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No. 133852

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office

3 OCT 1951

of writing Report 10.9.1951 When handed in at Local Office 14 SEP 1951 Port of LIVERPOOL.
in Survey held at BIRKENHEAD Date, First Survey 6/6/51 Last Survey 27/8/1951
(No. of Visits) 12
Tons { Gross 12741
Net
on the s.s. "PRESIDENTE PERON"
It at BIRKENHEAD. By whom built CAMMELL LAIRD & CO. LTD. Yard No. 1205 When built 1951.
partners ARGENTINE GOVERNMENT. Port belonging to BUENOS AIRES.
Rpt. allation fitted by CAMMELL LAIRD & CO. LTD. When fitted 1951.

essel equipped for carrying Petroleum in bulk YES Is vessel equipped with D.F. YES E.S.D. YES Gy.C. YES Sub.Sig. NO Radar YES.

is, have they been submitted and approved YES System of Distribution Two-wire Voltage of Lighting 110

le re testing 220 Power 220 D.C. or A.C., Lighting D.C. Power D.C. If A.C. state frequency —

testes me Movers, has the governing been found as per Rule when full load is thrown on and off YES Are turbine emergency governors fitted

elect a trip switch YES Generators, are they compound wound YES, and level compounded under working conditions YES,

not compound wound state distance between generators — and from switchboard — Are the generators arranged to run

parallel YES, are shunt field regulators provided YES Is the compound winding connected to the negative or positive pole

negative YES Have machines over 100 kw. been inspected by the Surveyors during manufacture and testing YES Have certificates of

P.M. t for machines under 100 kw. been supplied YES and the results found as per Rule YES.

classi cation of Generators In main engine room.

the ventilation in way of generators satisfactory YES are they clear of inflammable material and protected from mechanical injury and

213, damage from water, steam and oil YES Switchboards, where are main switchboards placed In main engine room,

In special platform.

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

am 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 YES 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 Triple pole circuit breakers fitted with overload and

reverse current trips.

and the switch and fuse gear (or circuit-breakers) for each outgoing circuit Double pole circuit breaker or double

bolt serial and fuses.

re compartments containing switchboards composed of fire-resisting material or lined as per Rule YES Instruments on main switchboard 7

ammeters 6 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.

witches, Circuit Breakers and Fuses, are they as per Rule YES are the fuses an Approved Type YES

take of fuses L. breakers (Lester) test / approved per Board of Trade letter 145-1-449.

are all fuses labelled YES If circuit breakers are provided for the generators, at what

overload do they operate Coded at 10% over and at what current do the reversed current protective devices operate 10% R.C.

oint 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 —

tate 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 YES, if so, are they

adequately protected YES 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 Main cables supported on main

gangway by steel plates — cables L.C.A. sub mains threading special L.C.A. clamped.

Accommodation L.C. clamped All cables protected as necessary.

Are all lead sheaths, armouring and conduits effectively 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

Alternative Lighting, are the groups of lights in the engine and boiler rooms arranged as per Rule 400. 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 400, are they adequately ventilated Yes. State battery capacity in ampere hours low powers 57ah. Telephone 10.2k.

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 Handing of fittings.

and where are the controlling switches fitted outside spaces. Are all fittings suitably ventilated Yes.

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

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 —. 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 fused Lubricators (Lube) 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.

E.S.D., if fitted state maker Hughes MS.21B, location of transmitter Cofferdam Eng. Rm. and receiver Cofferdam Eng. Rm.

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	Sundeland Forge	250	220	1136	1200	Si. Turbines	Peto Brothers Ltd	
	2	do	75	220	341	600	O.I. Engines	National Gas & Co.	
EMERGENCY ROTARY TRANSFORMER	2.	Sundeland Forge	30	110	272	1400	El. Motors.	Sundeland Forge.	

GENERATOR CABLES.

DESCRIPTION.	KILOWATTS.	CONDUCTORS.			MAXIMUM CURRENT IN AMPERES.	APPROX. LENGTH (lead plus return feet).	INSULATION.	PROTECTIVE COVERING.
		No. in Parallel.	Sectional Area or No. and Dia. of Strands.	In the Circuit.				
MAIN GENERATOR	250	10.3/104	37/103	1136	124/1632	156	V.C.	L.C.A.
	2.	61/093	-	984	78	-	-	-
Main Generator.	75	10.1/042	37/103	341	408/816	228	-	-
	1	37/103	-	408	114	-	-	-
EMERGENCY GENERATOR	47.4kW.	1	19.083	183	202	138	-	-
ROTARY TRANSFORMER: MOTOR	30.	1	37/083	272	314	120	"	"
GENERATOR EQUALISER	-	1	19.083	-	202	60	"	"

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

DESCRIPTION.								
Ship Section Board	51.	1	19.083	30	202	600	V.C.	L.C.A.
51.	1	19.083	110	202	600	"	"	"
Off	52.	1	7/064	66	80	172	"	"
Refuge	53.	1	19.052	5710	390	"	"	"
Galley	54.	1	19.083	93	202	336	"	"
Engine Room	55.	1	19.052	77	40	132	"	"
56.	1	7/064	60	80	190	"	"	"
57.	1	19.052	102	110	180	"	"	"
58.	1	19.064	82	143	240	"	"	"
Slope Connection	1	37/083	-	314	132	"	"	"
Ship Section Board Ldg	51.	1	19.083	75	202	600	"	"
52.	1	19.064	100	143	172	"	"	"

LIGHTING, HEATING, WIRELESS, NAVIGATION LIGHTS, ETC., CABLES.								
DESCRIPTION.	CONDUCTORS.	MAXIMUM CURRENT IN AMPERES.	APPROX. LENGTH (lead plus return feet).	INSULATION.	PROTECTIVE COVERING.			
navigation sig DB.	D1	1 7/029	2.5 15	140	V. I.R.	L.C.		
" Alternative feed	1	7/029	2.5 15	140	"			
Bulge	D2	1 7/064	18 80	140	V.C.			
Nas. Bridge Acc. Ldg	D3	1 7/044	30 31	140	V.I.R.			
Bridge Ldg (Instruments)	D3A	1 7/044	17 31	20	"			
Boat Deck Acc. Ldg	D4	1 7/044	19 31	130	"			
Bridge Deck Acc. Ldg Port.	D5	1 7/044	24 42	70	V.C.			
" " " Stars	D5A	1 7/044	22 42	80	V.C.			
Bridge Ldg	D6	1 7/044	18 31	80	V.I.R.			
Hospital Reductor	D7	1 7/044	9 31	90	"			
Port Deck Ldg Port	D7A	1 7/044	28 31	104	"			
Port Aft	D7B	1 7/044	14 31	110	"			
Stars Food	D8	1 7/044	30 31	154	"			
Stars Aft	D8A	1 7/044	15 31	110	"			
Cyl Acc. Ldg Port Food	D9	1 7/044	12.5 31	20	"			
" Stars "	D9A	1 7/044	25.5 31	120	"			
Port Wind	D10	1 7/044	22 31	144	"			
Port Aft	D10A	1 7/044	12 31	116	"			
Stars Wind	D11	1 7/044	29 31	174	"			
Stars Aft	D11A	1 7/044	18 31	116	"			
Bridge Power	D12	1 7/044	11 31	140	"			
Galley Gear	D13	1 7/044	16 31	28	"	L.C.A.		
Engin Room Ldg	D14	1 7/064	23 31	80	"			
Port Food	D14A	1 7/064	23 31	200	"			
Stars Food	D14B	1 7/064	24 31	80	"			
Stars Aft	D14C	1 7/064	24 31	200	"			
Gyro Pilot Control	1	7/044	15 31	520	112	"		
Rates.	1	7/044	15 31	80	"	L.C.		
Watches	1	7/044	20 31	130	"	L.C.		

MOTOR CABLES.								
ALL IMPORTANT MOTORS TO BE ENUMERATED.	No.	B.H.P.						
Main Circulating Pump	1	120	1 61/093	446	492	172	V.C.	L.C.A.
Balast	1	37	1 19/083	143	202	220	"	
General Service	1	30	1 19/064	118	143	220	"	
Bulge	1	30	1 19/064	118	143	200	"	
T.D. Fans	2	22	1 19/052	90	110	156	"	
Forced Lub. Pump	2	17	1 7/064	68	80	220	"	
O.F. Scavenger	2	14	1 7/064	58	80	120	"	
Extraction	2	12	1 7/064	48	80	100	"	
Sanitary	1	11.5	1 7/064	44	80	120	"	
Calorifiers (2)	-	-	1 19/052	83	110	160	"	
Steering Gear.	2	40	1 19/083	155	202	446	"	
Turning Motors	1	6	1 7/044	26	31	60	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.



Electrical Contractors. Date

COMPASSES.

Have the compasses been adjusted under working conditions.

FOR AND ON BEHALF OF
CAMMELL LAIRD & CO. LIMITED.

Builder's Signature. Date

13 SEP 1951

TECHNICAL MANAGER
SHIPBUILDING DEPT

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

Is this installation a duplicate of a previous case. Yes If so, state name of vessel. General San Martin

Plans. Are approved plans forwarded herewith. No. If not, state date of approval. 6-7-50 - 10-8-50

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 equipment of this vessel has been installed under special survey in accordance with the approved plans and rules for Electrical Equipment. The installation has been tested under working conditions, insulation tests carried out and found satisfactory.

The materials and workmanship are good and, in my opinion, the electrical equipment is eligible to be accepted for classification with the Society.

Noted Add 16-10-51

(The Surveyors are requested not to write on or below the space for Committee's Minutes.)

The amount of Fee £ 114. 10 : When applied for,
Due Liverpool £ 91. 12. 0 27 SEP 1951

" London £ 11. 9. 0

" Sunderland £ 11. 9. 0

Travelling Expenses (if any) £ - 15/5

When received,

Surveyor to Lloyd's Register of Shipping.

Committee's Minute

LIVERPOOL

2 OCT 1951

Assigned

See Minutes H. Noddy Rpt.

