

REPORT ON MACHINERY.

No. 71075

Received at London Office

Surveying Report 18th May 1918 1918 When made in at Local Office 25 JUN 1918 Port of NEWCASTLE-ON-TYNE
 Survey held at Newcastle Date, First Survey 24th Sept 1917 Last Survey 10th Jun 1918
 on the S.S. "War Balloon" (Number of Visits 77) Tons { Gross 2340.66
 Net 1328.20
 Built at Newcastle By whom built Wood Skinner & Co When built 1918
 Made at Newcastle By whom made H. E. Maina Eng Co when made 1918
 Made at do By whom made do when made 1918
 Indicated Horse Power 410 Owners The Shipping Controller Port belonging to London
 Indicated Horse Power as per Section 28 417 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes
 Description of Engines Triple Expansion No. of Cylinders 3 No. of Cranks 3
 Cylinders 25" 41" 68" Length of Stroke 45" Revs. per minute 80 Dia. of Screw shaft as per rule 13.28" Material of Iron
 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
 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
 the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive Yes If two
 fitted, is the shaft lapped or protected between the liners Yes Length of stern bush 5'-0"
 Tunnel shaft as per rule 13.41" Dia. of Crank shaft journals as per rule 13.43" Dia. of Crank pin 13.4" Size of Crank webs 27 1/2" x 8 3/4" Dia. of thrust shaft under
13 1/4" Dia. of screws 15'-6" Pitch of Screw 17'-0" No. of Blades 4 State whether moveable No Total surface 75 sq
 Feed pumps 2 Diameter of ditto 3 1/2" Stroke 24" Can one be overhauled while the other is at work Yes
 Bilge pumps 2 Diameter of ditto 3 1/2" Stroke 24" Can one be overhauled while the other is at work Yes
 Donkey Engines 3 Sizes of Pumps 10 1/2" x 12 1/2" x 1 1/2" 7 1/2" x 7 1/2" x 1 1/2" No. and size of Suctions connected to both Bilge and Donkey pumps
 Engine Room Three 3" In Holds, &c. Forward & After Main Holds 2-3"
 Hold Well 1-3" Tunnel Well 1-2 1/2"
 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"
 Are 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
 connections with the sea direct on the skin of the ship Yes Are they Valves or Cocks Both
 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 Both
 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
 pipes are carried through the bunkers Hold suction How are they protected Wood casing
 Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times Yes
 Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges Yes
 examination of completion of fitting of Sea Connections 31-1-18 of Stern Tube 31-1-18 Screw shaft and Propeller 2-5-18
 screw Shaft Tunnel watertight Yes Is it fitted with a watertight door No worked from Yes
 RS, & Co. (Letter for record 5) Manufacturers of Steel John Spencer & Sons
 Heating Surface of Boilers 5870 sq Is Forced Draft fitted Yes No. and Description of Boilers Two, single-ended
 Pressure 180 lbs Tested by hydraulic pressure to 360 lbs Date of test 1-19-4-18 No. of Certificates 1-9082
 boiler be worked separately Yes Area of fire grate in each boiler 75 sq No. and Description of Safety Valves to
Two, Spring Area of each valve 12.56 sq Pressure to which they are adjusted 185 lbs Are they fitted with easing gear Yes
 distance between boilers or uptakes and bunkers or woodwork 14" Mean dia. of boilers 16'-3 5/8" Length 11'-9" Material of shell plates Steel
1 1/2" Range of tensile strength 284-33 Are the shell plates welded or flanged No Descrip. of riveting: cir. seams 8 Lap
S.B.S. 7 Riv Diameter of rivet holes in long. seams 1 3/8" Pitch of rivets 9 3/4" Lap of plates or width of butt straps 20 1/2"
 tes of strength of longitudinal joint plate 85.3 Working pressure of shell by rules 192 lbs Size of manhole in shell 16" x 12"
 compensating ring Flanged No. and Description of Furnaces in each boiler 4- Brighton Material Steel Outside diameter 44 1/2"
 plain part bottom Thickness of plates 9" Description of longitudinal joint welded No. of strengthening rings Yes
 pressure of furnace by the rules 198 lbs Combustion chamber plates: Material Steel Thickness: Sides 23/32" Back 3/4" Top 23/32" Bottom 23/32"
 stays to ditto: Sides 10 1/2" x 8 3/4" Back 10 1/2" x 9 1/4" Top 10 1/2" x 8 3/4" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 199 lbs
 of stays Steel Diameter at smallest part 2.03" Area supported by each stay 98.7 sq Working pressure by rules 206 lbs End plates in steam space:
Steel Thickness 1 1/2" Pitch of stays 24" x 22 1/2" How are stays secured in w. Working pressure by rules 181 lbs Material of stays Steel
 at smallest part 9.42" Area supported by each stay 54.0 sq Working pressure by rules 95 lbs Material of Front plates at bottom Steel
1" Material of Lower back plate Steel Thickness 7/8" Greatest pitch of stays 13 3/4" Working pressure of plate by rules 194 lbs
 of tubes 2 3/4" Pitch of tubes 4" x 3 1/2" Material of tube plates Steel Thickness: Front 1" Back 3/4" Mean pitch of stays 9 3/8"
 oss wide water spaces 13 3/4" Working pressures by rules 189 lbs Girders to Chamber tops: Material Steel Depth and
 of girder at centre 10" x 1 1/4" Length as per rule 35 1/2" Distance apart 10 1/2" Number and pitch of stays in each 3-8 3/4"
 pressure by rules 194 lbs Superheater or Steam chest; how connected to boiler None Can the superheater be shut off and the boiler worked
 Diameter Length Thickness of shell plates Material Description of longitudinal joint Diam. of rivet
 Pitch of rivets Working pressure of shell by rules Diameter of flue Material of flue plates Thickness
 with rings Distance between rings Working pressure by rules End plates: Thickness How stayed
 pressure of end plates Area of safety valves to superheater Are they fitted with easing gear

