

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

JAN 1949

Date of writing Report 29th December 1948 When handed in at Local Office 27th JAN 1949 Received at London Office LAB
 No. in Survey held at GREENOCK Date First Survey 1st AUGUST Last Survey 24th DECEMBER 1948
 Reg. Book. 90746 on the M.V. BRITISH PROGRESS (No. of Visits 7)
 Built at GLASGOW By whom built GLYTHSNOOD S.B.C. LTD Yard No. 89 When built 1948
 Owners BRITISH TANKER CO LTD Port belonging to LONDON
 Installation fitted by SUNDERLAND FORGE & ENGINEERING CO LTD When fitted 1948
 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. YES Radar YES

Plans, have they been submitted and approved YES System of Distribution TWO WIRE Voltage of Lighting 110
 Heating YES Power 110 D.C. or A.C., Lighting D.C. Power D.C. 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 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 STARBOARD SIDE OF ENGINE ROOM
 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 NEAR GENERATORS
 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 SINDANYO, 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 construction as per Rule, including locking of screws and nuts YES Description of Main Switchgear for each generator and arrangement of equaliser switches 700 AMP TRIPLE POLE CIRCUIT-BREAKER FITTED WITH OVERLOAD AND REVERSE CURRENT TRIPS

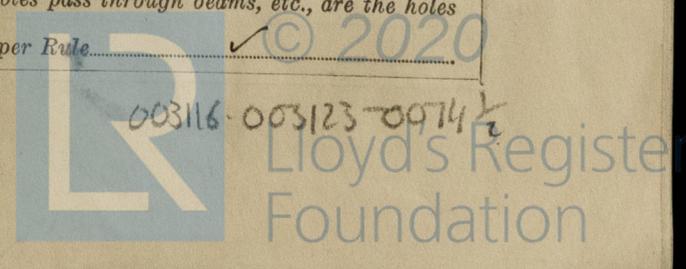
and the switch and fuse gear (or circuit breakers) for each outgoing circuit 300 AMP, 200 AMP, 100 AMP, 60 AMP OR 30 AMP D.P. KNIFE PATTERN SWITCHES WITH 'ZED' TYPE FUSES

Are compartments containing switchboards composed of fire-resisting material or lined as per Rule YES Instruments on main switchboard TWO ammeters TWO 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 EARTH LAMPS

Switches, Circuit Breakers and Fuses, are they as per Rule YES, are the fuses an Approved Type YES, make of fuses SIEMENS 'Z' TYPE, are all fuses labelled YES If circuit breakers are provided for the generators, at what overload do they operate FULL LOAD, and at what current do the reversed current protective devices operate 10% - 15%

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 3.8 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 MAINS - L.C.A.B. CABLES CLIPPED TO STEEL PLATE WITH COVER FITTED. MACHINERY SPACE - L.C.A.B. CABLES CLIPPED TO STEELWORK OR TRAY ACCOMMODATION. L.C.B. CABLE CLIPPED TO WOODWORK.

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 ✓



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

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. YES

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. FLAMEPROOF FITTINGS INSTALLED IN CENTRE CASTLE SPACE. PUMP ROOM FITTINGS COMPLY WITH RULE REQUIREMENTS and where are the controlling switches fitted. IN ACCOMMODATION SPACE. Are all fittings suitably ventilated. YES

Searchlight Lamps, No. of 2, whether fixed or portable. YES, are they of the carbon arc or of the filament type. YES

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. SIEMENS. 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. MARCONI - SEAVISA location of transmitter. FRAME SPACE AFT OF ENGINE ROOM FORWARD BULKHEAD and receiver. SIMILAR POSITION.

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 ...	2	SUNDERLAND FORGE & ENGINEERING CO. LTD.	75	110	682	500	STEAM ENGINE.	BELLISS & MORCOM.
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 GENERATOR ...	75	2	37/103	682	770	58	V.C.	L.C.
" " EQUALISER ...		1	37/103	-	385	29	V.C.	L.C.
EMERGENCY GENERATOR ...								
ROTARY TRANSFORMER: MOTOR ...								
" " GENERATOR ...								

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

DESCRIPTION.	No.	Sectional Area or No. and Dia. of Strands. Sq. ins. or sq. mm.	In the Circuit.	Rule.	APPROX. LENGTH (lead plus return feet).	INSULATION.	PROTECTIVE COVERING.
MIDSHIP LIGHTING AND POWER SECTION.	1	37/103	244	385	340	V.C.	L.C.A.B.
HFT ACCOMMODATION LIGHTING AND POWER SECT.	1	37/072	195	246	208	V.C.	L.C.A.B.
ENGINE ROOM LIGHTING SECTION.	1	19/052	53	104	162	V.C.	L.C.A.B.
SHORE CONNECTION.	1	37/103	300	385	262	V.C.	L.C.A.B.

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	37/103	70	385	502	V.C.	L.C.A.B.
NAVIGATION.	1	7/064	30	75	112	V.C.	L.C.B.
UPPER BRIDGE DECK LIGHTING D.B.	1	7/044	22	31	72	RUBBER	L.C.B.
BRIDGE DECK MID. LIGHTING D.B.	1	7/044	15	31	30	RUBBER	L.C.B.
ACCOM. LIGHTING D.B. HFT.	1	7/064	24	76	286	V.C.	L.C.B.
ACCOM. LIGHTING D.B. STARBOARD HFT.	1	7/044	14	31	160	RUBBER	L.C.B.
ACCOM. LIGHTING D.B. PORT HFT.	1	7/044	14	31	116	RUBBER	L.C.B.
POOP DECK ACCOM. LIGHTING D.B. PORT	1	7/044	18	31	160	RUBBER	L.C.B.
POOP DECK ACCOM. LIGHTING D.B. STARBOARD	1	7/044	16	31	136	RUBBER	L.C.B.
ENGINE ROOM LIGHTING D.B. TOP PORT	1	7/044	12	31	140	RUBBER	L.C.A.B.
ENGINE ROOM LIGHTING D.B. TOP STBD.	1	7/044	12	31	240	RUBBER	L.C.A.B.
ENGINE ROOM LIGHTING D.B. BOTTOM PORT.	1	7/044	12	31	180	RUBBER	L.C.A.B.
ENGINE ROOM LIGHTING D.B. BOTTOM STBD.	1	7/044	12	31	72	RUBBER	L.C.A.B.
ENGINE ROOM H.V. D.B.	1	19/052	81	104	104	V.C.	L.C.A.B.
REFRIG. D.B.	1	7/064	45	75	386	V.C.	L.C.A.B.
RADAR.	1	7/044	25	31	184	RUBBER	L.C.B.
CYRO	1	7/029	10	15	84	RUBBER	L.C.B.

MOTOR CABLES.

ALL IMPORTANT MOTORS TO BE ENUMERATED.	No.	B.H.P.	Sectional Area or No. and Dia. of Strands. Sq. ins. or sq. mm.	In the Circuit.	Rule.	APPROX. LENGTH (lead plus return feet).	INSULATION.	PROTECTIVE COVERING.
TURNING GEAR	1	10	19/052	80	104	152	V.C.	L.C.A.B.
MID BOAT WINCHES.	2	7.5	19/052	65	104	140	V.C.	L.C.B.
HFT BOAT WINCHES.	2	7.5	19/052	65	104	212	V.C.	L.C.B.
REFRIG COMPRESSORS	2	4	7/064	35	75	32	V.C.	L.C.A.B.
PURIFIERS	2	2.5	7/044	22	31	270	RUBBER	L.C.A.B.
HFT VENT FANS.	2	2.75	7/044	24	31	64	RUBBER	L.C.B.
MID VENT FANS.	2	2	7/044	17	31	180	RUBBER	L.C.B.
ENGINE ROOM VENT FANS	1	1.5	7/044	14	31	162	RUBBER	L.C.A.B.
PRIMING PUMP	1	1.5	7/044	14	31	250	RUBBER	L.C.A.B.

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 Contractors.

Date 30/12/48

J.C. Thanks for

COMPASSES.

Have the compasses been adjusted under working conditions.

YES

ELYTHWOOD'S SHIPBUILDING CO., LTD.

Builder's Signature.

Date 10/1/49

[Signature]

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

YES.

Is this installation a duplicate of a previous case.

YES.

BRITISH COUNCILLOR

Plans. Are approved plans forwarded herewith.

No

If not, state date of approval.

25TH MARCH 1948.

Certificates. Are certificates of test for motors engaged on essential sea 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 installation of this vessel has been fitted on board under Special Survey, tested under working conditions and found satisfactory. The quality of materials and workmanship is good.

3.0.1	3.0	521	401	520	81		
3.0.1	3.0	541	401	520	81		
3.0.1	3.0	515	401	520	81		
3.0.1	3.0	38	28	400	1		
3.0.1	3.0	250	18	55	400	1	30
3.0.1	3.0	64	31	40	400	1	30
3.0.1	3.0	105	15	40	400	1	30
3.0.1	3.0	105	15	40	400	1	30
3.0.1	3.0	250	18	55	400	1	30

Note sub 15/2/49

Total Capacity of Generators 150 Kilowatts.

The amount of Fee ...

£ 62.10

When applied for,

18 JAN 1949

When received,

19

Travelling Expenses (if any) £

Surveyor to Lloyd's Register of Shipping.

[Signature]

Committee's Minute

GLASGOW 18 JAN 1949

Assigned

SEE ACCOMPANYING MACHINERY REPORT

2m.9.48.—Transfer. (MADE AND PRINTED IN ENGLAND.) (The Surveyors are requested not to write on or below the space for Committee's Minute.)

J.D.P. 15.1.49

112



© 2020

Lloyd's Register Foundation