

# REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office 25 APR 1928

Date of writing Report 12.4.28 When handed in at Local Office 21.4.28 Port of GLASGOW.

No. in Survey held at GLASGOW. Date, First Survey 1.2.28 Last Survey 11.4.28 19  
Reg. Book. 40699. on the M.V. "EL. ARGENTINO" (Number of Visits 1st)

Built at GOVAN. By whom built THE FAIRFIELD S.B. CO. LTD Yard No. 629 When built 1928

Owners THE BRITISH &amp; ARGENTINE S. NAVY CO. LTD Port belonging to LONDON.

Electric Light Installation fitted by MESSRS FAIRFIELD S.B. &amp; E. CO. LTD Contract No. 629 When fitted 1928.

System of Distribution TWO-WIRE

Pressure of supply for Lighting 220 volts, Heating — 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

Position of Generators ENGINE ROOM, HOLD LEVEL, 2 PORT &amp; 2 STARBOARD

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, 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 Board, where placed ON SWITCHBOARD PLAT IN ENGINE ROOM FORWARD END

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 YES

Switchboards, are they placed in accessible positions, free from inflammable gases and acid fumes 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, proportion of omnibus bars YES, accessibility of all parts YES, absence of fuses on back of board YES, connections of switches YES

Main Switchgear, description of switchgear for each generator and each outgoing circuit, and arrangement of equalizer switches EACH GENERATOR HAS ONE 800 AMP TRIPLE POLE CIRC. BREAKER, OVERLOAD TRIPS &amp; TIME LAGS &amp; D.P. MAIN SWITCH, EACH OUTGOING CIRCUIT

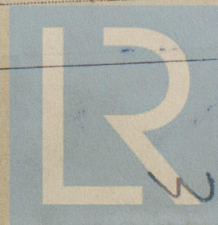
OVER 300 AMPS HAS ONE D.P. CIRC. BREAKER WITH TRIPS &amp; TIME LAGS. OTHER OUTGOING CIRCUITS HAVE EACH 2 S.P. HAND-GUARD FUSES &amp; 1 D.P. QUICK BREAK KNIFE SWITCH.

Instruments on main switchboard 8 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 2 EARTH LAMPS WITH 2 FUSES &amp; 2 SWITCHES [SINGLE POLE, LINKED]

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



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2376  
200  
2576

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.

*E. Skinner*

Electrical Engineer.

Date 16<sup>th</sup> April 1928

#### COMPASSES.

Distance between electric generators or motors and standard compass 33 FEET FROM W/T ROTARY CONVERTER

Distance between electric generators or motors and steering compass 30 " " " " "

The nearest cables to the compasses are as follows:—

A cable carrying .08 Ampères IN feet from standard compass feet from steering compass.

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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 FAIRFIELD SHIPBUILDING  
AND ENGINEERING CO., LIMITED.

*J. Henderson*  
MANAGER.

Builder's Signature.

Date 16/4/28

Is this installation a duplicate of a previous case Yes. If so, state name of vessel M.V. *Dauntless Grange*.

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

*This installation has been fitted on board under special survey. Tested under full load conditions & found satisfactory.*

*A short circuit developed in the armature winding of the forward refrigerating machine motor.*

*This was made good by removing, re-insulating & re-building the damaged coils.*

*The armature was then "drop tested" & subsequently run at load for 24 hours with satisfactory results.*

*The materials & workmanship were found to be good and sound.*

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

*J.M. 28/4/28.*

Total Capacity of Generators 660 Kilowatts.

The amount of Fee ... £48.0.0 : When applied for, 18/4/28

Travelling Expenses (if any) £ : When received, 19.5.28

*J. S. Rankin*  
Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 24 APR 1928

Assigned Elec. Light.



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