

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

5 NOV 1947

Date of writing Report... 10th Oct 1947 When handed in at Local Office... 11/11/47 Port of... GLASGOW

No. in Survey held at... LEITH Date, First Survey... 1/10/47 Last Survey... 6th October 1947

Reg. Book. 32532 on the... S.S. "SALMONIER" ex "SAMMONT" Tons {Gross... 7219 Net... 4380

Built at... Los Angeles By whom built... California S.B. Corp. Yard No. - When built... 1943

Owners... Ben Line Steamers Ltd Port belonging to... London

Electrical Installation fitted by... California S.B. Corp. Contract No. - When fitted... 1943

Is vessel fitted for carrying Petroleum in bulk... No Is vessel equipped with D.F. Yes E.S.D. Yes Gy.C. Yes Sub-Sig. Radar

Have plans been submitted and approved... System of Distribution... Two Wire Insulated Voltage of supply for Lighting... 120

Heating... Power... 120 Direct or Alternating Current, Lighting... D.C. Power... D.C. If Alternating Current state periodicity... Prime Movers,

has the governing been tested and found as per Rule when full load is suddenly thrown on and off... Yes Are turbine emergency governors fitted with a

trip switch as per Rule... Generators, are they compound wound... Yes are they level compounded under working conditions... Yes

if not compound wound state distance between generators... and from switchboard... Where more than one generator is fitted are they

arranged to run in parallel... Yes, are shunt field regulators provided... Yes Is the compound winding connected to the negative or positive pole

Negative 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... Are the lubricating arrangements and the construction

of the generators as per rule... Yes Position of Generators... Generator Flat, Engine Room, Starboard side

is the ventilation in way of generators satisfactory... Yes are they clear of inflammable material... Yes, if situated

near unprotected combustible material state distance from same horizontally... and vertically... are the generators protected from mechanical

injury and damage from water, steam and oil... Yes, are the bedplates and frames earthed... Yes and the prime movers and generators in metallic

contact... Yes Switchboards, where are main switchboards placed... Near generators

are they in accessible positions, free from inflammable gases and acid fumes... Yes, are they protected from mechanical injury and damage from water, steam

and oil... Yes, if situated near unprotected combustible material state distance from same horizontally... and vertically... what insulation

material is used for the panels... Ebony Asbestos, if of synthetic insulating material is it an Approved Type... Yes, if of

semi-insulating material (slate or marble) are all conducting parts insulated therefrom as per Rule... Is the frame effectually earthed... Yes

Is the construction as per Rule... Yes, including accessibility of parts... Yes, absence of fuses on the back of the board of panel, individual fuses

to pilot and earth lamps, voltmeters, etc... Yes, locking of screws and nuts... Yes, labelling of apparatus and fuses... Yes, fuses on the "dead"

side of switches... Yes Description of Main Switchgear for each generator and arrangement of equaliser switches... D.P. Circuit-breakers

with overload and reverse current trips; Triple-pole isolating switch, including equaliser

and for each outgoing circuit... D.P. switch and D.P. cartridge fuses

Are compartments containing switchboards composed of fire-resisting material or lined as per Rule... Yes Instruments on main switchboard... 3

ammeters... 3 voltmeters... synchronising devices. For compound machines in parallel is the ammeter connected on the pole opposite to the

equaliser connection... Yes Earth Testing, state means provided... Earth Lamps

Switches, Circuit Breakers and Fuses, are they as per Rule... A.I.E.E. Standard are the fuses an approved type... A.I.E.E. Standard are all fuses labelled as

per Rule... Yes If circuit breakers are provided for the generators, at what overload current did they open when tested... Full load, are the reversed current

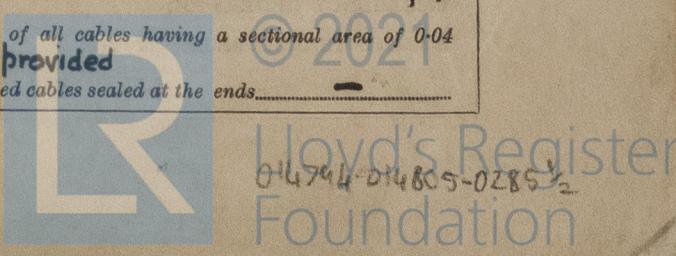
protection devices connected on the pole opposite to the equaliser connection... Yes, have they been tested under working conditions, and at what current

did they operate... Yes: 10-15 A. Joint Boxes, Section Boards and Distribution Boards, is the construction and position as per Rule... Yes

Cables, are they insulated and protected as per the appropriate Tables of the Rules... A.I.E.E. Standard, if otherwise than as per Rule are they of an approved type... Yes

state maximum fall of pressure between bus bars and any point under maximum load... 3 volts, are the ends of all cables having a sectional area of 0.04

square inch and above provided with soldering sockets... No, but adequate mechanical clamps are provided Are paper insulated and varnished cambric insulated cables sealed at the ends... -



with insulating compound — or waterproof insulating tape —. Are all the cable runs in accessible positions, not exposed to drip or accumulation of water or oil, high temperatures or risk of mechanical damage Yes, are cables laid under machines or floorplates No, if so, are they adequately protected —. Are cables in machinery spaces, galleys, laundries, etc., lead covered Yes or run in conduit —. State how the cables are supported and protected Supported clear of bulkheads on steel clips

Are all lead sheaths, armouring and conduits effectually bonded and earthed Yes. Refrigerated chambers, are the cables and fittings as per Rule —. Are all cables passing through decks and watertight bulkheads provided with deck tubes or watertight glands Yes, where unarmoured cables pass through beams, etc., are the holes effectively bushed Yes and with what material Lead. Alternative Lighting, are the groups of lights in the engine and boiler rooms arranged as per Rule Yes. Emergency Supply, state position — and method of control —

Navigation Lamps, are they separately wired Yes controlled by separate double pole switches Yes and fuses Yes. Are the switches and fuses in a position accessible only to the officers on watch Yes, is an automatic indicator fitted Yes. Secondary Batteries, are they constructed and fitted as per Rule —, are they adequately ventilated — what is the battery capacity in ampere hours —

Fittings, are all fittings on weather decks, in stokeholds and engine rooms and wherever exposed to drip or condensed moisture, weatherproof Yes. Are fittings installed where readily combustible materials or inflammable or explosive dust or gases are likely to be present No, if so, how are they protected —

and where are the controlling switches fitted —, are all fittings suitably ventilated —, are all fittings and accessories constructed and installed as per Rule Yes. 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 Standard and placed in well-ventilated compartments in which inflammable gases cannot accumulate and free from damage from water, steam and oil Yes, if situated near unprotected combustible material state minimum distance from same horizontally — and vertically —. Are motors coupled to oil fuel transfer and unit pressure pumps capable of being stopped from a position accessible in the event of fire in the pump compartment —

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 No. Control Gear and Resistances, are they constructed and fitted as per Rule Yes. 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 —. Are the fittings for pump rooms, tween deck spaces, etc., in accordance with the special requirements for such ships —. Are the cables lead covered as per Rule —. Spare Gear, if the vessel is for open sea service have spares been provided as per Rule Yes, are they suitably stored in dry situations Yes. Insulation Tests, has the insulation resistance of all circuits and apparatus been tested and found satisfactory Yes

PARTICULARS OF GENERATING PLANT.

DESCRIPTION OF GENERATOR.	No. of	RATED AT				WHERE DRIVEN BY AN INTERNAL COMBUSTION ENGINE.	
		Kilowatts.	Volts.	Ampères.	Revs. per Min.	Fuel Used.	Flash Point of Fuel.
MAIN	3	20	120	167	400	Single Cyl. 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.	Rule.			
MAIN GENERATOR	20	1	0.1969	167	182	64	Rubber	L.C.A.
" " EQUALISE		1	0.0329		56	32	"	"
EMERGENCY GENERATOR								
ROTARY TRANSFORMER: MOTOR								
" " GENERATOR								

MAIN DISTRIBUTION CABLES.

DESCRIPTION.	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.			
AUX. SWITCHBOARDS AND SECTION BOARDS							

LIGHTING AND HEATING, ETC., CABLES.

WIRELESS	P7	1	0.0206	35	44	290	Rubber	L.C.A.
NAVIGATION LIGHTS	From L8	1	0.0206	10	44	10	"	"
LIGHTING AND HEATING								
Engine Room	L1	1	0.0521	58	75	40	"	"
Cargo Flood Lights Forward	L2	1	0.0521	25	75	410	"	"
Cargo Midship Accom.	L3	1	0.0829	58	103	190	"	"
Midship Accom. Lighting	L4	1	0.0829	48	103	150	"	"
Cargo Flood Lights Aft.	L5	1	0.0521	23	75	270	"	"
Aft Stores	L6	1	0.0521	25	75	440	"	"
Boat Deck Accom & Fathometer	L7	1	0.0829	55	103	190	"	"
Wheelhouse	L8	1	0.0206	13	44	240	"	"
Boat Deck Accom. & D.F.	L9	1	0.0829	50	103	200	"	"
Searchlight (Cable only)		1	19.052	60	64	312	H.R.	—
Gyro (Connected to L7)		1	3.036	6	10	48	"	—
Radar		1	19.052	42	64	330	"	—

MOTOR CABLES.

ALL IMPORTANT MOTORS TO BE ENUMERATED.	No.	B.H.P.	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.			
Refrigerator	1	7 1/2	1	0.0658	59	88	125	Rubber	L.C.A.
R.W. Pumps	2	3/4	1	0.0032	6	13	100	"	"

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.

Supported clear of bulkheads on steel clips

Electrical Engineers.

Date

COMPASSES.

Minimum distance between electric generators or motors and standard compass 26 Feet

Minimum distance between electric generators or motors and steering compass 20 Feet

The nearest cables to the compasses are as follows:-

A cable carrying 2 Ampères 10 feet from standard compass 7 feet from steering compass.

A cable carrying 0.2 Ampères led into feet from standard compass led into 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 degrees on course in the case of the

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

Builder's Signature.

Date

Is this installation a duplicate of a previous case Yes If so, state name of vessel "SAM" Type

Plans. Are approved plans forwarded herewith No If not, state date of approval

Certificates. Are certificates of test for motors engaged on essential services and generators forwarded herewith Not available

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

Installation of this vessel as now seen appears to have been fitted in accordance with the standards of the American I.E.E., with the exception of Searchlight, Gyro-compass and Radar cables, which were installed at this time.

The generators, circuit-breakers and the installation generally have been examined, tested under working conditions and found satisfactory.

It was noted that the generators are constructed in line with American practice for a standard temperature rise of 40°C.

The installation as now seen is, in my opinion, such as could be accepted for classification with this Society.

Total Capacity of Generators 60 Kilowatts.

The amount of Fee £ 16 : - : When applied for, 4 NOV. 1947

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

B. Wagner, Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 4 NOV 1947

Assigned Transmit to London



EM.4.38-Transfer. (MADE AND PRINTED IN ENGLAND.) (The Surveyors are requested not to write on or below the space for Committee's Minute.)

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