

REPORT ON MACHINERY.

ived from 3 - AUG. 1900

Port of Glasgow

TUES. SEP 18 1900

Received at London Office 18  
Date, first Survey 5 Decr '98 Last Survey 6 July 1900  
(Number of Visits 25)  
Sup: on the Screw Steamer "Florida"  
Built at Port Glasgow By whom built Russell & Co  
Engines made at Gurner By whom made J. G. Keneaid & Co when made 1900  
Boilers made at Glasgow By whom made Lindsay Burnet & Co when made 1900  
Registered Horse Power Owners E. C. Law & Holmich & Co Port belonging to Luninpiccolo.  
Nom. Horse Power as per Section 28 291 Is Refrigerating Machinery fitted no Is Electric Light fitted no.

GINES, &c.—Description of Engines  
No. of Cylinders No. of Cranks  
Dia. of Cylinders Length of Stroke Revs. per minute Dia. of Screw shaft as per rule as fitted Lgth. of stern bush  
Dia. of Tunnel shaft as per rule as fitted Dia. of Crank shaft journals as per rule as fitted Dia. of Crank pin Size of Crank webs Dia. of thrust shaft under  
Collars Dia. of screw Pitch of screw No. of blades State whether moveable Total surface  
No. of Feed pumps Diameter of ditto Stroke Can one be overhauled while the other is at work  
No. of Bilge pumps Diameter of ditto Stroke Can one be overhauled while the other is at work  
No. of Donkey Engines Sizes of Pumps No. and size of Suctions connected to both Bilge and Donkey pumps  
In Engine Room In Holds, &c.  
No. of bilge injections sizes Connected to condenser, or to circulating pump Is a separate donkey suction fitted in Engine room & size  
Are all the bilge suction pipes fitted with roses Are the roses in Engine room always accessible Are the sluices on Engine room bulkheads always accessible  
Are all connections with the sea direct on the skin of the ship Are they Valves or Cocks  
Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Are the discharge pipes above or below the deep water line  
Are they each fitted with a discharge valve always accessible on the plating of the vessel Are the blow off cocks fitted with a spigot and brass covering plate  
What pipes are carried through the bunkers How are they protected  
Are all pipes, cocks, valves, and pumps in connection with the machinery and all boiler mountings accessible at all times  
Are the bilge suction pipes, cocks, and valves arranged so as to prevent any communication between the sea and the bilges  
When were stern tube, propeller, screw shaft, and all connections examined in dry dock Is the screw shaft tunnel watertight  
Is it fitted with a watertight door worked from

OILERS, &c.— (Letter for record S) Total Heating Surface of Boilers 4400 sq ft Is forced draft fitted no  
No. and Description of Boilers two single ended return tubes Working Pressure 180 lbs Tested by hydraulic pressure to 360 lbs  
Date of test 29/6/00 Can each boiler be worked separately yes Area of fire grate in each boiler 63 sq ft No. and Description of safety valves to  
each boiler two direct spring Area of each valve 7.06 sq ft Pressure to which they are adjusted 184 lbs Are they fitted with easing gear yes  
Smallest distance between boilers or uptakes and bunkers or woodwork 12 1/2 in Mean dia. of boilers 15-3 Length 10-6 Material of shell plates steel  
Thickness 1/4 Range of tensile strength 28-32 Are they welded or flanged no Descrip. of riveting: cir. seams double lap long. seams triple butt  
Diameter of rivet holes in long. seams 1 5/16 Pitch of rivets 9 in Lap of plates on width of butt straps 19 1/2  
Per centages of strength of longitudinal joint rivets 89.2 plate 86.4 Working pressure of shell by rules 183 Size of manhole in shell 16 x 12  
Size of compensating ring 7 in No. and Description of Furnaces in each boiler 3 Doughtons Material steel Outside diameter 49 in  
Length of plain part top 19 1/2 Thickness of plates crown 19 1/2 Description of longitudinal joint welded No. of strengthening rings 4  
Working pressure of furnace by the rules 192 lbs Combustion chamber plates: Material steel Thickness: Sides 7/8 Back 4/8 Top 2 1/8 Bottom 4/8  
Pitch of stays to ditto: Sides 8 1/2 x 5 1/2 Back 8 1/2 x 8 1/2 Top 8 1/2 x 9 If stays are fitted with nuts or riveted heads nuts Working pressure by rules 195 lbs  
Material of stays steel Diameter at smallest part 1 1/4 Area supported by each stay 70 in Working pressure by rules 185 lbs End plates in steam space:  
Material steel Thickness 3/16 Pitch of stays 18 1/2 x 20 1/2 How are stays secured 2 nuts Working pressure by rules 183 lbs Material of stays steel  
at smallest part 6 9/8 Area supported by each stay 86 2 in Working pressure by rules 192 lbs Material of Front plates at bottom steel  
Thickness 3/4 Material of Lower back plate steel Thickness 3/4 Greatest pitch of stays 18 1/2 Working pressure of plate by rules 277 lbs  
Diameter of tubes 3 1/2 Pitch of tubes 4 1/2 x 4 1/2 Material of tube plates steel Thickness: Front 4/8 Back 3/4 Mean pitch of stays 9 in  
Pitch across wide water spaces 14 1/2 Working pressures by rules 292 7215 lbs Rinders to Chamber tops: Material steel Depth and  
Thickness of girder at centre 8 x 3/4 double Length as per rule 27 7/8 Distance apart 29 7/8 Number and pitch of Stays in each two 8 1/2  
Working pressure by rules 200 lbs Superheater or Steam chest; how connected to boiler none Can the superheater be shut off and the boiler worked  
separately Diameter Length Thickness of shell plates Material Description of longitudinal joint Diam. of ried  
oles Pitch of rivets Working pressure of shell by rules Diameter of flue Material of flue plates Thickness  
stiffened with rings Distance between rings Working pressure by rules End plate: Thickness How stayed  
Working pressure of end plates Area of safety valves to superheater Are they fitted with easing gear



**DONKEY BOILER—** No. Description

Made at By whom made When made Where fixed

Working pressure tested by hydraulic pressure to No. of Certificate Fire grate area Description of safety valves

No. of safety valves Area of each Pressure to which they are adjusted If fitted with easing gear If steam from main boilers can enter the donkey boiler

Dia. of donkey boiler Length Material of shell plates Thickness Range of tensile strength

Descrip. of riveting long. seams Dia. of rivet holes Whether punched or drilled Pitch of rivets

Lap of plating Per centage of strength of joint Rivets Thickness of shell crown plates Radius of do. No. of Stays to do.

Dia. of stays. Diameter of furnace Top Bottom Length of furnace Thickness of furnace plates Description of joint

Thickness of furnace crown plates Stayed by Working pressure of shell by rules

Working pressure of furnace by rules Diameter of uptake Thickness of uptake plates Thickness of water tubes

**SPARE GEAR.** State the articles supplied:—

The foregoing is a correct description,  
*Lindsay Currie & Co.* Manufacturers of Main Boilers

Dates of Survey while building

During progress of work in shops— 1898:— Dec. 5. 9. Jan. 19. Feb. 23. May. 10. Ju. 5. 9. 21. Aug. 21. Sep. 18. 19. Oct. 2. 9. 13. 28. Nov. 20. 22. 1900:— Jan. 9. Feb. 2. 21. Mar. 16. 20. June. 18. 28. July. 6.

During erection on board vessel —

Total No. of visits 25.

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

“ “ “ donkey “ “ “ *No*

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

*These boilers have been constructed under special survey, the materials and workmanship are of an of good description, they have now been forwarded to Glasgow where they are to be fitted on board*

The amount of Entry Fee. £ : : When applied for, 11. 9. 1900.

Special . . . . £ 11 : 10 : 4

Donkey Boiler Fee . . . . : : When received, 11. 9. 1900.

Travelling Expenses (if any) £ : : 11. 9. 1900.

Committee's Minute

Glasgow. 17 SEP. 1900

Assigned

*See G.R. report no 12990.*

*A.M. Keane*  
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.



Lloyd's Register Foundation