

Rpt. 13.

No. 21467

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Date of writing Report 31st Aug^t 1945 When handed in at Local Office 2nd Sept^r 1945 Port of Leith
 No. in Survey held at Burntisland Date, First Survey 25-5-45 Last Survey 24th Aug^t 1945
 Reg. Book. 23498 on the S.S. "EMPIRE PACIFIC." Tons { Gross 987
 Net 380
 Built at Burntisland By whom built Burntisland J. B. Leal Yard No. 298 When built 1945
 Owners Ministry of War Transport Port belonging to Burntisland
 Electrical Installation fitted by Burntisland J. B. Leal Contract No 298 When fitted 1945
 Is vessel fitted for carrying Petroleum in bulk no Is vessel equipped with D.F. - E.S.D. - Gy.C. - Sub.Sig. -

Have plans been submitted and approved yes System of Distribution Double wire Voltage of supply for Lighting 110
 Heating 110 Power 110 Direct or Alternating Current, Lighting Direct Power Direct 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 generator
-
 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 indolanyo, 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
150 Amp double pole switches & fuses.
-
 and for each outgoing circuit 30 amp double pole, double throw switches & D.P. fuses.
-
 Are compartments containing switchboards composed of fire-resisting material or lined as per Rule yes Instruments on main switchboard 3
 ammeters 2 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 lamps
 Switches, Circuit Breakers and Fuses, are they as per Rule -, 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 yes / WE
 state maximum fall of pressure between bus bars and any point under maximum load 4.2, 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

003252-003262-0221/2

PARTICULARS OF GENERATING PLANT.

GENERATOR CABLES

| DESCRIPTION. | KILOWATTS. | CONDUCTORS. | | MAXIMUM CURRENT IN AMPERES. | | APPROX. LENGTH (usec 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 N ^o 1. ... | 15 | 1 | 19.064 | 78 | 135. | 30. | V.C. | LEAD SHEATHED. |
| " " EQUALISER ... | | | | | | | | |
| " " N ^o 2. ... | 15 | 1 | 19.064 | 78 | 135. | 30. | V.C. | LEAD SHEATHED. |
| | | | | | | | | |
| | | | | | | | | |
| EMERGENCY GENERATOR ... | | | | | | | | |
| ROTARY TRANSFORMER: MOTOE ... | | | | | | | | |
| " " GENERATOR ... | | | | | | | | |

[illegible][illegible][illegible]

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.

FOR THE BURNISLAND SHIPBUILDING COMPANY LTD.

J. C. Lawrence

DIRECTOR

Electrical Engineers.

Date 31/8/45

COMPASSES.

Minimum distance between electric generators or motors and standard compass 140 FEET.

Minimum distance between electric generators or motors and steering compass 130 FEET.

The nearest cables to the compasses are as follows:—

A cable carrying .36" Ampères 7" feet from standard compass - feet from steering compass.

A cable carrying .36 Ampères - 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 any course in the case of the

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

J. C. Lawrence

DIRECTOR

Builder's Signature.

Date 31/8/45

Is this installation a duplicate of a previous case No If so, state name of vessel

Plans. Are approved plans forwarded herewith No If not, state date of approval 13/1/45

Certificates. Are certificates of test for motors engaged on essential services and generators forwarded herewith No - See letter attached

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

This Installation has been efficiently fitted on board in accordance with the Rules & the approved plans. The materials & workmanship are sound & good, & the installation was found satisfactory under full load & working conditions.

Noted

Run 19.9.45

Total Capacity of Generators 30 Kilowatts.

The amount of Fee ... £ 22: 10 :
+ 25% for Specⁿ 5: 12: 6
Travelling Expenses (if any) £ 28 - 2 - 6
2 1/2% £ 23-12-6
4 1/2% £ 4-10-0

When applied for, 3/9/1945.
When received, 19.....

For J. F. Campbell & Self John Houston
Surveyor to Lloyd's Register of Shipping

21 SEP 1945

Committee's Minute

Assigned *see minute*
M. H. Rpt.