

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office.....

Date of writing Report 22nd Sept. 43 When handed in at Local Office 8 OCT 1943 Port of Sunderland

No. in Survey held at Sunderland Date, First Survey 8th July Last Survey 29th Sept. 1943
Reg. Book. Suppt. (Number of Visits 13)

40251 on the S.S. "WRENWOOD" Tons { Gross 2847
Net 1588

Built at Sunderland By whom built S.P. Austin & Son, Ltd. Yard No. 368 When built 1943

Owners W. Grace Fenwick & Co., Ltd. Port belonging to London

Electrical Installation fitted by The Sunderland Prop. Eng. Co., Ltd. Contract No. 368 When fitted 1943

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

Have plans been submitted and approved yes System of Distribution 2w wire insulated Voltage of supply for Lighting 110

Heating 110 Power yes Direct yes Alternating Current, Lighting yes Power yes If Alternating Current state periodicity yes 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 yes Generators, are they compound wound yes, are they level compounded under working conditions yes,

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

arranged to run in parallel yes, are shunt field regulators provided yes Is the compound winding connected to the negative or positive pole

negative Have machines over 100 kw. been inspected by the Surveyors during manufacture and testing yes 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 side aft on

main 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 yes and vertically yes, 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 engine room starboard side aft

beside generating sets

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 yes and vertically yes, what insulation

material is used for the panels "Ebonny kindamyo", 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 yes 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 double pole

quick break knife switch and double pole fuse.

and for each outgoing circuit double pole double throw quick break 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 2w

ammeters 2w voltmeters yes synchronising devices yes For compound machines in parallel is the ammeter connected on the pole opposite to the

equaliser connection yes Earth Testing, state means provided Elamps connected to E through one of 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 yes, are the reversed current

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

did they operate yes 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 yes,

state maximum fall of pressure between bus bars and any point under maximum load 4.4v, are the ends of all cables having a sectional area of 0.01

square inch and above provided with soldering sockets yes Are paper insulated and varnished cambric insulated cables sealed at the ends none fitted

Lloyd's Register
59 2/2 Foundation

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.

By *H. L. Lister*
for The Sunderland Forge & Engineering Co. Ltd.
Sunderland.

Electrical Engineers.

Date 23rd Sept. 1943

COMPASSES.

Minimum distance between electric generators or motors and standard compass 174 feet

Minimum distance between electric generators or motors and steering compass 170 feet

The nearest cables to the compasses are as follows:—

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

A cable carrying 14 Ampères 7 feet from standard compass on the 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 *1/2* degrees on *every* course in the case of the standard compass, and *1/2* degrees on *every* course in the case of the steering compass.

FOR S. P. AUSTIN & SON, LIMITED.

S. B. Dugdale

Builder's Signature.

Date

MANAGING DIRECTOR

Is this installation a duplicate of a previous case *Yes* If so, state name of vessel *"Brushwood"*

Plans. Are approved plans forwarded herewith *Yes* If not, state date of approval *13/2/42 & 25/9/42*

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. The materials used are of good quality and the workmanship is good. On completion the equipment was run under working conditions with satisfactory results and the insulation resistance of all circuits was measured and found good. This equipment is in my opinion suitable for a closed vessel.

Noted
L.H.
25/10/43.

Total Capacity of Generators 18 Kilowatts.

The amount of Fee £ 16 : 10 : - 7 OCT 1943

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

G. Harrison

Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned *See J. E. Machy rpt.*

TUES. 26 OCT 1943



© 2020

Lloyd's Register Foundation