

REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

12 FEB 1926

Date of writing Report 8th February 1926 When handed in at Local Office 19 Port of Copenhagen

No. in Survey held at Copenhagen Date, First Survey 12th December 25 Last Survey 3rd February 1926
Reg. Book Splm. (Number of Visits 16)

40246 on the Twin Screw Motor Vessel "NORDPOL"

Built at Copenhagen By whom built Akt. Burmister & Hain's Maskin og Skibsloggeri Yard No. 340 Tons { Gross 5885.98
Net 3657.68 When built 1925-26

Owners Akt. Dampskibsselskabet Norden (S. P. Brown & Co) Port belonging to Copenhagen

Electric Light Installation fitted by Akt. Burmister & Hain's Maskin og Skibsloggeri Contract No. 340 When fitted 1926

System of Distribution Two-wire with direct current, insulated system!

Pressure of supply for Lighting 110 volts, Heating ✓ colts, Power 220 colts.

Direct or Alternating Current, Lighting Direct current Power Direct current

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 overload yes, are they compound wound yes

are they over compounded 5 per cent. No, 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 and clearly marked yes, are they so spaced or shielded that they cannot be accidentally earthed, or short circuited yes Are the lubricating arrangements of the generators as per Rule yes

Position of Generators On port side of the machinery space.

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 Not situated near unprotected woodwork or other combustible material., are the generators protected from mechanical injury and damage from water, steam or oil yes

are their axis 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 at the forward end of machinery space.

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 Not situated near unprotected woodwork or other combustible material.

are they constructed wholly of durable, incombustible 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 connected to one pole

insulated from the slab with mica or micanite and the slab similarly insulated from its framework yes, and is the frame effectively earthed yes

Are the following fittings as per Rule, viz.:— 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 For each generator:

a three pole circuit breaker with overload and reversed current trip, and a single-pole equalizer switch as required by the Rules. - For each outgoing circuit a double-pole linked switch and a double-pole fuse as per Rule. -

Instruments on main switchboard 5 ammeters 4 voltmeters ✓ 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 One voltmeter is provided with Ohm-scale and the switchboard is provided with two sets of earth testing lamps. -

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

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



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.

AKTIESELSKABET
BURMEISTER & WAINSKIN- OG SKIBBYGGERI Electrical Engineers. Date _____
Ch. Mørgen

COMPASSES.

Distance between electric generators or motors and standard compass *About 56 feet*
 Distance between electric generators or motors and steering compass *45 "*
 The nearest cables to the compasses are as follows:—
 A cable carrying *abt. 8* Ampères *abt. 10* feet from standard compass *abt 8* feet from steering compass.
 A cable carrying *abt 0.2* Ampères ~~to the lamp in feet from~~ standard compass ~~and in 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 *0* degrees on *all* course in the case of the standard compass, and *0* degrees on *all* course in the case of the steering compass.

AKTIESELSKABET
BURMEISTER & WAINSKIN- OG SKIBBYGGERI Builder's Signature. Date _____
Ch. Mørgen

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, &c. _____)

The whole electric lighting and power installation as above described has been fitted in accordance with the Rules, the approved plan and the requirements contained in the London letter E. dated the 18th September 1925.
The material used and the workmanship are of good description in every respect.
The whole electric installation has been tested under full power working condition and found satisfactory.

Recommend the vessel to have notation in the Register Book of "Electric light."

It is submitted that
 this vessel is eligible for
THE RECORD, Elec. light.

W. J. W.
 15/2/26

Total Capacity of Generators *150* Kilowatts

The amount of Fee <i>is noted on the Machinery Report.</i>	When applied for,	19
	When received,	19
Travelling Expenses (if any) £ <i>✓ : ✓ :</i>		

A. E. French
 Surveyor to Lloyd's Register of Shipping.

1 in 1924.—Transfer.
 (The Surveys are requested not to write on or below the space for Committee's Minute.)

Committee's Minute **FRI, 19 FEB 1926**
 Assigned *Elec Light*