" x 3 3/4" Material of tube plates Steel Thickness: Front 7/8" Back 7/8" Mean pitch of stays 9.5

Pitch across wide water spaces 13" Working pressures by rules 232 Girders to Chamber tops: Material Steel Depth and

Thickness of girder at centre 9 1/2" x 1 3/16" (2) Length as per rule 364" Distance apart 8 1/4" Number and pitch of stays in each 3 @ 8 1/2"

Working pressure by rules 210 Steam dome: description of joint to shell yes % of strength of joint yes

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

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

SUPERHEATER. Type yes Date of Approval of Plan yes Tested by Hydraulic Pressure to yes

of Test yes Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler yes

Safety Valve yes Pressure to which each is adjusted yes Is Easing Gear fitted yes

003341-003348 0190

IS A DONKEY BOILER FITTED? ☒

If so, is a report now forwarded? ☒

SPARE GEAR. State the articles supplied:— All spare parts required by Rules has been supplied, together with the following items:—

One propeller shaft: one bottom end brass: 2 valve spindles: set of top end brasses: 1 eccentric strap: Piston & piston valve rings & springs for each size: A.P. rod & bucket & head valve: main & auxiliary check valves: Circulating pump rod: spare valves for all pumps: 2 safety valve springs:

The foregoing is a correct description,

FOR EARLE'S
SHIPBUILDING & ENGINEERING CO. L^{td} MITEL

Manufacturer.

Dates of Survey while building
During progress of work in shops -- 1926 Mar. 18. 20. Apr. 15. 23. May 8. 28. Jun. 4. 12. 21. 22. Jul. 1. 5. 6. 8. 13. 19. 28. Aug. 9. 10. 12. 12.
During erection on board vessel --- 16. 17. 18. 20. 21. 24. 25. 26. 27. 28. 31. Sep. 8. 9. 10.
Total No. of visits 22

Is the approved plan of main boiler forwarded herewith ☒

Dates of Examination of principal parts—Cylinders HP 14.6.26 MP 14.6.26 Slides 21.6.26 Covers As above Pistons 14.6.26 Rods 21/6/26

Connecting rods 21.6.26 Crank shaft 21.6.26 Thrust shaft 1.7.26 Tunnel shafts 1.7.26 Screw shaft 1.7.26 Propeller 1.7.26

Stern tube 1.7.26 Steam pipes tested 12/8/26 } Engine and boiler seatings { 18.8.26 Engines holding down bolts 27.8.26

Completion of pumping arrangements 28.8.26 Boilers fixed 18.8.26 Engines tried under steam 28.8.26

Completion of fitting sea connections 9.8.26 Stern tube 9.8.26 Screw shaft and propeller 9.8.26

Main boiler safety valves adjusted 28.8.26 Thickness of adjusting washers P 3/8 + 3/8. S 3/8 + 3/8. F P 3/8 S 1 3/32

Material of Crank shaft Steel Identification Mark on Do. 5178D M.R. Material of Thrust shaft Steel Identification Mark on Do. 5178D.

Material of Tunnel shafts " Identification Marks on Do. do Material of Screw shafts do Identification Marks on Do. do

Material of Steam Pipes L.D. Steel 5 1/2" Bore & 1/4" thick Test pressure 615 Lbs per sq. in.

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 ☒ If so, state name of vessel ☒

General Remarks (State quality of workmanship, opinions as to class, &c. The engines & boilers of this vessel have been built under special survey, and in accordance with the approved plans. The materials and workmanship are sound & good. The machinery satisfactorily fitted on board, tried under working conditions & found good. Safety valves adjusted under steam, and all pumping arrangements found in order.

The machinery is eligible in my opinion to have record in the Register Book of L.M.C. 9.26, O.G.

It is submitted that
this vessel is eligible for
THE RECORD. + LMC 9.26. OG. FD.

The amount of Entry Fee ... £ 5 : 0 :
Special ... £ 81 : 17 :
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) £ : :
When applied for, 14.9.1926
When received, 25.10.1926

Committee's Minute

Assigned

17 SEP 1926

CERTIFICATE WRITTEN

Engine Surveyor to Lloyd's Register of Shipping.

Lloyd's Register
Foundation