

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office 15 FEB 1945

Date of writing Report 25th DECEMBER 1944 When handed in at Local Office 30 1 1945 Port of GLASGOW

No. in Survey held at GRANGEMOUTH Date, First Survey 23rd DECEMBER Last Survey 28th DECEMBER 1944
Reg. Book.

89420 on the EMPIRE JUNNA Tons { Gross 2370
Net 1281

Built at GRANGEMOUTH By whom built THE GRANGEMOUTH DOCKYARD CO. LTD. Yard No. 458 When built 1944

Owners MINISTRY OF WAR TRANSPORT Port belonging to GRANGEMOUTH

Electrical Installation fitted by THE GRANGEMOUTH DOCKYARD CO. LTD. Contract No. — When fitted 1944

Is vessel fitted for carrying Petroleum in bulk YES Is vessel equipped with D.F. YES E.S.D. YES Gy.C. — Sub.Sig. —

Have plans been submitted and approved YES System of Distribution TWO WIRE Voltage of supply for Lighting 110

Heating — Power — Direct or Alternating Current, Lighting D.C. Power D.C. 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

NEGATIVE Have machines over 100 kw. been inspected by the Surveyors during manufacture and testing — 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 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 — 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 NEAR 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 SINDANYO, 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

DOUBLE POLE SWITCHES AND FUSES

and for each outgoing circuit DOUBLE POLE SWITCHES AND FUSES

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 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 — 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 W.E.,

state maximum fall of pressure between bus bars and any point under maximum load 2.3 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



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and found satisfactory.....Yes ✓

DESCRIPTION.	KILOWATTS.	CONDUCTORS.		MAXIMUM CURRENT IN AMPERES.		APPROX. LENGTH (load plus return feet).	INSULATED WITH.	HOW PROTECTED.
		No. in Parallel Per Pole.	Sectional Area or No. and Dia. of Strands. Sq. ins. or sq. mm.	In the Circuit.	Rule.			
MAIN GENERATOR ... (FORWARD) ...	10	1	19/083	91	118 ✓	87	RUBBER	L. C. A. B.
" " EQUALISER ... (AFT) ...	10	1	19/083	91	118 ✓	54	"	"
EMERGENCY GENERATOR ...								
ROTARY TRANSFORMER: MOTOR ...								
" " GENERATOR ...								

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.

THE GRANGEMOUTH DOCKYARD COY., LTD.

T.B.G. Harvey

Managing Director

Electrical Engineers.

Date *26/1/45*

COMPASSES.

Minimum distance between electric generators or motors and standard compass..... *159 FEET.*

Minimum distance between electric generators or motors and steering compass..... *157 FEET.*

The nearest cables to the compasses are as follows:—

A cable carrying *0.1* Ampères *led into* feet from standard compass *led into* feet from steering compass.

A cable carrying *5.0* Ampères *12* feet from standard compass *8* 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 *Any* course in the case of the standard compass, and *Nil* degrees on *Any* course in the case of the steering compass.

THE GRANGEMOUTH DOCKYARD COY., LTD.

T.B.G. Harvey

Managing Director

Builder's Signature.

Date *26/1/45*

Is this installation a duplicate of a previous case..... *Yes* If so, state name of vessel *S.S. "EMPIRE R.M."*

Plans. Are approved plans forwarded herewith..... *No* If not, state date of approval..... *9th November 1943*

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, tested under working conditions and found satisfactory. All the requirements of the approved plans and M.O.W.T. Specification have been carried out. The materials and workmanship are good.

Noted

Heu

5.2.45

Total Capacity of Generators..... *20* Kilowatts.

The amount of Fee ... £ *17* : *10* :

SPECIFICATION FEE £ *4* : *7* / *6*

Travelling Expenses (if any) £ *1* : *2* :

When applied for,

30 JAN 1945

When received,

.....19.....

M. Gardiner
Surveyor to Lloyd's Register of Shipping.

Committee's Minute

GLASGOW 30 JAN 1945

SEE ACCOMPANYING MACHINERY REPORT.

Assigned



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Foundation

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