

Rpt. 13.

No. 119768

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Date of writing Report... 5.7.43 When handed in at Local Office... 9.7.43 Received at London Office...

No. in Survey held at Lydham Station Date, First Survey 7/4/43 Last Survey 25/6/43
Reg. Book. Port of Liverpool (Number of Visits... 4)

on the S.S. "FRESHPOOL" Tons { Gross 283 Net 92

Built at Lydham By whom built Lydham S.B. & Eng. Co. Ltd. Yard No. 872 When built 1943

Owners The Admiralty Port belonging to...

Electrical Installation fitted by Lydham S.B. & Eng. Co. Ltd. Contract No. 872 When fitted 1943

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

Have plans been submitted and approved yes System of Distribution Star Line Voltage of supply for Lighting 110

Heating no Power no Direct or Alternating Current, Lighting DC Power no If Alternating Current state periodicity no Prime Movers, no

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 wound yes Are they level wound under working conditions yes

Are they arranged to run in parallel yes Are shunt field regulators provided yes Where more than one generator is fitted are they arranged to run in parallel yes

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 Are the lubricating arrangements and the construction of the generators as per rule yes

Position of Generators In Engine Room

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 In Engine Room adjacent to 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 yes and vertically yes what insulation material is used for the panels Insulating material

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 construction as per Rule yes including accessibility of parts yes Is the frame effectually earthed 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 switch

and for each outgoing circuit Double pole switch and fuses

Are compartments containing switchboards composed of fire-resisting material or lined as per Rule yes Instruments on main switchboard one

ammeters one voltmeters one synchronising devices one For compound machines in parallel is the ammeter connected on the pole opposite to the equaliser connection yes

Earth Testing, state means provided Earth lamps

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 3.1 Volts 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

PARTICULARS OF GENERATING PLANT

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.

Red Cable has been covered, run in galvanized conduit on deck.
Chilled to steel & covered on open exposed pipes in machinery spaces.
General E. Portier has been approved.
THE LYTHAM SHIPBUILDING and ENGINEERING COMPANY, LIMITED.
J. A. Frideurthal Electrical Engineers. Date *6.7.43*

COMPASSES.

Minimum distance between electric generators or motors and standard compass *Yes*

Minimum distance between electric generators or motors and steering compass *Yes*

The nearest cables to the compasses are as follows:—

A cable carrying *20* Ampères *in* feet from standard compass *6* feet from steering compass *Yes*

A cable carrying *20* Ampères *4* feet from standard compass *4* feet from steering compass *Yes*

A cable carrying *5.5* Ampères *8* feet from standard compass *10* feet from steering compass *Yes*

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 *any* course in the case of the

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

J. A. Frideurthal Builder's Signature. Date *6.7.43*

Is this installation a duplicate of a previous case *Yes*

If so, state name of vessel *SS. FRESHMERE*

Plans. Are approved plans forwarded herewith *Yes*

If not, state date of approval *10.12.42.*

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 fitted on board under special survey and in accordance with the approved plans and specification. The equipment was tested under full working conditions and found satisfactory. The materials and workmanship are good. *Yes*

Noted
29/7/43.

Total Capacity of Generators *10* Kilowatts.

The amount of Fee ... £ *10.0.0* When applied for *18.23 JUL 1943*

Travelling Expenses (if any) £ *1.7/8* When received *19.19*

Committee's Minute

Assigned

Transmit to London.

Surveyor to Lloyd's Register of Shipping.

FRI. 6 AUG 1943

See minute on J.E. Rpt.