

Rpt. 13.

No. 25461

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office

5 AUG 1949

Date of writing Report 28th May 1949 When handed in at Local Office 28 1949 Port of ANTWERP
 No. in Survey held at ANTWERP Date, First Survey 12-1-48 Last Survey 5-5-1949
 Reg. Book. (No. of Visits 16)

92150 on the m/- "BELGIAN PRIDE" Tons Gross 8722 Net 4969
 Built at Hoboken By whom built A. J. M. Cockrell Yard No. 694 Commissioned When built 1949
 Owners Belgian Gulf Oil Co Port belonging to Antwerp
 Installation fitted by E. B. Campbell & Thawood N.Y. When fitted 1949
 Is vessel equipped for carrying Petroleum in bulk Yes Is vessel equipped with D.F. Yes E.S.D. Yes Gy.C. Yes Sub.Sig. - Radar -

Plans, have they been submitted and approved Yes System of Distribution two wire Voltage of Lighting 110
 Heating 110 Power 110 D.C. or A.C., Lighting DC Power DC If A.C. state frequency -
 Prime Movers, has the governing been found as per Rule when full load is thrown on and off Yes Are turbine emergency governors fitted
 with a trip switch - Generators, are they compound wound Yes, and level compounded under working conditions Yes
 if not compound wound state distance between generators - and from switchboard - Are the generators arranged to run
 two 40 KW. Generators 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 - Have certificates of
 test for machines under 100 kw. been supplied Yes and the results found as per Rule Yes

Position of Generators On platform stbd. side of E.R. in fore and aft position
 is the ventilation in way of generators satisfactory Yes are they clear of inflammable material and protected from mechanical injury and
 damage from water, steam and oil Yes Switchboards, where are main switchboards placed On platform stbd.
 side of E.R. at forward end in athwartship direction
 are they in accessible positions, free from inflammable gases and acid fumes and protected from mechanical injury and damage from water,
 steam and oil Yes, what insulation is used for the panels Lead paint type, if synthetic insulating
 material is an Approved Type Yes, if of semi-insulating material (slate or marble) are all conducting parts insulated therefrom as
 per Rule - Is the construction as per Rule, including locking of screws and nuts Yes Description of Main Switchgear
 for each generator and arrangement of equaliser switches Two 40 KW. Generators: three pole circuit
 breakers with equaliser switches timed as per Rule. The 12 KW.
 Generator: double pole circuit breaker. Makers of circuit breakers: Brandt & Fils
 and the switch and fuse gear (or circuit breakers) for each outgoing circuit. All double pole switches and
 fuses on each pole.

Are compartments containing switchboards composed of fire-resisting material or lined as per Rule Yes Instruments on main switchboard seven
 ammeters three voltmeters - synchronising devices. For compound machines in parallel are the ammeters and reversed current
 protection devices connected on the pole opposite to the equaliser connection Yes Earth Testing, state means provided
 Tell - Ohm meter

Switches, Circuit Breakers and Fuses, are they as per Rule Yes, are the fuses an Approved Type Yes
 make of fuses C.E.C. (Cartridge), are all fuses labelled Yes If circuit breakers are provided for the generators, at what
 overload do they operate 50% - to run, and at what current do the reversed current protective devices operate 10% of full load
 current

Joint Boxes, Section Boards and Distribution Boards, is the construction as per Rule Yes

Cables, are they insulated and protected as per Rule Yes, if otherwise than as per Rule are they of an Approved Type -
 state maximum fall of pressure between bus bars and any point under maximum load 6 volts, are the ends of all cables having a sectional
 area of 0.01 square inch and above provided with soldering sockets Yes Are all paper insulated and varnished cambric insulated
 cables sealed at the ends Yes 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 any 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 -
 or of the "HR" type - State how the cables are supported or protected In all exposed positions
 armoured clipped to bulkheads or to perforated steel trays

Are all lead sheaths, armouring and conduits effectually bonded and earthed Yes 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 Refrigerated chambers, are the cables and fittings as per Rule Yes (horizontal chamber)

LIGHTING, HEATING, WIRELESS, NAVIGATION LIGHTS, ETC., CABLES.

DESCRIPTION.	CONDUCTORS.		MAXIMUM CURRENT IN AMPERES.		APPROX. LENGTH (lead plus return feet).	INSULATION.	PROTECTIVE COVERING.
	No. in Parallel per Pole.	Sectional Area or No. and Dia. of Strands. Sq. ins. or sq. mm.	In the Circuit.	Rule.			
Wireless	1	19/064	27.2	135	441	Cambie	L.C.A.
Navigation Lights	1	2/026	5	7	400	V.L.R.	L.C.A.
Lighting circuits in E.R.	1	2/026	7.4	7	100	"	"
	1	2/029	9.55	2.5	100	"	"
Lighting circuits from dist. fuse board to different light points in accom. and on deck	1	2/029	3.5	3.5	60	V.L.R.	L.C. & L.S.A.
	1	2/036	3	7	50	"	"
	1	7/044	10	22	150	"	L.C.A.
Water boilers	1	7/036	10	27	40	Cambie	L.C.A.
Hotplate	1	7/044	28	42	40	"	"

MOTOR CABLES.

ALL IMPORTANT MOTORS TO BE ENUMERATED.	No.	B.H.P.							
Steering gear motor	1	10	1	19/044	73	87	195	Cambie	L.C.A.
Turning gear motor	1	12.5	1	19/064	100	135	60	"	"

Alternative Lighting, are the groups of lights in the engine and boiler rooms arranged as per Rule. Yes Emergency Supply, state position Yes

Navigation Lamps, are they separately wired Yes controlled by separate double pole switches 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 Is an alternative supply provided Yes

Secondary Batteries, are they constructed and fitted as per Rule Yes are they adequately ventilated. Yes state battery capacity in ampere hours 28 amp. / hr.

Fittings, are all fittings on weather decks, in stokeholds and engine rooms and wherever exposed to drip or condensed moisture, weatherproof Yes Are any fittings installed where readily combustible materials or inflammable or explosive dust or gases are likely to be present Yes if so, how are they protected. Flame proof

and where are the controlling switches fitted. As per Rule Are all fittings suitably ventilated Yes

Searchlight Lamps, No. of 1, whether fixed or portable 1, are they of the carbon arc or of the filament type. Carbon arc

Heating and Cooking, is the general construction as per Rule Yes, are the frames effectually earthed Yes, are heaters in the accommodation of the convection type Yes Motors, are all motors constructed and installed as per Rule and placed in well-ventilated compartments in which inflammable gases cannot accumulate and protected from damage from water, steam and oil. Yes

Are motors coupled to oil fuel transfer and pressure pumps capable of being stopped from a position accessible in the event of fire in the pump compartment. Yes Have motors of 100 BHP and over been inspected by the Surveyors during manufacture and testing Yes

Have certificates of test for motors under 100 BHP intended for essential sea services been supplied and the results found as per Rule Yes

Control Gear and Resistances, are they constructed and fitted as per Rule Yes Lightning Conductors, where required are they fitted as per Rule Yes 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 Yes, are all fuses of an Approved Cartridge Type Yes, make of fuse C.F.E.C. Are the fittings for pump rooms, 'tween deck spaces, etc., in accordance with the special requirements for such ships. Yes Are the cables lead covered as per Rule Yes

E.S.D., if fitted state maker HUGHES Location of transmitter Offendham E.R. and receiver Offendham E.R.

Spare Gear, if the vessel is for open sea service have spares been provided as per Rule and 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	MAKER.	RATED AT			PRIME MOVER.		
			Kilowatts per Generator.	Volts.	Ampères.	Revs. per Min.	TYPE.	MAKER.
MAIN ...	One	Campbell-Thomson	40	110	364	1000	Diesel motor	Atcl. La Mente
	One	Electro Tech. Industries	40	110	364	500	Steam eng.	Jaffa
aux. Gen.	One	Campbell-Thomson	12	110	109	1000	Diesel motor	Atcl. La Mente
EMERGENCY ...								
ROTARY TRANSFORMER								

GENERATOR CABLES.

DESCRIPTION.	KILOWATTS.	CONDUCTORS.		MAXIMUM CURRENT IN AMPERES.		APPROX. LENGTH (lead plus return feet).	INSULATION.	PROTECTIVE COVERING.
		No. in Parallel per Pole.	Sectional Area or No. and Dia. of Strands. Sq. ins. or sq. mm.	In the Circuit.	Rule.			
MAIN GENERATORS ...	40	2	19/083	364	182	90	Cambie	L.C.A.
" " EQUALISER ...		1	19/083		191	45	"	"
aux. Generator	12	1	19/064	109	135	30	"	"
EMERGENCY GENERATOR ...								
ROTARY TRANSFORMER: MOTOR ...								
" " GENERATOR...								

MAIN DISTRIBUTION CABLES (to Section Boards, Distribution Fuse Boards, etc.) FROM MAIN SWITCH BOARD

DESCRIPTION.								
01.14/01.15 to dist. fuse boards F1, F2, F3	1	7/064	65	75	180	Cambie	L.C.A.	
01.14/01.15 to dist. fuse boards F4, F5	1	19/064	110	135	420	"	"	
01.18/01.19/01.20/01.21/01.22/01.23/01.24/01.25/01.26/01.27	1	7/036	21.7	28	195	"	"	
01.28/01.29 to main motor, fan, etc.	1	2/036	3.3	7	75	"	"	
01.23 to oil heater	1	19/064	27.2	135	441	"	"	
01.20 wireless	1	7/052	14	57	250	"	"	
01.20 compass	1	7/052	33.7	37	165	V.L.R.	"	
02.1/02.2/02.3/02.4/02.5 to dist. fuse boards E1, E2, E3, E4	1	7/064	19.9	42	420	"	"	
02.3 to dist. fuse board E3	1	19/064	54	58	240	"	"	
02.4 to dist. fuse board E4	1	19/052	37.5	45	366	"	"	
02.7/02.9 to dist. fuse board E7, E9	1	19/052	37.5	37	330	"	"	
02.8 to dist. fuse board E8	1	7/036	3.3	17	366	"	"	
02.10 to nav. light dist. fuse board	1	7/036	40	135	900	Cambie	"	
To Survey canal search light	1	19/056				"	"	

N^o 11
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.

ETABLISSEMENTS BELGES
CAMPBELL & ISHERWOOD
Société Anonyme
ELECTRICIENS - MECANICIENS
Rue de Genes, 11
ANVERS

Electrical Contractors.

Date May 31st 1949

COMPASSES.

Have the compasses been adjusted under working conditions?

Division du Chantier Naval
HOBLENSE-NAVYERS

Builder's Signature.

Date

Have the foregoing descriptions and schedules been verified and found correct?

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

Plans. Are approved plans forwarded herewith? If not, state date of approval.

Certificates. Are certificates of test for motors engaged on essential sea services and generators forwarded herewith?

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 constructed and installed under Special Survey of the Society's Surveyors in accordance with the Rules, the approved plans and the Secretary's letters. The materials and workmanship are good, insulation and other tests have been carried out with satisfactory results in accordance with the Rule requirements.

The electrical installation of this vessel is eligible, in my opinion, to be incorporated in the class assigned to the machinery.

Note ent 1/9/49

Total Capacity of Generators 92 Kilowatts.

The amount of Fee ... £s. 14220.-

When applied for,

21st 1949

When received,

19

Travelling Expenses (if any) £s. 2990.-

Committee's Minute

FR 9 SEP 1949

Assigned

See fe machy rpl.

G. Falkenberg
Surveyor to Lloyd's Register of Shipping.