

# Report of Survey for Repairs, &c., of Engines and Boilers.

(Received at London Office DEC 29 1938)

Date of writing Report 17<sup>th</sup> Dec. 1938 When handed in at Local Office 17/12/38 Port of NEWCASTLE-ON-TYNE

No. in Reg. Book 9883 Survey held at Hellburn Date, First Survey 15 Nov Last Survey 15 Dec 1938  
on the Machinery of the Wood, Iron or Steel Twin Sc. "ARANDORA STAR." (No. of Visits 27)

Tonnage } Gross 15474 Vessel built at Birkenhead By whom Baumel Laird & Co. Ltd. When 1927-5  
          } Net 9090 Engines made at do By whom do When 1927

Nominal Horse Power 2078 Boilers, when made (Main) 1927 (Donkey)   
No. of Main Boilers 2 & 2 1/2 Owners Fredrick Leyland & Co. Ltd. Owners' Address London  
No. of Donkey Boilers  Managers ✓ Port London Voyage ✓

Steam Pressure in Main Boilers 200 lbs If Surveyed Afloat or in Dry Dock Palmer's D.D.  
In Donkey Boilers  Particulars of Classification (which must be inserted precisely as in Register Book & Supplements).

Last Report No. \_\_\_\_\_ Port \_\_\_\_\_  
Particulars of Examination and Repairs (if any) LMC.

CHARACTER for Special Survey Date of last Survey and of Periodical Surveys.	Years assigned or expired.	Machinery and Boiler Surveys (Including date of N.B. if any).
+100 A1		+ LMC 12.34
with freeboard		BS 12.37
12.37.		CL 11.37.
SS Bkn. No 2-35		
Fitted for oil fuel 5.27. F.P. about 150° F.		

Periodical Surveys, when held, must be reported in detail and seriatim in the terms of the Rules. State clearly the cause of Repairs, if any, and, in detail, the nature and extent of Examinations and subsequent Repairs. Repairs on account of Damage (the cause of which must be stated) should be separated from Repairs due to other causes; and besides being detailed in the body of the report, should be briefly summarized at the end of the report. State also the dates and initials of any letters respecting this case.

In damage cases where the Surveyor has not made a special damage report he is required to state whether he offered his services for this purpose, and why they were declined

Was a damage report made by anyone else? If so, by whom?

Did the Surveyor personally go inside each Main Boiler separately and make a thorough examination at this time? Yes

" " Donkey " " "

Was this not done, state for what reasons?

Did what parts of the Boilers could not be thus thoroughly examined?

What special means, in the absence of internal examination, were adopted by the Surveyor to assure himself of the thorough efficiency of those parts of each Boiler?

State latest date of internal examination of each boiler P.S.B. 13/11/38 3 DB 24/11/38 5 SB 5/2/38 Present condition of funnel(s) Good.

Did the Surveyor examine the Safety Valves of the Main Boiler? Yes To what pressure were they afterwards adjusted under steam? 200 lbs / sq"

Did the Surveyor examine the Safety Valves of Donkey Boiler?  To what pressure were they afterwards adjusted under steam?

Did the Surveyor examine all the manholes, doors and their fastenings of the Main Boilers? Yes, and of the Donkey Boilers?

Did the Surveyor examine the drain plugs of the Main Boilers? None, and of the Donkey Boilers?

Did the Surveyor examine all the mountings of the Main Boilers? Yes, and of the Donkey Boilers?

Has screw shaft now been drawn and examined? No Is it fitted with continuous liner?  Is an approved appliance fitted at the after end of the shaft to permit of it being efficiently lubricated?

Has shaft now been changed?  If so, state reasons

Has the shaft now fitted been previously used?  Has it a continuous liner?  Is an approved appliance fitted at the after end of the shaft to permit of it being efficiently lubricated?

State date of examination of Screw Shaft  State the distance between lignum vitae or bearing metal of stern bush and top of after bearing of screw shaft P.S.S. 3/6"

Engine parts, when referred to by numbers, should be counted from forward. Is electric light and power fitted? Yes

Did the Surveyor examine the generators, motors, switchgear, cables and fuses? Yes

Has the insulation resistance of the generators, circuits and apparatus been tested and found to be not less than 100,000 ohms? Yes

If the Survey is not complete, state what arrangements have been made for its completion and what remains to be done to complete the survey the auxiliary steam pipes remain to be tested as per Rule. Stated would be done at a convenient opportunity within the next 12 months.

How done? Vessel placed in dry dock. Propellers, outer ends of stern bushes, sea cocks & valves, & all outside fastenings examined.

All turbine casings & rotors, gearing, p. & s. intermediate shafting, starboard thrust shaft & bearing, main & aux. condensers, all auxiliaries, pumping arrangements, dynamo engines, steering engine & windlass examined. All found or put in good order.

Note: Port thrust shaft & bearing examined at Southampton, see Sou. Rpt. No. 16877.

P.T.O.

General Observations, Opinion, and Recommendation:— The machinery of this vessel is in a good & efficient condition eligible in my opinion to remain as classed with fresh Record of + LMC 12.38 subject to the auxiliary steam pipes being tested as per Rule.

Survey Fee (per Section 29) + LMC £ 16. 0. 0  
 Special Damage or Repair Fee (if any) (per Section 29.) £ 6. 0. 0  
 Selling expenses (if chargeable) £ : :  
 Fees applied for 22 DEC 1938  
 Received by me, 18. 1. 19 39

Submitted's Minute FRI 13 JAN 1939  
Signed + LMC 12.38 subject CERTIFICATE WRITTEN

G. Dixon & W.T. Budget  
Engineer Surveyor to Lloyd's Register of Shipping.

Insert Character of Ship and Machinery precisely as in the Register Book

## TW. SC. "ARANDORA STAR."

Now done: (Contd.)

All main steam pipes (steel) tested in place to 400 lbs/10" hyd. press. & found good.

The 3 double-ended boilers & the 2 single-ended boilers opened out & examined together with their safety valves and other mountings & found or put in good order.

The safety valves of all boilers adjusted to 200 lbs/10"

Repairs H. & T.

Port H.P. rotor 1st row of impulse blading renewed on account of erosion.

Star? H.P. dummy cylinder renewed & clearances adjusted.

Blading in all turbines cleaned, a number of casing & rotor blades faired slightly & binding strips rebrazed as necessary.

Port air Pump bucket & valves renewed.

Port Lub. oil Pump combined rod renewed.

Star? Circ. Pump H.P. piston rod renewed.

Aft. Circ. Pump H.P. & L.P. piston rods skimmed & rebrused.

Weir feed Pumps. All sucl. & delivery valves & seats machined.

General Service pump bucket & rod renewed.

Aux. Circ. Pump steam cylinder bored out & new piston fitted.

Port main discharge valve cover repaired.

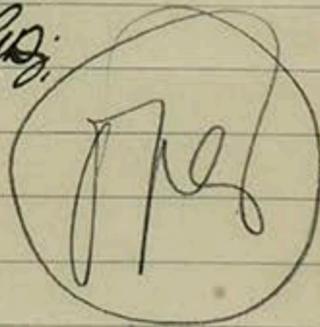
All auxiliaries overhauled & steam, water or oil rings renewed as necessary.

All boiler mountings thoroughly overhauled.

Star? double-ended boiler - one safety valve lid & seat renewed & both hydrometer valve chests rejointed to shell.

A number of main steam pipe joints remade.

A number of other minor repairs effected.

LDJ:  


S. S. "ARANDORA STAR"Electrical Inst<sup>n</sup>

Removed & replaced five motors for ventilation. One 8.5 HP fan motor fitted for galley ventilation. All fan motors removed from the ship, the commutators skimmed up & undercut. All armatures & field coils re-impregnated & toned. The main dynamo opened up & coils & armature varnished. The commutator of the 2 dynamo ground up & undercut. Main switchboard, the circuit breakers were dismantled & rebuilt by the makers. Switches cleaned & renewed as found necessary. Dining room lighting & bells revised throughout. Twenty five electric clocks fitted with control panel & master clock in chart house. Masthead light revised. 4 flood lights fitted on mast.

Port & starboard side of C Deck, B deck aft & A deck aft partly revised. 12 additional lights fitted on new sports deck. Cinema revised in galvanised steel conduit. Hospitals revised. All fittings on stairways revised. All galley & laundry motors overhauled. Ladies hair dressing saloon revised & 8 additional lights & 4 fans fitted. Engine room & stokehold partly revised. The insulation resistance now good. The dynamos, C. Breakers were examined & tested under full load & found satisfactory. The remainder of the inst<sup>n</sup> throughout the vessel was ex<sup>d</sup> tested under working conditions & found satisfactory.

W. T. B.