

SUVA: FIJI

7th March 1942.

Messrs. Morris, Hedstrom, Limited,
Lloyd's Agents,
S U V A.

Gentlemen:

This is to certify that I, the undersigned Engineer Surveyor, have at the request of Messrs. Morris, Hedstrom, Limited, Lloyd's Agents at Suva, Fiji, surveyed the main and donkey boilers of the s.s. BRITISH COLONY as she lay in Suva Harbour, and my report is given below :-

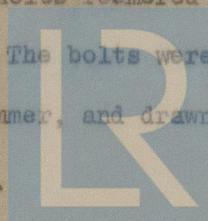
No.1 Port Main Boiler

The boiler was thoroughly opened up, cleaned and made ready for survey. Tubes, furnaces, longitudinal and combustion chamber stays, landings and rivetted joints were examined, and were all found to be in good order, with the exception of one defective rivet in the top and bottom longitudinal butt straps at the after end of the butt joints.

Defective rivets were removed; holes reamed out and turned bolts fitted. Combustion chambers and furnaces were thoroughly examined and found in good order. All mountings were opened up and found in good order.

No. 2 Starboard Main Boiler

This boiler was thoroughly opened up, cleaned, and made ready for survey. Tubes, furnaces, longitudinal and combustion chamber stays, landings and rivetted joints were examined, and found in good order, with the exception of three rivets at the after end of the lower butt strap on the longitudinal joint in the shell plating. There was a slight leak in the joint at this place, and three of the rivets when tested by hammering were found to be defective, the heads breaking clean away from the shank. The defective rivets were removed, holes reamed out and turned bolts were fitted in their places. The bolts were a good fit, being driven home with a six-pound hammer, and drawn up with a deep nut with eleven threads to the inch.



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Combustion chambers and furnaces were examined inside and out, and were found to be in good order.

All mountings were opened up, examined and ground in. All were in good order, with the exception of the valve and seat of one of the safety valves on this boiler, which were renewed.

No. 3 Forward Main Boiler

This boiler was thoroughly opened up, cleaned, and made ready for survey. Tubes, furnaces, longitudinal and combustion chamber stays, landings and rivetted joints were examined and found in good order. Furnaces and combustion chambers were examined inside and out, and found in good order.

All mountings were opened up, examined and ground in; all were in good order.

Hereunder are the gaugings of the furnaces of the main boilers, taken at two places in each furnace, viz. at the ninth and sixth corrugations from the front of the furnaces. It was found in every case that the vertical diameter exceeded the horizontal diameter by the amount in inches shown below, and no evil effects were apparent from the form assumed since the furnaces were put into service.

Calibration of Furnaces

Forward Main Boiler:

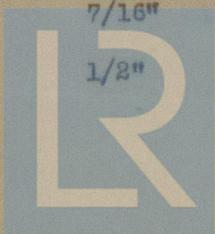
	Port	Port centre	Starboard centre	Starboard
No. 9 corrugation	5/8"	5/16"	1/2"	3/8"
No. 6 "	5/8"	7/16"	7/16"	3/4"

Port Main Boiler:

No. 9 corrugation	5/8"	9/16"	5/8"	3/8"
No. 6 "	5/8"	5/8"	5/8"	5/8"
No. 2 "	Round	-	-	-

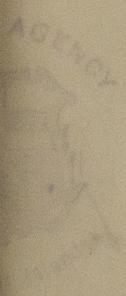
Starboard Main Boiler:

No. 9 corrugation	11/16"	7/16"	3/8"	3/8"
No. 2 "	5/8"	1/2"	9/16"	7/16"



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The whole of these boilers appear to be in excellent order, except for the defects in the butt straps of the longitudinal joints in the port and starboard boilers. Only slight scale was found on the furnaces and smoke tubes, but it was thicker on the lower parts of the combustion chamber backs, but not to an injurious extent. No leaks were to be found in the combustion chambers, and no distortion between the stays.

Donkey Boiler:

This boiler was opened up and cleaned for survey. All stays, tubes, furnaces, combustion chambers, landings etc. were examined and found in good order. All mountings were opened up, cleaned, and ground in. All are in good order.

General:

In the absence of a standard pressure gauge the boiler safety valves were floated individually with their own gauges to 205-pounds per square inch, and then collectively with the engine room gauge, when the valves blew freely at 198-pounds and closed sharply when the pressure fell below that figure.

The donkey boiler was tested under steam, and the valves were floated at a pressure of 120-pounds per square inch, when they lifted freely and closed sharply when the pressure fell below that figure.

From my observations I am of the opinion that the boilers of this vessel are in good seagoing order, and recommend that the boilers be given a certificate for a period of twelve months from the date of this report.


A.A. RAGG M.I.C.E. M.I.Mech.E.

Engineer Surveyor appointed by
Lloyd's Agents

Fee for this survey

£10-10-0



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