

17 FEB 1937

Rpt. 13.

No. 94702

# REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office

Date of writing Report 16 FEB 1937 When handed in at Local Office 16 FEB 1937 Port of Lewcastle.

No. in Survey held at Lewcastle. Date, First Survey 11 Jan'y Last Survey 10 Feb'y 1937  
 Reg. Book. Suph. (Number of Visits.....)

88580 on the M. V. Hullgate. Tons { Gross  
Net

Built at Lewcastle. By whom built B. Belandis Yard No. 35 When built 1937

Owners Hullgate Shipping Co. Port belonging to Hull.

Electric Light Installation fitted by Campbell Escherwood Ltd. Contract No. 35 When fitted 1937

Is the Vessel fitted for carrying Petroleum in bulk No.

System of Distribution Double wire.

Pressure of supply for Lighting 110 volts, Heating — volts, Power 110 volts.

Direct or Alternating Current, Lighting Direct Power Direct

If alternating current system, state frequency of periods per second —

Has the Automatic Governor been tested and found efficient when the whole load is suddenly thrown on or off Yes

Generators, do they comply with the requirements regarding temperature rise Yes, are they compound wound Yes

are they over compounded 5 per cent. Yes, if not compound wound state distance between each generator —

Where more than one generator is fitted are they arranged to run in parallel No, is an adjustable regulating resistance fitted in series with each shunt field Yes

approved Yes Have machines over 100 kw. been inspected by the Surveyors during manufacture and testing —

Are all terminals accessible, clearly marked, and furnished with sockets Yes, are they so spaced or shielded that they cannot be accidentally earthed, short circuited, or touched Yes

Position of Generators Engine room port side, is the ventilation in way of the generators satisfactory Yes are they clear of all inflammable material Yes if situated near unprotected

woodwork or other combustible material, state distance of same horizontally from or vertically above the generators — and —

are the generators protected from mechanical injury and damage from water, steam or oil Yes, are their axes of rotation fore and aft Yes

Earthing, are the bedplates and frames of the generating plant efficiently earthed Yes are the prime movers and their respective generators in metallic contact Yes

Main Switch Boards, where placed Engine room port side.

If the generators and main switchboard are not placed in the same compartment, is each generator provided with a fuse on each insulated pole as near as possible to the terminals of the generator, additional to that provided on the main switchboard —

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

if situated near unprotected woodwork or other combustible material, state distance of same horizontally from or vertically above the switchboards — and —, are they constructed wholly of durable, non-ignitable non-absorbent materials Yes

is all insulation of high dielectric strength and of permanently high insulation resistance Yes

is it of an approved type Yes, if semi-insulating material is used, are all conducting parts insulated from the slab with mica or micaite or other non-hygroscopic insulating material, and the slab similarly insulated from its framework Yes

is the non-hygroscopic insulating material of an approved type Yes, and is the frame effectively earthed Yes Are the fittings as per Rule regarding:— spacing or shielding of live parts

Yes, accessibility of all parts Yes, absence of fuses on back of board Yes, temperature rise of omnibus bars Yes

individual fuses to voltmeter, pilot or earth lamp Yes, are moving parts of switches alive in the "off" position No

are all screws and nuts securing connections effectively locked Yes are any fuses fitted on the live side of switches No

Main Switchgear, description of switchgear for each generator and each outgoing circuit, and arrangement of equalizer switches SPS + DP fuses for dynamo. SPS + DP fuses for outgoing circuits lighting & power

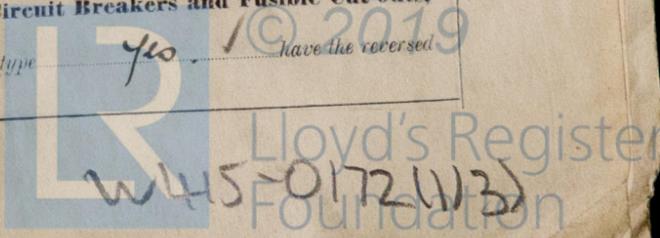
Are turbine driven generators fitted with emergency trip switch as per rule — Are cupboards or compartments containing switchboards composed of fire-resisting material or lined with approved material —

Instruments on main switchboard 2 ammeters 2

voltmeters — synchronising device for paralleling purposes. For compound machines is the ammeter connected on the opposite pole to equaliser connection

Earth Testing, state what means are provided at the main switchboard for indicating the state of the insulation of the system —

E lamps coupled to E through switches & fuses Switches, Circuit Breakers and Fusible Cut-outs, do these comply with the requirements of the Rules Yes are the fusible cutouts of an approved type Yes have the reversed





M.V. "HULLGATE"

3/3/37. 4/3/37.

Completion of the electrical inst<sup>n</sup>

hoof lists. 2.

The winch forward and one aft now fitted on board, tested & found satisfactory. The 15KW dynamo has been tested under working conditions & found satisfactory. The insulation resistance was good. Cert of compass adjustment attached herewith. W.T. Badger. Fee charged.

All Conductors are of annealed copper conforming to British Standard Specification No. 7 (or International Electro-technical Commission Publication No. 28).

The Insulated Conductors are guaranteed to withstand the immersion and resistance tests specified in the Rules.

The foregoing is a correct description.

CAMPBELL & ISHERWOOD, LTD.  
PER Thor Meade Electrical Engineers. Date 30th Jan 1937

COMPASSES.

Distance between electric generators or motors and standard compass 30 feet.

Distance between electric generators or motors and steering compass

The nearest cables to the compasses are as follows:—

A cable carrying 25 Amperes on the feet from standard compass — feet from steering compass.

A cable carrying Amperes feet from standard compass feet from steering compass.

A cable carrying Amperes 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 all course in the case of the standard

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

FOR AND ON BEHALF OF  
**CLELAND & CO. (LONDON) LIMITED.**  
David As Builder's Signature. Date 16/2/37.  
DIRECTOR.

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

General Remarks (State quality of workmanship, opinions as to class, etc. The above inst<sup>n</sup> has been fitted out under special survey. The workmanship & materials used are good. The insulation resistance is good. The 3-KW dynamo has been tested & all lighting throughout the vessel. The 15-KW remains to be tested & compasses to be re-adjusted

Total Capacity of Generators 18 Kilowatts.

The amount of Fee ... £ 16 : 10 : 15 1937  
When applied for, W.T. Badger  
Travelling Expenses (if any) £ : : 7.5 1937 8/5  
When received, Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI 12 MAR 1937  
Assigned See Nwc J.C. 94702

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