

REPORT ON MACHINERY.

Received at London Office

SEP. 19. 1918

Date of writing Report 10 When handed in at Local Office 17/9/18 Port of Middlesbrough
 No. in Survey held at Glasgow & Middlesbrough Date, First Survey 8th July 1918 Last Survey 9th Sept. 1918
 Reg. Book. on the Steel Screw Steamer "WAR PIGEON" (S.S. No. 525) Tons { Gross 5272 Net 3203
 Master J.A. Sheehy Built at Stockton By whom built Messrs Roper & Sons When built 1918

Engines made at Glasgow By whom made Messrs Harland & Wolff Ltd. (No 527) when made 1918
 Boilers made at Glasgow By whom made Messrs A. & J. Inglis Ltd. (No 597) when made 1918
 Registered Horse Power Owners The Shipping Controller Port belonging to London
 Non. Horse Power as per Section 28 490 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 27-44-73 Length of Stroke 48 Revs. per minute 77 Dia. of Screw shaft 14.7 Material of screw shaft Steel
 as per rule 13.33 as fitted 13.2 as per rule 14.0 as fitted 14.2 as per rule 14.7 as fitted 15.2

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 no 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 liners are fitted, is the shaft lapped or protected between the liners no Length of stern bush 60 1/2

Dia. of Tunnel shaft 13.33 Dia. of Crank shaft journals 14.0 Dia. of Crank pin 14.2 Size of Crank webs 28x9 Dia. of thrust shaft under collars 14 3/4 Dia. of screw 17.6 Pitch of Screw 17.6 No. of Blades 16-6 State whether moveable no Total surface 98.2

No. of Feed pumps 2 Diameter of ditto 4 Stroke 24 Can one be overhauled while the other is at work yes
 No. of Bilge pumps 2 Diameter of ditto 4 Stroke 24 Can one be overhauled while the other is at work yes
 No. of Donkey Engines 3 Sizes of Pumps 10 1/2 x 14 x 24 9 1/2 x 7 x 18 No. and size of Suctions connected to both Bilge and Donkey pumps In Engine Room 4 @ 3 1/2 In Holds, &c. 2 @ 3 1/2 each hold except aftermost

No. of Bilge Injections 2 sizes 8 & 10 Connected to condensers circulating pump yes Is a separate Donkey Suction fitted in Engine room & size yes-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 main below other 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 Suctions to forward holds How are they protected wood ceiling
 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
 Dates of examination of completion of fitting of Sea Connections 16.5.18 of Stern Tube 16.5.18 Screw shaft and Propeller 11.7.18
 Is the Screw Shaft Tunnel watertight yes Is it fitted with a watertight door no worked from 2 trunks to deck

BOILERS, &c. — (Letter for record (S)) Manufacturers of Steel Stewart & Lloyd; D. Colvilles Sons & The Dudley Iron Works
 Total Heating Surface of Boilers 7020 ft² Is Forced Draft fitted yes No. and Description of Boilers 3 Single ended marine
 Working Pressure 180 Tested by hydraulic pressure to 360 Date of test 21.5.18 No. of Certificate 14285
 Can each boiler be worked separately yes Area of fire grate in each boiler 63.3 No. and Description of Safety Valves to each boiler 2 direct Spring Area of each valve 9.62 Pressure to which they are adjusted 185 lb Are they fitted with easing gear yes
 Smallest distance between boilers or bunkers or woodwork 7'-0" Mean dia. of boilers 15'-6" Length 11'-6" Material of shell plates steel
 Thickness 1 1/4" Range of tensile strength 28-32 tons Are the shell plates welded or flanged no Descrip. of riveting: cir. seams 2 R. Lap
 long. seams 5 R. DBS Diameter of rivet holes in long. seams 1 1/2" Pitch of rivets 9 1/2" Lap of plates or width of butt straps 19 1/2"
 Per centages of strength of longitudinal joint rivets 88.3 Working pressure of shell by rules 181 Size of manhole in shell 16 x 12
 plate 85.6 Size of compensating ring none No. and Description of Furnaces in each boiler 3 Dighton Material S Outside diameter 4'-2 3/8"
 Length of plain part top 19 Thickness of plates crown 3/32 Description of longitudinal joint Welded No. of strengthening rings nil
 bottom 32 Working pressure of furnace by the rules 189 Combustion chamber plates: Material S Thickness: Sides 2 3/32" Back 1/16" Top 2 3/32" Bottom 2 3/32"
 Pitch of stays to ditto: Sides 9 1/4 x 10 5/8" Back 9 x 10" Top 9 1/4 x 10 5/8" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 186
 Material of stays S Diameter at smallest part 2.07 Area supported by each stay 98.28 Working pressure by rules 190 End plates in steam space: Material S Thickness 1/32 Pitch of stays 21 1/2 x 20 1/2" How are stays secured nuts Working pressure by rules 182 Material of stays S
 Diameter at smallest part 8.29 Area supported by each stay 446 Working pressure by rules 198 Material of Front plates at bottom S
 Thickness 3/32 Material of Lower back plate S Thickness 2 7/32 Greatest pitch of stays 9 x 13 3/8" Working pressure of plate by rules 207
 Diameter of tubes 3" Pitch of tubes 4 1/2" Material of tube plates S Thickness: Front 3/32 Back 3/4" Mean pitch of stays 12 3/4 x 8 1/4"
 Pitch across wide water spaces 13 3/8" Working pressures by rules 181 Girders to Chamber tops: Material S Depth and thickness of girder at centre 11 x 7/8" Length as per rule 38 3/16" Distance apart 10" Number and pitch of stays in each 2 @ 9 1/2"
 Working pressure by rules 189 Superheater or Steam chest; how connected to boiler none Can the superheater be shut off and the boiler worked separately no
 Diameter Length Thickness of shell plates Material Description of longitudinal joint Diam. of rivet holes Pitch of rivets Working pressure of shell by rules Diameter of flue Material of flue plates Thickness
 If stiffened with rings Distance between rings Working pressure by rules End plates: Thickness How stayed
 Working pressure of end plates Area of safety valves to superheater Are they fitted with easing gear

IS A DONKEY BOILER FITTED?

no

If so, is a report now forwarded? ✓

SPARE GEAR. State the articles supplied: - Two each of con. rod top-end, bottom end and main bearing bolts and nuts: 3 crank shaft + 3 tunnel shaft coupling bolts + nuts: one set each of feed & bilge pump valves: 3 each of main & donkey feed check valves: assorted bolts & nuts: iron of various sizes, one cast iron propeller and minor gear as per specification and C.G.M.S letter dated 25/9/18

The foregoing is a correct description,

See Gls Reports Nos 37868 & 37953

Manufacturer.

Dates of Survey while building { During progress of work in shops -- 1918. During erection on board vessel --- July 8. 11. 16. 18. 23. Aug 1. 7. 12. 13. 16. 27. 29. Sept 2. 3. 4. 5. 6. 9 Total No. of visits 20. Is the approved plan of main boiler forwarded herewith

See also Glasgow Report No 37953

Dates of Examination of principal parts - Cylinders 27. 9. 17 Slides 17. 1. 18 Covers 12. 9. 17 Pistons 17. 1. 18 Rods 27. 9. 17 Connecting rods 5. 2. 18 Crank shaft 5. 2. 18 Thrust shaft 8. 1. 18 Tunnel shafts 8. 1. 18 Screw shaft 8. 1. 18 Propeller 5. 7. 18 Stern tube 11. 5. 18 Steam pipes tested Gls 11. 8. 17 From Gls No 1884 Engine and boiler seatings 11. 7. 18 Engines holding down bolts 13. 8. 18 Completion of pumping arrangements 4. 9. 18 Boilers fixed 29. 8. 18 Engines tried under steam 29. 8. 18 Main boiler safety valves adjusted 29. 8. 18 Thickness of adjusting washers P Blr S 3/8 : 6 Blr S 3/8 : 5 Blr S 5/16 Material of Crank shaft Steel Identification Mark on Do. 527 + E Material of Thrust shaft Steel Identification Mark on Do. 1255 1244, 1245, 1236, 1942, 1069 J.P. - 714 R.F.M. Material of Tunnel shafts Steel Identification Marks on Do. Material of Screw shafts Steel Identification Marks on Do. 1731 J Material of Steam Pipes LAP WELDED STEEL Test pressure 540 LBS

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 ✓ If so, state name of vessel Standard Class A

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

The machinery of this vessel has been built under special survey - See Glasgow Reports Nos 37868 & 37953, and has now been satisfactorily fitted on board by Messrs P. Bl & Co Ltd - Stockton. The materials and workmanship are sound and good. The engines, boilers and auxiliaries have been examined under full working conditions and all found satisfactory.

The machinery being in a good and efficient condition under the vessel eligible in my opinion to have the notations of LMC 9.18 and "Carrying fuel oil F.P. above 150° Fah in the S.B.", in the Register Book

It is submitted that this vessel is eligible for THE RECORD. + LMC 9.18 F.P.

Wm Morrison 20-9-18

Note: - The vessel is fitted with Electric Light and "Wireless"

The amount of Entry Fee £ 87 : 17-3 To be collected in Glasgow. When applied for, 58-11-6 pa. 4/1/18 29. 3. 0/ pa. 4/1/18 Special Gls. Indt. £ 29 : 5-9 17/9/1918 Donkey Boiler Fee £ Travelling Expenses (if any) £ £ 29. 5. 9/18 25/9/18

Committee's Minute

Assigned

+ L.M.C. 9.18

29-5-96 58-11-6 89-17-3

