

REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office 23 JAN 1929

Date of writing Report

19

When handed in at Local Office

22 - 1 - 1929

Port of

Belfast

No. in Survey held at

Belfast

Date, First Survey 4 Sept. 1928

Last Survey 21st Jan 1929

Reg. Book.

(Number of Visits.....12.....)

90404 on the Steel Twin Screw "Highland Chieftain"

Gross 14450

Net

Built at Belfast

By whom built Harland & Wolff Ltd

Yard No. 806

When built 1928

Owners Nelson Steam Nav. Co. Ltd (H & W. Nelson Ltd) Port belonging to Belfast

Electric Light Installation fitted by Harland & Wolff Ltd

Contract No. 751806 When fitted 1928

System of Distribution Two wire direct current to distribution boxes.
Pressure of supply for Lighting 220 volts, Heating 220 volts, Power 220 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 rating

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

yes.

, is an adjustable regulating resistance fitted in

series with each shunt field

yes.

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.

Are the lubricating arrangements of the generators as per Rule

yes.

Position of Generators

Main generators in Motor Room Port & Star. 6m 94 generators in house on boat deck.

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.

yes.

are the prime movers and

Earthing, are the bedplates and frames of the generating plant efficiently earthed

yes.

yes.

their respective generators in metallic contact

Main Switch Boards, where placed On Switch board platform. Fore End of Motor Room.

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.

, if semi-insulating material is used, are all conducting parts insulated from the slab

with mica or micanite or other non-hygroscopic insulating material, and the slab similarly insulated from its framework

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.

, proportion of omnibus

bars Yes., individual fuses to voltmeter, pilot or earth lamp

yes.

, connections of switches

yes

Main Switchgear, description of switchgear for each generator and each outgoing circuit, and arrangement of equalizer switches D.P. Overload circuit breaker with reverse current, time limits & inter locked equalizer switch for each generator

D.P. Overload circuit breaker or D.P. switch & fuses for each outgoing circuit.

Instruments on main switchboard 7 ammeters 2 voltmeters arranged synchronising device for paralleling purposes.

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

Switches, Circuit Breakers and Fusible Cut-outs, do these comply with the requirements of the Rules

yes.

Joint Boxes Section and Distribution Boards, is the construction, protection, insulation, material, and position of these as per rule

yes.



© 2020

Lloyd's Register Foundation

003038-003045-0218

If portable lamps for use in dangerous spaces are supplied, are they of a type approved by the Home Office

© 2020
Lloyd's Register
Foundation

All Conductors are of annealed copper conforming to British Standard Specification No. 7.

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

The foregoing is a correct description



Electrical Engineers.

Date Jan 17th 1929

COMPASSES.

Distance between electric generators or motors and standard compass 160 feet to generators. 22 feet to nearest motor

Distance between electric generators or motors and steering compass 156 feet to generators. 18 feet to nearest motor

The nearest cables to the compasses are as follows:—

A cable carrying 39 Ampères 16 feet from standard compass 14 feet from steering compass.

A cable carrying 32 Ampères 16 feet from standard compass 14 feet from steering compass.

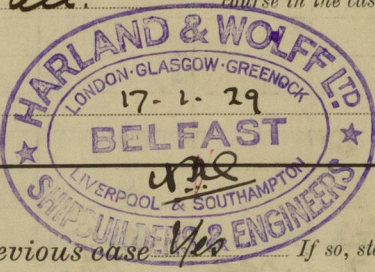
A cable carrying Ampères feet from standard compass feet from steering compass.

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 all course in the case of the standard

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



Builder's Signature.

Date Jan 17th 29

Is this installation a duplicate of a previous case? Yes If so, state name of vessel "Highland Monarch"

General Remarks (State quality of workmanship, opinions as to class, &c.)

This work has been done under special survey. The materials and workmanship are sound and good. The installation has been tried out under full working conditions with satisfactory results. In my opinion the vessel is now eligible for notation "Electric Light"

It is submitted that
this vessel is eligible for
THE RECORD.

Elec. Light
R. S. H.
23/1/29

Total Capacity of Generators 900 Kilowatts.

The amount of Fee ... £ 54 :-

When applied for,
12-1-1929
When received,
12/2/29

Travelling Expenses (if any) £ :

R. Lee Annes
Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned

Elec Light



© 2020

Lloyd's Register
Foundation