

REPORT ON MACHINERY.

No. 17196
WEB. OCT. 31 1917

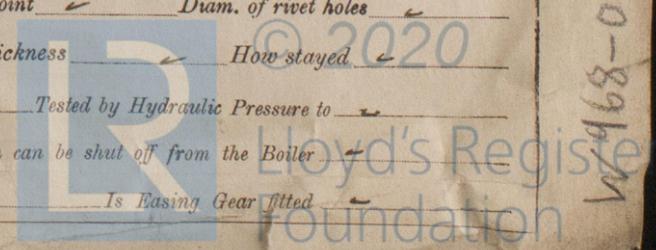
Received at London Office

Date of writing Report 26/10/17 When handed in at Local Office 26/10/17 Port of Glasgow
 No. in Survey held at Port Glasgow Date, First Survey 8.6.14 Last Survey 22/10/1917
 Reg. Book. on the S. S. ARDGLAMIS (Number of Visits 81)
 Master F. H. PUTT Built at Port Glasgow By whom built Russell & Co Tons } Gross 4563
 Engines made at Port Glasgow By whom made The Clyde Ship & Eng. Co Ltd when made 1917 } Net 2884
 Boilers made at do By whom made do when made 1917
 Registered Horse Power _____ Owners Steamship Company Ltd Port belonging to Glasgow
 Nom. Horse Power as per Section 28 474 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 27-42-70 Length of Stroke 48 Revs. per minute 68 Dia. of Screw shaft as per rule 14.5 Material of screw shaft 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 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 No If two liners are fitted, is the shaft lapped or protected between the liners No Length of stern bush 5-0
 Dia. of Tunnel shaft as per rule 13.128 Dia. of Crank shaft journals as per rule 13.85 Dia. of Crank pin 14 Size of Crank webs 4 1/2 x 2 1/4 x 8
 collars 14 Dia. of screw 17-6 Pitch of Screw 16-0 No. of Blades 4 State whether moveable No Total surface 96 sq
 No. of Feed pumps 2 Diameter of ditto 3 1/2 Stroke 24 Can one be overhauled while the other is at work Yes
 No. of Bilge pumps 2 Diameter of ditto 4 1/2 Stroke 24 Can one be overhauled while the other is at work Yes
 No. of Donkey Engines 3 Sizes of Pumps BALLAST GENERAL WEIRS. 100 GALLONS. 6 x 10 x 6 No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room 4 @ 3 1/2" & 1 @ 2 1/2" TUNNEL WELL In Holds, &c. 8 @ 3 1/2"
 No. of Bilge Injections 1 sizes 8 Connected to condenser, or to 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 Yes
 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 None How are they protected No
 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 Engine room platform

BOILERS, &c.—(Letter for record 5) Manufacturers of Steel Steel Co of Scotland
 Total Heating Surface of Boilers 7073 sq Is Forced Draft fitted Yes No. and Description of Boilers Three single ended double
 Working Pressure 180 lb Tested by hydraulic pressure to 360 lb Date of test 6/7/17 No. of Certificate 1275
 Can each boiler be worked separately Yes Area of fire grate in each boiler 52.7 sq No. and Description of Safety Valves to each boiler Two spring
 Area of each valve 8.29 sq Pressure to which they are adjusted 185 lb Are they fitted with easing gear Yes
 Smallest distance between boilers or uptakes and bunkers or woodwork 8-0 Mean dia. of boilers 15-0 Length 11-9 Material of shell plates Steel
 Thickness 1 1/2 Range of tensile strength 28-32 Are the shell plates welded or flanged No Descrip. of riveting: cir. seams No
 long. seams T.R. S.B.S. 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 1/2
 Per centages of strength of longitudinal joint 85.8 top Working pressure of shell by rules 183 lb Size of manhole in shell 16 x 12
 plate 85.7 bottom Size of compensating ring Flanged No. and Description of Furnaces in each boiler 3 horizontal Material Steel Outside diameter 4 1/4
 Length of plain part top Thickness of plates bottom 7 1/2 Description of longitudinal joint Welded No. of strengthening rings 1
 Working pressure of furnace by the rules 187 lb Combustion chamber plates: Material Steel Thickness: Sides 1 1/2 Back 1 1/2 Top 1 1/2 Bottom 1 1/2
 Pitch of stays to ditto: Sides 8 1/2 x 8 Back 8 1/2 x 8 Top 8 1/2 x 8 If stays are fitted with nuts or riveted heads Both Working pressure by rules 185 lb
 Material of stays Steel Area at smallest part 1.45 Area supported by each stay 63.5 Working pressure by rules 183 End plates in steam space: Material Steel Thickness 1
 Pitch of stays 15 1/2 x 15 1/2 How are stays secured With nuts Working pressure by rules 183 lb Material of stays Steel Area at smallest part 4.3
 Area supported by each stay 244 Working pressure by rules 183 Material of Front plates at bottom Steel Thickness 1 1/2 Material of Lower back plate Steel Thickness 1 1/2 Greatest pitch of stays 13 1/2 Working pressure of plate by rules 183 lb
 Diameter of tubes 3 Pitch of tubes 4 1/2 Material of tube plates Steel Thickness: Front 1 Back 1 1/2 Mean pitch of stays 9.5
 Pitch across wide water spaces 14 Working pressures by rules 183 lb Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 9 1/2 x 1 1/2 Length as per rule 36.2 Distance apart 8 Number and pitch of stays in each 3 @ 8 1/2
 Working pressure by rules 188 lb 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 _____



IS A DONKEY BOILER FITTED? *No*

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:— 2 connecting rods, 2 Piston rods, 2 main beams, 6 holding down & 12 shaft coupling bolts & nuts. 2 feed pump valves, 2 bilge pump valves, 1 Propeller, 6 dog assisted bolts & nuts, a quantity of assorted iron. 6 junk ring bolts & gaskets cover & 6 valve chest studs, 1 set air pump valves, 1 set check valves, 120 condenser funnels, 1 safety valve spring.

The foregoing is a correct description,

THE CLYDE SHIPBUILDING & ENGINEERING CO. LIMITED,

W. J. J. ...
Director.

Manufacturer.

Dates of Survey while building { During progress of work in shops -- (1914) June 8. Aug. 3. 7. 14. (1915) Jan. 12. (1916) Jan. 11. 13. Jan. 28. 13. 16. Apr. 12. 20. May 5. June 5. 14. 26. July 12. 25. Aug. 8. Oct. 3. 6. 14. 31. Nov. 23. During erection on board vessel -- Dec. 6. (1917) Jan. 9. 16. 24. 29. 30. Feb. 1. 6. 7. 16. 22. Mar. 1. 2. 6. 7. 9. 14. 15. 21. 28. 30. Apr. 2. 3. 13. 17. 18. 19. 23. May 2. 8. 10. 11. 16. 21. 22. June 6. 12. 13. 18. 19. Total No. of visits 25 July 18. 23. 24. 27. 31. Aug. 16. 17. 22. 24. 29. Sep. 20. Oct. 4. 10. Is the approved plan of main boiler forwarded herewith *Yes* ✓
18. 22 = 81.

Dates of Examination of principal parts—Cylinders 3/11/16 Slides 6/12/16 Covers 3/11/16 Pistons 9/12/16 Rods 25/7/16 Connecting rods 25/7/16 Crank shaft 19/6/17 Thrust shaft 9/1/17 Tunnel shafts 1/3/17 Screw shaft 6/6/17 Propeller 10/15/17 Stern tube 19/6/17 Steam pipes tested 20/9/17 Engine and boiler seatings 4/10/17 Engines holding down bolts 4/10/17 Completion of pumping arrangements 10/10/17 Boilers fixed 10/10/17 Engines tried under steam 22/10/17 Completion of fitting sea connections 23/7/17 Stern tube 23/7/17 Screw shaft and propeller 17/8/17 Main boiler safety valves adjusted 10/10/17 Thickness of adjusting washers 5 1/2" P 5/2" 5 1/2" P 5/2" 5 1/2" P 5/2" Material of Crank shaft *Steel* Identification Mark on Do. 193 Material of Thrust shaft *Steel* Identification Mark on Do. 193 Material of Tunnel shafts *Steel* Identification Marks on Do. 193 Material of Screw shafts *Steel* Identification Marks on Do. 193 Material of Steam Pipes *Iron* 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 *No* 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 & the material & workmanship are good. On completion they were examined while running full power trials in the berth & found satisfactory. The machinery throughout is now in good & efficient condition & eligible in my opinion to have the record LMC. 10. 17. marked in the Society's Register Book.*

It is submitted that this vessel is eligible for THE RECORD. + LMC. 10. 17. F. D.

J. M. J. W. D.
11/11/17

J. M. J. W. D.
Engineer Surveyor to Lloyd's Register of Shipping.

The amount of Entry Fee ... £ 3. 0. 0 When applied for, Special ... £ 43-14-0 25. 10. 1917 Donkey Boiler Fee ... £ : : When received, Travelling Expenses (if any) £ : : 1. 11. 1917 2/11/17

Committee's Minute GLASGOW 30 OCT. 1917

Assigned + LMC. 10. 17
J. D.



Certificate (if required) to be sent to ...
The Surveyors are requested not to write on or below the space for Committed Minute.