

Rpt. 13.

No. 63063

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

NOV 14 1940

Date of writing Report 26th October 1940 When handed in at Local Office 9:11:40 Port of GLASGOW
No. in Survey held at Glenock & Port Glasgow Date, First Survey 14:8:40 Last Survey 31st Oct. 1940
Reg. Book. 87011 on the S.S. "AIRCREST" (Number of Visits 11) Gross 5237
Built at Port Glasgow By whom built Littlehorns Ltd. Yard No. 936 When built 1940
Owners Crest Shipping Co Ltd. Port belonging to LONDON
Electrical Installation fitted by Sunderland Forge & Eng. Co Ltd. Contract No. 936 When fitted 1940
Is vessel fitted for carrying Petroleum in bulk no. Is vessel equipped with D.F. no. E.S.D. no. Gy.C. no. Sub.Sig. no.

Have plans been submitted and approved no. System of Distribution two wire Voltage of supply for Lighting 110

Heating no. Power 110 Direct or Alternating Current, Lighting D.C. Power D.C. If Alternating Current state frequency no. Prime Movers,

has the governing been tested and found efficient when the whole load is suddenly thrown on and off no. Are turbine emergency governors fitted with a

trip switch as per Rule no. Generators, are they compound wound no., are they level compounded under working conditions no.

if not compound wound state distance between generators no. and from switchboard no. Where more than one generator is fitted are they

arranged to run in parallel no., are shunt field regulators provided no. Is the compound winding connected to the negative or positive pole

positive Have machines over 100 kw. been inspected by the Surveyors during manufacture and testing no. Have certificates of

test for machines under 100 kw. been supplied no. and the results found as per rule no. Are the lubricating arrangements and the construction

of the generators as per rule no. Position of Generators in engine room

no., is the ventilation in way of generators satisfactory no. are they clear of inflammable material no., if situated

near unprotected combustible material state distance from same horizontally no. and vertically no., are the generators protected from mechanical

injury and damage from water, steam and oil no., are the bedplates and frames earthed no. and the prime movers and generators in metallic

contact no. Switchboards, where are main switchboards placed near generators

no.

are they in accessible positions, free from inflammable gases and acid fumes no., are they protected from mechanical injury and damage from water, steam

and oil no., if situated near unprotected combustible material state distance from same horizontally no. and vertically no., what insulation

material is used for the panels linoleum, if of synthetic insulating material is it an Approved Type no., if of

semi-insulating material (slate or marble) are all conducting parts insulated therefrom as per Rule no. Is the frame effectually earthed no.

Is the construction as per Rule no., including accessibility of parts no. absence of fuses on the back of the board no., individual fuses

to pilot and earth lamps, voltmeters, etc. no. locking of screws and nuts no., labelling of apparatus and fuses no., fuses on the "dead"

side of switches no. Description of Main Switchgear for each generator and arrangement of equaliser switches

2P. Switch and fuses for each generator

no.

and for each outgoing circuit 2P 40 Switch and fuses

no.

Are compartments containing switchboards composed of fire-resisting material or lined as per Rule no. Instruments on main switchboard 2

ammeters 2 voltmeters no. synchronising devices. For compound machines in parallel is the ammeter connected on the pole opposite to the

equaliser connection no. Earth Testing, state means provided car H. lamps

and where are the controlling switches fitted....., are all fittings suitably ventilated.....
are all fittings and accessories constructed and installed as per Rule..... Searchlight Lamps, No. of....., whether fixed or portable.....
....., are their fittings as per Rule..... Heating and Cooking, is the general construction as per Rule.....
are the frames effectually earthed....., are heaters in the accommodation of the convection type..... Motors, are all motors constructed and
installed as per Rule..... and placed in well-ventilated compartments in which inflammable gases cannot accumulate and free from damage from water,
steam and oil....., if situated near unprotected combustible material state minimum distance from same horizontally..... and vertically.....
Have motors of 100 BHP and over been inspected by the Surveyors during manufacture and testing..... Have certificates of test for motors under
100 BHP intended for essential services been supplied and the results found as per Rule..... Control Gear and Resistances, are they constructed and
fitted as per Rule..... Lightning Conductors, where required are they fitted as per Rule..... Ships carrying Oil having a Flash Point
less than 150° F. Have all the special requirements of the Rules for such ships been complied with....., are all fuses of the cartridge type.....
are they of an approved type..... If portable lamps for use in dangerous spaces are supplied, are they of a self-contained battery-fed flameproof
type..... Spare Gear, if the vessel is for open sea service have spares been provided as per Rule....., are they suitably stored in dry
situations..... Insulation Tests, has the insulation resistance of all circuits and apparatus been megger tested and found satisfactory.....

PARTICULARS OF GENERATING PLANT.								
DESCRIPTION OF GENERATOR.	No. of	RATED AT				DRIVEN BY	WHERE DRIVEN BY AN INTERNAL COMBUSTION ENGINE.	
		Kilowatts.	Volts.	Ampères.	Revs. per Min.		Fuel Used.	Flash Point of Fuel.
MAIN ...	2	15	110	136	850	Steam engine.		
EMERGENCY ...								
ROTARY TRANSFORMER								

GENERATOR CABLES.

DESCRIPTION.	KILOWATTS.	CONDUCTORS.		MAXIMUM CURRENT IN AMPERES.		APPROX. LENGTH (lead 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.	Rels.			
MAIN GENERATOR	15	1	19.064	136	135 ✓	50	K.	L.C.B.
" " EQUALISER								
.....								
.....								
.....								
.....								
EMERGENCY GENERATOR								
ROTARY TRANSFORMER: MOTOR								
" " GENERATOR								

MAIN DISTRIBUTION CABLES.

[illegible]

LIGHTING AND HEATING, ETC., CABLES.

WIRELESS	...	...	...	...	...	...	...	...	...
NAVIGATION LIGHTS	...	...	...	...	...	...	...	...	...
LIGHTING AND HEATING	...	...	...	...	...	...	...	...	...
CLEN AFT LT ⁹ DB.	1	7/944	15	31	488	Lucas	CONDUIT.		
	1	7/036	8	24	493	"	"		
ENGINEERS LT ⁹ DB.	1	7/036	7.5	24	448	"	"		
ENGINEERS LT ⁹ DB	1	7/004	20	46	160	"	"		
SALOON LT ⁹ DB	1	17/002	30.5	64	420	"	"		
CARGO FOR ⁹ DB.	1	7/944	10.8	31	208	"	"		
CARGO AFT. DB.	1	7/029	9	15	206	"	"		

MOTOR CABLES.

[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.

P.Pro. THE SUNDERLAND FORGE & ENGINEERING CO. LTD.

Electrical Engineers.

Date 31st October 1940

COMPASSES.

Minimum distance between electric generators or motors and standard compass 40 feet

Minimum distance between electric generators or motors and steering compass 36 feet

The nearest cables to the compasses are as follows:—

A cable carrying 18 Ampères led into feet from standard compass led into feet from steering compass.

A cable carrying 8 Ampères 6 feet from standard compass 6 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

Has the effect of switching on and off circuits, motors and other electro-magnetic apparatus within the vicinity of the compasses been noted

The maximum deviation due to electric currents was found to be nil degrees on inf course in the case of the

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

LITHGOWS LIMITED.

Secretary

Builder's Signature.

Date

5/11/40.

Is this installation a duplicate of a previous case If so, state name of vessel

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

The electrical installation of the vessel has been fitted on board under special survey, tested under full working conditions and found satisfactory.
The materials and workmanship are good.

Noted

19/11/40.

Total Capacity of Generators 30 Kilowatts.

The amount of Fee ... £ 22 : 10 : When applied for.

Travelling Expenses (if any) £ : 19 : When received.

Committee's Minute GLASGOW 12 NOV 1940

Assigned Su G.H. F.E Rpt 21128

S. G. Findlay

Surveyor to Lloyd's Register of Shipping.



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