

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Date of writing Report 11th April, 1940 When handed in at Local Office 19 Received at London Office APR 25 1940

No. in Survey held at West Haverpool Port of West Haverpool
Reg. Book Suppl. Date, First Survey 27th Nov, '39 Last Survey 12th April, 1940
39072 on the S.S. "FLORIAN" (Number of Visits 5)

Built at West Haverpool By whom built Wm Swan & Co., Ltd. Tons { Gross 1099 Net 1099 When built 1940
Owners Ellerman Lines, Ltd. Port belonging to Liverpool

Electrical Installation fitted by The Liverpool Engineering Co., Ltd. Contract No. 1099 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 house wire Voltage of supply for Lighting 110

Heating No Power 110 Direct or Alternating Current, Lighting No Power No If Alternating Current state frequency No Prime Movers, No

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 Engine room starboard side

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 Engine room starboard side

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

the construction as per Rule No, including accessibility of parts No, absence of fuses on the back of the board No, individual fuses pilot and earth lamps, voltmeters, etc. No locking of screws and nuts No, labelling of apparatus and fuses No, fuses on the "dead" of switches No Description of Main Switchgear for each generator and arrangement of equaliser switches Double pole

knife switch and double pole fuses

for each outgoing circuit Double pole double throw knife switch and double pole fuses

compartments containing switchboards composed of fire-resisting material or lined as per Rule No Instruments on main switchboard 2w meters 2w 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 2 lamps coupled to 2 through switches of equal

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	550	Single cylinders steam engines		
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.	Rule.				
MAIN GENERATORS	2415	1	19/072	136	157	50x60	V.C.	L.C.B.	
" " EQUALISER									
EMERGENCY GENERATOR									
ROTARY TRANSFORMER: MOTOR									
" " GENERATOR									
MAIN DISTRIBUTION CABLES.									
AUX. SWITCHBOARDS AND SECTION BOARDS									
Port Fans S.B. feed:-		1	19/064	42	82	514	V.I.R.	L.C.B. & H.R.B.	
Supply:- 6 circuits @		1	8/036	74	12	40-100	V.I.R.	H.R.B.	
Aft Fans S.B. feed:-		1	7/064	28	46	290	V.I.R.	L.C.B.	
Supply:- 4 circuits @		1	3/036	74	12	50-100	V.I.R.	H.R.B.	
Cargo Ltg. S.B. feed:-		1	19/064	71	83	130	V.I.R.	L.C.B.	
Supply:- 2 circuits @		1	7/064	26922	31	22x180	V.I.R.	L.C.B. & H.R.B.	
1 circuit @		1	7/064	23	31	408	V.I.R.	L.C.B. & H.R.B.	
Midship Ltg. S.B. feed:-		1	19/064	30	83	130	V.I.R.	L.C.B.	
LIGHTING AND HEATING, ETC., CABLES.									
WIRELESS		1	7/036	10	24	384	V.I.R.	L.C.B.	
NAVIGATION LIGHTS		1	7/036	5.3	24	376	V.I.R.	L.C.B.	
LIGHTING AND HEATING									
Engine & Boiler Room S.B.		1	7/036	7+4	24	20x80	V.I.R.	L.C.B.	
Aft Accessory Ltg. S.B.		1	7/064	9	46	250	V.I.R.	L.C.B.	
Undermined feed from Mid. S.B.									
Port Aft Ltg. S.B.		1	7/036	4.5	24	120	V.I.R.	L.C.B.	
Port Forward Ltg. S.B.		1	7/064	7.6	46	180	V.I.R.	L.C.B.	
Mid. Forward Ltg. S.B. & Forward Ltg. S.B.		1	7/064	9.9+2.5	46	180+324	V.I.R.	L.C.B.	
Starboard Aft S.B.		1	7/036	5.5	24	90	V.I.R.	L.C.B.	
MOTOR CABLES.									
ALL IMPORTANT MOTORS TO BE ENUMERATED.	No.	B.H.P.							
Oil Pumps	1	1.5	1	7/029	15	18.2	80	V.I.R.	
Refrig. Mfr.	1	5	1	7/064	43	46	224	V.I.R.	

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.

W. H. Sunderland *Eng. Ltd.* Electrical Engineers. Date *13-4-1940*
H. Gurney

COMPASSES.

Minimum distance between electric generators or motors and standard compass *116 feet*

Minimum distance between electric generators or motors and steering compass *112 feet*

The nearest cables to the compasses are as follows:—

A cable carrying *.14* Ampères *on the* ~~feet from~~ standard compass *7* feet from steering compass.

A cable carrying *.14* Ampères *7* feet from standard compass *on the* ~~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 *his* degrees on *Every* course in the case of the standard compass, and *his* degrees on *Every* course in the case of the steering compass.

W. H. Sunderland Builder's Signature. Date *22-4-40*
GENERAL MANAGER

Is this installation a duplicate of a previous case *Yes* 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 equipment of this vessel has been fitted under special survey. The materials used and the workmanship are good. On completion the equipment was run under working conditions, the governing, regulation and compounding of the generating sets were tested, the insulation resistances of all circuits were measured and the spare gear was examined. This equipment is in my opinion suitable for a closed vessel.*

Noted
26/4/40

Total Capacity of Generators *30* Kilowatts.

The amount of Fee ... *£ 22 : 10* : When applied for, *19*.....
Travelling Expenses (if any) *£* : : When received, *13/5* *1940* *14/5*

B. J. J. J.
Surveyor to Lloyd's Register of Shipping.

Committee's Minute *FM 26 APR 1940*
Assigned *See Hpl. JE 18031*



© 2019

Lloyd's Register
Foundation