

# REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Date of writing Report... 10-11-1942 When handed in at Local Office... 14-11-1942 Port of... Liverpool Received at London Office... 18 NOV 1942

No. in Survey held at... Bishamstead Date, First Survey... 24/9/42 Last Survey... 6/11/42 Reg. Book... 85723 on the... m.v. "BRITISH PROMISE" (Number of Visits... 5)

Built at... Bishamstead By whom built... Cannell Laird & Co. Ltd. Yard No... 1068 Tons {Gross... 8443 Net... 4825} When built... 1942

Owners... British Tanker Co. Ltd Port belonging to... London. Electrical Installation fitted by... The Sunderland Forge & Eng. Co. Ltd Contract No... 1068 When fitted... 1942

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

Have plans been submitted and approved... Yes System of Distribution... Two wire Voltage of supply for Lighting... 110

Heating... Power... 110 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... No, 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 Are the lubricating arrangements and the construction of the generators as per rule... Yes Position of Generators... In engine room, starboard side, foreward.

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... In engine room adjacent to 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... Wood

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... Yes, 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... Double pole switch

and for each outgoing circuit... Double pole change-over switch fuses.

Are compartments containing switchboards composed of fire-resisting material or lined as per Rule... Yes Instruments on main switchboard... 2 ammeters... 2 voltmeters... synchronising devices. For compound machines in parallel is the ammeter connected on the pole opposite to the equaliser connection... Earth Testing, state means provided... Earth Lamps.

Switches, Circuit Breakers and Fuses, are they as per Rule... Yes, are the fuses an approved type... Yes, 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... are the reversed current protection devices connected on the pole opposite to the equaliser connection... have they been tested under working conditions, and at what current did they operate... 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... Yes, 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... 3.5V, are the ends of all cables having a sectional area of 0.04 square inch and above provided with soldering sockets... Yes Are paper insulated and varnished cambric insulated cables sealed at the ends... Yes

with insulating compound — or waterproof insulating tape 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 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 Main cables on deck, L.C.A. in galvanized iron pipes. Machinery spaces L.C.A. or L.C.A.B. clipped to beams or plating. Pump rooms in conduit. Accommodation L.C.B. clipped.

Are all lead sheaths, armouring and conduits effectually bonded and earthed Yes. Refrigerated chambers, are the cables and fittings as per Rule 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 effectually 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 Yes, are they adequately ventilated Yes what is the battery capacity in ampere hours 80 amp. hours.

Fittings, are all fittings on weather decks, in stowholds 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 Yes, if so, how are they protected Top of Pump Room & Crutchcase space - flame proof fittings.

and where are the controlling switches fitted in accommodation, are all fittings suitably ventilated Yes, are all fittings and accessories constructed and installed as per Rule Yes. Searchlight Lamps, No. of None, 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 Yes 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 Yes. Control Gear and Resistances, are they constructed and fitted as per Rule Yes. Lighting 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 the cartridge type Yes are they of an approved type Yes. 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. 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				DRIVEN BY	WHERE DRIVEN BY AN INTERNAL COMBUSTION ENGINE.	
		Kilowatts.	Volts.	Amps.	Revs. per Min.		Fuel Used.	Flash Point of Fuel.
MAIN	2	30	110	273	600	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 ... (2)	30	1	37/083	273	296	60	Varnish	L.C.A.B.
" " EQUALISER								
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 ...							
Medialp Section Board	1	37/072	53.3	246	600	V.C.	L.C.A. in pipe
" " (Alternative Supply)	1	57/072	53.3	246	600	"	"
Aft. Section Board	1	19/083	92.5	191	90	"	L.C.A.B.
Flow Connection	1	37/083	273	296	100	"	"
Engine Room Lighting Section Board	1	7/064	48	75	30	"	L.C.A.
" " " "	1	7/064	61	75	30	"	"
Emergency Searchlight (Commutator Box)	1	7/064	60	75	800	"	L.C.A. in pipe.

LIGHTING AND HEATING, ETC., CABLES.

WIRELESS	1	7/064	35	75	105	V.C.	L.C.B.
NAVIGATION LIGHTS D.B.1.	1	7/036	15	24	132	V.I.R.	"
LIGHTING AND HEATING D.B.2.	1	7/044	15	31	120	"	"
Upper Deck Lighting D.B.3	1	7/036	13	24	90	"	"
Deck Deck Lighting (Port) D.B.4.	1	7/064	16	75	30	V.C.	"
" " (Star) D.B.5	1	7/064	18	75	90	"	"
Cargo Lighting (Midship) D.B.6	1	7/036	11	24	30	V.I.R.	"
Engine Room Lighting (Port) D.B.7	1	7/044	9	31	120	"	L.C.A.B.
" " (Star) D.B.8	1	7/044	9	31	80	"	"
" " (Star) D.B.9	1	7/044	9	31	160	"	"
" " (Star) D.B.10	1	7/044	9	31	60	"	"
Poop Deck Lighting (Port) D.B.11	1	7/044	18	31	105	"	L.C.B.
" " (Star) D.B.12	1	7/044	7	31	30	"	"
Aft Lighting Upper Deck (Port) D.B.13.	1	7/044	12	31	110	"	"
" " (Star) D.B.14	1	7/044	11	31	80	"	"
Cargo Lighting (Aft) D.B.15	1	7/044	6	31	60	"	"

MOTOR CABLES.

ALL IMPORTANT MOTORS TO BE ENUMERATED.	No.	B.H.P.						
Steering Gear motor	1	10	19/072	80	102	120	V.C.	L.C.A.B.
Oil Pump	2	2	7/044	178	31	60/90	V.I.R.	"
Eng. Room Vent Fan.	1	1.5	7/029	14	15	120	"	"
Workshop motor	1	3	7/044	25	31	150	"	"
Accommodation Vent Fan (Aft)	1	4	7/064	33	75	105	V.C.	L.C.B.
" " (Midship)	1	4	7/064	33	75	132	"	"

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.

THE SUNDERLAND FORGE & ENG. CO. LTD.

*B. Williams*

Electrical Engineers.

Date 12/16/42

COMPASSES.

Minimum distance between electric generators or motors and standard compass 215 ft

Minimum distance between electric generators or motors and steering compass 208 ft

The nearest cables to the compasses are as follows:—

A cable carrying 1.5 Ampères 14 feet from standard compass 10 feet from steering compass.

A cable carrying .36 Ampères *led into* feet from standard compass 8 feet from steering compass.

A cable carrying .36 Ampères 8 feet from standard compass *led into* 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 *1/2* degrees on *any* course in the case of the standard compass, and *1/2* degrees *any* course in the case of the steering compass.

FOR AND ON BEHALF OF  
 CAMMELL LAIRD & CO. LIMITED

*[Signature]*

Builder's Signature.

Date 13 NOV 1942

MANAGER

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

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

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

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

*Equipment of the vessel has been fitted on board in accordance with the approved plans & to the requirements of the Rules for Electrical Equipment. The installation has been tested under full working conditions & found satisfactory. The materials and workmanship are good.*

*Noted*  
*[Signature]*  
 24/11/42

Total Capacity of Generators 60 Kilowatts.

The amount of Fee ... £28.10.0. When applied for, 19.

Travelling Expenses (if any) £ : : When received, 10.

*[Signature]*

Surveyor to Lloyd's Register of Shipping.

Committee's Minute LIVERPOOL 17 NOV 1942

Assigned See Minute on Liverpool I.E. Rpt.

*[Signature]*

5m. 4.30.—Transfer. (MADE AND PRINTED IN ENGLAND.)  
 (The Surveys are requested not to write on or below the space for Committee's Minute.)



© 2020

Lloyd's Register Foundation