

Rpt. 9

Date of writing report 25.8.1957 Received London 4 SEP 1957 Port EMDEN No. 162  
Survey held at Emden No. of visits 12 First date 27.5.57. Last date 22.8.1957

# REPORT OF PERIODICAL SURVEYS & REPAIRS OF MACHINERY

No. in R.B. 00359 Name S.S. "AFRICAN BARON" Gross tons 7166 Date of build 9/1942  
Owners West Africa Navigation Ltd. Managers -- Port of Registry Monrovia  
Engines made - By John Inglis Co. Ltd. Type T 3Cyl. 24 1/2" 37" & 70"x48"

No. of Main Engines 1 No. of Screws 1  
No. of Main Boilers 3 W.P. SB. 220lbs.  
No. of Aux./Donkey Boilers -- W.P. --  
Surveyed Afloat or in Dry Dock both  
Nature of Survey MBS., Dckg., TSCL., Dam.Rps.  
Was Damage Report issued? yes Int. Cert.? yes  
Last Report (For Head Office only)

Records of Survey & Special Notations as per Register Book

Hull	Machinery
* 100 A1 with fbd.	* LMC
S.S. Ham. 7/56	Engines 6/55
Docking 6/56	Boilers 6/56
	TS CL. 6/56
	SPS. 7/51

The condition of any of the following items is to be described as "good" only when the part has been examined, found or placed in good condition, and is considered to be acceptable until the due date of the next Periodical Examination. Where it is considered that re-examination or repairs should be effected before the due date of the next Periodical Examination a distinguishing mark thus † should be inserted against the item and the circumstances and action recommended described fully under "defects and repairs". At part or complete Special Surveys those items which are not applicable to the ship should be cancelled with a black line; this need not be done when the machinery is on a continuous survey basis. When any part has been subjected to pressure test this should be stated. Engine parts when referred to by numbers should be counted from forward.

DOCKING Propellers good Wear Down of Stern Bushes 2.6 mm Oil Glands -- Sea Connections --  
Fastenings good Has Screwshaft Tube been drawn? yes Date of Examination 4.7.57. Has Shaft been changed? No  
Has Shaft now fitted been previously used? -- Has Shaft now examined/fitted a continuous liner? yes Approved oil gland? no

MAIN ENGINES (Recip. Steam or I.C.) PORT STARBOARD

1 Cyls., Covers, Pistons & Rods

2 Valves & Gears

3 Connecting Rods, Top Ends & Guides { Side  
Centre

4 Crankpins & Bearings { Side  
Centre

5 Journals & Bearings

MAIN ENGINE DRIVEN AIR COMPRESSORS

6 Cyls., Covers, Pistons & Rods

7 Connecting Rods & Top Ends

8 Crankpins & Bearings

9 Journals & Bearings

10 Cyls. & Safety Devices

MAIN ENGINE DRIVEN SCAVENGE PUMPS

11 Cyls., Covers, Pistons & Rods

12 Connecting Rods & Top Ends

13 Crankpins & Bearings

14 Journals & Bearings

15 Levers

SCAVENGE BLOWERS

SUPERCHARGERS

MAIN TURBINES

Change Rotors, Blading, Bearings & Thrusts

TAURINE STEAM TURBINES (WITH RECIP. ENGINES)

COMPRESSORS

VALVES & HYDRAULIC COUPLINGS

CLUTCH GEARING

ORDER BLOCKS, SHAFTS & BEARINGS

1 Intermediate Shafts & Bearings

2 Down Bolts & Chocks good

3 Couplings (MAIN & AUX.)

4 RE-HEATERS

5 SUPERHEATERS

6 STEERING VALVES

MAIN ENGINE DRIVEN PUMPS

CRANKCASE DOORS & EXPLOSION RELIEF DEVICES

Have Main Engines been tested working and manoeuvring?

OPINION OF MACHINERY AND RECOMMENDATIONS The machinery of this vessel as now seen, is in efficient condition and eligible in my opinion to remain as classed with fresh record of Main Boiler Survey 57, when the port boiler has been examined under steam and its safety valves adjusted, Tailshaft continuous Liner 7/57 now.

List of Endorsements Port boiler furnaces to be specially examined each Main Boiler Survey.

Date of Committee JUESDAY 24 SEP 1957  
Decision See Rpt. 8

Signature: G. Masters  
Engineer Surveyor to Lloyd's Register of Shipping

Lloyd's Register  
611757-01170510231013

If certificate is required state where to be sent.

"AFRICAN BARON"BOILER REPAIRS (Wear)

All port boiler furnaces measured, readings obtained verified with those found in ship's logs noted 1951 and 1956, minor variations from readings not found detrimental at this time and furnaces considered still efficient meantime. They remain to be <sup>specially</sup> re-examined each Main boiler survey. This may be noted for the list of endorsements.

Damage stated caused by striking an underwater object on the 28th April, 1957, whilst on voyage Hamburg to Bombay in loaded condition.

Now Done for Damage

Vessel placed in drydock, examined propeller and outside fastenings, sea valves (opened), tailshaft drawn, aft end of sternbush.

All main engine holding down bolts, coupling flanges aft of main engine crankshaft, thrustshaft and the foremost length of intermediate shafting (uncoupled) the waterends of the main circulating and of the ballast pumps, the ballast lines in way of Nos. 1, 2, 3, and 4 double bottom tanks, the steam heating coils in Nos. 2 and 4 double bottom tanks. *exam.*

All three boilers throughout with mountings and superheaters and all above found or placed in satisfactory condition.

Machinery Repairs on account of damage

The tailshaft was found satisfactory.

Tips of cast iron working propeller faired as necessary (tips indented, small pieces missing).

A number of 12 main engine holding down bolts renewed (fractured).

Shafting alignment of main engine crankshaft, thrustshaft, and foremost length of intermediate shafting verified uncoupled during and on completion of hull repairs and replaced, recoupled and secured in good order. (in way of damage to double bottom plating and structure frames Nos. 69/55).

Ballast pump overhauled with necessary renewals (waterend valves and valve gear partly choked).

Main circulating pump overhauled with necessary renewals (impeller guide rings scored, packing space bushes partly broken away.)

A number of length of ballast lines (steel) in way of No. 1, 2, 3 and 4 double bottom tanks renewed, reconnected, reclipped and rejointed, tested and found in order (distorted or fractured).

A number of steam heating coils (steel) in Nos. 2 and 4 double bottom tanks faired or part renewed and satisfactorily tested and found in order. (distorted or fractured).

Boiler repairs on account of damage.

All three boilers water contaminated. (No. 6 double bottom tank, the feed water tank pierced).

All three boilers cleaned, water sides hosed down and refreshed with feed water.

All above boilers mountings overhauled with minor renewals.

Leaky plain tubes of all 3 boilers re-expanded or renewed as necessary, leaky superheater coils rejointed or part renewed as necessary.

Starboard and centre boilers examined under steam, the safety valves adjusted and all found in safe working order.

Ballast pump waterend, main circulating pump, - waterend. *- waterend.*

33 Ballast ~~in Nos. 1, 2, 3, 4, double bottom tanks.~~ *in Nos. 1, 2, 3, 4, double bottom tanks.* - good.

34 Have the remaining Piping Arrangements & Fittings in the machinery space been examined as considered necessary? **Yes**

35 Fresh Water Coolers ..... 36 Lub. Oil Coolers ..... 37 Heaters (state service) .....

38 Independent Air Compressors, Coolers & Safety Devices .....

39 Air Receivers & Safety Devices—Main ..... 40 Auxiliary .....

41 Oil Fuel Tanks (Not forming part of hull structure) .....

42 Evaporators ..... 43 Have Evaporator Safety Valves been tested under steam? .....

44 Steering Machinery ..... 45 Windlass ..... 46 Fire Extinguishing Arrangements **Good.**

AUXILIARY ENGINES (Identify by position) .....

PROPULSION	PORT	STARBOARD	ELECTRICAL EQUIPMENT	AUXILIARY EQUIPMENT
a	Generators			Generators & Governors
b	Exciters			
c	Air Coolers			
d	Motors			m Motors
e	Air Coolers			
f	Control Gear, Cables, etc.			n Switchboards & Fittings
g	Insulation Resistance			o Circuit Breakers
h	Insulating Oil Test			p Cables
i	Overspeed Governors			q Insulation Resistance
j	Magnetic Couplings			r Steering Gear Generators and Motors
k	Air Gap			s Navigation Light Indicators

BOILERS OPENED UP & EXAMINED (Identify by position and state latest date of internal examination of each boiler)

MAIN **Port boiler 20.6.57, Starboard and centre boilers 5.7.57.** AUXILIARY, DONKEY or PRESS .....

Superheaters **good**

Safety Valves **good**

Mountings, Doors & Fastenings **good**

Safety Valves Adjusted to (Sat.) **Starboard and centre boilers**  
(Spt.) **220 lbs./sq. inch.**

Boiler Securing Arrangements **good**

Main Economisers ..... Exhaust Gas Heated Economisers .....

Steam Heated Steam Generators ..... Steam Generator Safety Valves Adjusted to **stbd. and centre boilers working**

Were Oil Burning System & Remote Controls examined working in accordance with Rules? **yes** Forced Circulating Pumps .....

Have Saturated Steam Pipes in cylindrical boiler smoke boxes been examined as required by Rules? **yes** Funnel **efficient.**

EXAMINATION & TESTING OF STEAM PIPES (State material)

Main ..... Auxiliary (over 3 in. bore) .....

Were Copper Pipes annealed? ..... Have Saturated Pipes in cylindrical boiler smoke boxes been tested? .....

PARTICULARS OF DEFECTS & REPAIRS, ETC. (Damage repairs should be detailed separate from wear and tear repairs; state what action has been taken regarding items which are subjects of class)

The port boiler furnaces were considered efficient until next Main boiler survey. The Owner's Representative states that arrangements will be made each MBS, the above furnaces to be specially examined.

The port boiler remains to be examined under steam and its safety valves adjusted. The above Representative states that arrangements will be made this to be done at Bombay, to which port the vessel is now proceeding. - Bombay Surveyors advised by letter.

**Machinery Repairs (Wear)**

Adjustments to main and auxiliary engines were carried out in our port, as considered necessary, by engine staff.

Owners' new bronze propeller examined and found satisfactory and the propeller fitted and secured to working tailshaft in good order.

Makers:- Stone & Co., Ltd., Diameter:- 18'-3", Mean pitch 18'-4 1/2".

Working cast iron propeller was placed on board as spare.

Cont'd.... *B.M.*

Repair/

Damage fee ..... £ 56. 0. 0.

Expenses... ..... 8. 0. 0.

Date when A/c rendered *14.11.57*

Rpt. 9a  
Port of

**E M D E N**

Continuation of Report No. 162 dated 25th August, 1957 on the

**SS. "AFRICAN BARON"**

Port boiler examined on completion of repairs at sailing date and found satisfactory.

It remains to be examined under steam and its safety valves to be adjusted.

Boiler's spare gear, i.e. patent stoppers, spare tubes, spare superheater coils examined and found satisfactory.

*B.M.*

