

REPORT ON ELECTRICAL EQUIPMENT

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office.....

Date of writing Report... 26-5-1943 When handed in at Local Office... 16-6-1943 Port of Middlesbrough

No. in Survey held at Haverthill-on-Tees Date, First Survey... 15-4-43 Last Survey... 25-5-1943
Reg. Book. 87489 on the S/S. "LAFIAN" (Number of Visits... 4...)

Tons { Gross... 7221
Net... 5055

Built at Haverthill-on-Tees By whom built Furness Shipbuilding Co Ltd and No. 352 When built 1943

Owners United Africa Co Ltd Port belonging to Liverpool

Electrical Installation fitted by Furness Shipbuilding Co Ltd Contract No. 352 When fitted 1943
(Working only fitted)

Is vessel fitted for carrying Petroleum in bulk... No Is vessel equipped with D.F. Yes E.S.D. Yes Gy.C. No Sub.Sig. No

Have plans been submitted and approved... Yes System of Distribution Two-wire insulated Voltage of supply for Lighting... 110

Heating... Power 110 Direct on Alternating Current, Lighting Yes Power Yes If Alternating Current state periodicity... Prime Movers,

has the governing been tested and found as per Rule when full load is suddenly thrown on and off... Yes Are turbine emergency governors fitted with a

trip switch as per Rule... — Generators, are they compound wound... Yes, are they level compounded under working conditions... Yes,

if not compound wound state distance between generators... — and from switchboard... — Where more than one generator is fitted are they

arranged to run in parallel... No, are shunt field regulators provided... Yes Is the compound winding connected to the negative or positive pole

positive Have machines over 100 kw. been inspected by the Surveyors during manufacture and testing... None fitted Have certificates of

test for machines under 100 kw. been supplied... Yes and the results found as per rule... Yes Are the lubricating arrangements and the construction

of the generators as per rule... Yes Position of Generators engine room starboard on raised platform

is the ventilation in way of generators satisfactory... Yes are they clear of inflammable material... Yes, if situated

near unprotected combustible material state distance from same horizontally... — and vertically... —, are the generators protected from mechanical

injury and damage from water, steam and oil... Yes, are the bedplates and frames earthed... Yes and the prime movers and generators in metallic

contact... Yes Switchboards, where are main switchboards placed on raised platform by generators

are they in accessible positions, free from inflammable gases and acid fumes... Yes, are they protected from mechanical injury and damage from water, steam

and oil... Yes, if situated near unprotected combustible material state distance from same horizontally... — and vertically... —, what insulation

material is used for the panels... "Bakelite" if of synthetic insulating material is it an Approved Type... Yes, if of

semi-insulating material (slate or marble) are all conducting parts insulated therefrom as per Rule... — Is the frame effectually earthed... Yes

Is the construction as per Rule... Yes, including accessibility of parts... Yes absence of fuses on the back of the board... Yes, individual fuses

to pilot and earth lamps, voltmeters, etc... Yes locking of screws and nuts... Yes labelling of apparatus and fuses... Yes fuses on the "dead"

side of switches... Yes Description of Main Switchgear for each generator and arrangement of equaliser switches... a double-pole

single-throw quick break Knife switch and double-pole fuse, a

D.P.D.T. Knife switch for supplying D.G. from extra generator.

and for each outgoing circuit... a single-pole single-throw Knife switch and double-pole

fuse.

Are compartments containing switchboards composed of fire-resisting material or lined as per Rule... Yes Instruments on main switchboard... Two

ammeters Two voltmeters... — synchronising devices. For compound machines in parallel is the ammeter connected on the pole opposite to the

equaliser connection... — Earth Testing, state means provided E lamps connected to E through two fuses.

Switches, Circuit Breakers and Fuses, are they as per Rule... Yes, are the fuses an approved type... Yes, are all fuses labelled as

per Rule... Yes If circuit breakers are provided for the generators, at what overload current did they open when tested... —, are the reversed current

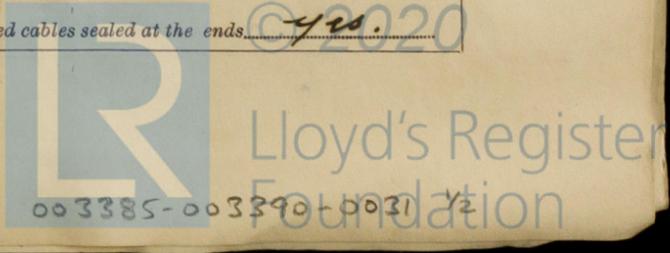
protection devices connected on the pole opposite to the equaliser connection... —, have they been tested under working conditions, and at what current

did they operate... — Joint Boxes, Section Boards and Distribution Boards, is the construction and position as per Rule... Yes

Cables, are they insulated and protected as per the appropriate Tables of the Rules... Yes, if otherwise than as per Rule are they of an approved type... —,

state maximum fall of pressure between bus bars and any point under maximum load... less than 424V. are the ends of all cables having a sectional area of 0.04

square inch and above provided with soldering sockets... Yes Are paper insulated and varnished cambric insulated cables sealed at the ends... Yes



The Electrical Equipment is installed in accordance with the approved plans and the requirements of the Rules.
 All Insulated Conductors are guaranteed to have been tested at the maker's works as specified in the Rules.
 The foregoing is a correct description.

P. L. Cooper

Electrical Engineers.

Date *10/6/43.*

COMPASSES.

Minimum distance between electric generators or motors and standard compass *125'*

Minimum distance between electric generators or motors and steering compass *120'*

The nearest cables to the compasses are as follows:—

A cable carrying *.14* Ampères *7* feet from standard compass *on the* feet from steering compass.

A cable carrying *.14* Ampères *on the* feet from standard compass *7* feet from steering compass.

A cable carrying _____ Ampères _____ feet from standard compass _____ feet from steering compass.

Have the compasses been adjusted with and without the electric installation at work at full power *yes*

Has the effect of switching on and off circuits, motors and other electro-magnetic apparatus within the vicinity of the compasses been noted *yes*

The maximum deviation due to electric currents was found to be *nil* degrees on *every* course in the case of the

standard compass, and *nil* degrees on *every* course in the case of the steering compass.

THE HAMBROS SHIPBUILDING CO., LIMITED.

Builder's Signature.

Date *10-6-43*

Geo. M. Robertson
 Secretary

Is this installation a duplicate of a previous case *yes* If so, state name of vessel *S/S "KUMASIAN"*

Plans. Are approved plans forwarded herewith *No.* If not, state date of approval *7-10-42*

Certificates. Are certificates of test for ~~motors engaged on essential services and~~ generators forwarded herewith *yes.*

General Remarks (State quality of workmanship, whether insulation tests, etc., have been made, opinions as to class, etc.)

The electrical equipment of this vessel has been installed under special survey in accordance with the approved plans. The materials used are of good quality and design and the workmanship is good. On completion the equipment was operated under load with satisfactory results and the insulation resistance of each circuit was measured and found good. This equipment is in my opinion suitable for a classed vessel.

Noted
P.P.
23/6/43

Total Capacity of Generators *(2x25) 50* Kilowatts.

The amount of Fee ... £ *27. 10. 0.* When applied for, *5: 6: 1943*

Travelling Expenses (if any) £ : : When received,19.....

S. D. Ward
 Surveyor to Lloyd's Register of Shipping.

Committee's Minute *WED, 23 JUN 1943*

Assigned *See fe machy 44*

5m. 4.30.—Transfer. (MADE AND PRINTED IN ENGLAND.)
 (The Surveyors are requested not to write on or below the space for Committee's Minute.)