

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office

16 NOV 1955

5561 AON 91

Date of writing Report 18th May 55 When handed in at Local Office 10th Mar. 55 Port of Honfleur

No. in Survey held at Caudebec and Honfleur Date, First Survey 19th Feb. Last Survey 7th April 1955

Reg. Book. (No. of Visits) eighteen Gross 12,833 Net 7,257

✓ on the single screw tug "IPHIGENIA" Tons 175 When built 1955

Built at La Ciotat By whom built Chantiers Navals de la Ciotat Card No. 175

Owners Societe Hell Indochine Port belonging to HAVER

Installation fitted by Chantiers Navals de la Ciotat When fitted 1955

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 440 AC 3 phase 3 wire Voltage of Lighting 115 V

Heating 115 V Power 440 & 115 D.C. or A.C., Lighting AC Power AC If A.C. state frequency 60 periods

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 no Generators, are they compound wound alternator and level compounded under working conditions latter with

Are the generators arranged to run in parallel yes Is the compound winding connected to the negative or positive pole substation

Have machines 100 kw. and over been inspected by the Surveyors during manufacture and testing yes Have certificates of test for machines under 100 kw. been supplied and the results found as per Rule yes Position of Generators Turbo alternator set on port and starboard Engine Room upper flat and Diesel Alternator set at after end of Engine Room lower platform S.S.

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 Main switchboard on port Engine Room upper flat; Auxiliary switchboards on port and starboard Engine Room lower flat

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 Dead front type, fittings on insulated bars 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 AC circuit breaker with overload trip and time lag, reverse current relay and time lag and no volt trip.

and the switch and fuse gear (or circuit breakers) for each outgoing circuit AC triple pole circuit breaker, overload trip and time lag; triple pole breakers and fuses; AC double pole switch and fuses.

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

ammeters 3 voltmeters 2 synchronising devices. For compound machines in parallel are the ammeters and reverse current protection devices connected on the pole opposite to the equaliser connection yes Earth Testing, state means provided lamp

Leakage indication yes Preference Tripping, state if provided yes, and tested yes

Switches, Circuit Breakers and Fuses, are they as per Rule yes, are the fuses an Approved Type yes

make of fuses Delle and Lechess are all fuses labelled yes If circuit breakers are provided for the generators, at what overload do they operate Tested at 100% full load, set at 125% F.L., and at what current do the reverse current protective devices operate Tested at 10% full load, set at 6% full load Cables, are they insulated and protected as per Rule yes

if otherwise than as per Rule are they of an Approved Type yes (letter) state maximum fall of pressure between bus bars and any point under maximum load less than 5% volts 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 State type of cables (if in conduit this should also be stated) in machinery spaces VC & VRI, LC & LC KB, galley, VC & VRI LC & LC KB and mixed insulated cables on fore and aft

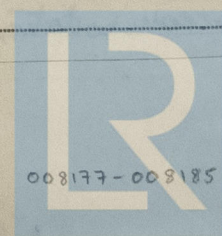
and laundries VC & VRI, LC & LC KB State how the cables are supported or protected single core cables supported on wooden cleats in steel fabricated channels. Alternators, group starters and switchboards cables earthed (at both ends). All lead covered cables earthed (earthed at each end) and fixed to steel trays, metal or wood work and protected by plates where necessary.

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 (domestic chambers)

Have refrigeration fan motors been constructed under survey yes and test certificates supplied yes

Are the motors accessible for maintenance at all times yes



© 2020

Lloyd's Register
Foundation

008177-008185-0091/2

Alternative Lighting, are the groups of lights in the engine and boiler rooms arranged as per Rule yes Emergency Supply, state position yes
 Engine Room emergency lighting battery in Elect. Room and E.R.
 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, fitted and adequately ventilated as per Rule yes state battery capacity in ampere hours 80 Ah Where required to do so does it comply with 1948 International Convention ✓
 Lighting, is fluorescent lighting fitted no If so, state nominal lamp voltage ✓ and compartments where lamps are fitted ✓

Fittings, are all fittings on weather decks, in stokeholds and engine rooms and wherever exposed to drip or condensed moisture, weatherproof yes
 Searchlights, No. of one, whether fixed or portable portable, 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 ✓ 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
 Lightning Conductors, where required are they fitted as per Rule ✓
 Ships carrying Oil having a Flash Point of 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 DELTA and DEAROS Are the fittings for pump rooms, 'ween deck spaces, etc., in accordance with the special requirements for such ships yes Are all cables lead covered as per Rule yes
 E.S.D., if fitted state maker Delum Hughes location of transmitter and receiver Engine Room double bottom
 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.	
			Kw. per Generator.	Volts.	Ampères.	Revs. per Min.	TYPE.	MAKER.
MAIN Alternator	2	Lesite Generale de Construction	550	440	880	1800	Steam	ALSTHOM
Exciter	2	Electriques et Mecaniques					Turbo	Belfort
Emergency Generator	1	at Belfort	250	440	250	1800	4 SCAS	Chautier Harbours
Rotary Transformer: Motor	1	Cie Gen. Electrique at Nancy	250	440	250	1800	biel eng. empied	de la Ciotat (NORBERG)

GENERATOR CABLES.

DESCRIPTION.	No. of	Kw.	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.	In the Circuit.	Rule.			
MAIN GENERATOR (Steam) ...	2	550	3	150x3=450	880 A	989 A	24m.	VC	LCB
EQUALISER ...	✓								
Auxiliary (Diesel) Generator	1	250	2	122x2=244	320 A	420 A	42m.	VC	LCAB
EMERGENCY GENERATOR ...	✓								
ROTARY TRANSFORMER: MOTOR ...	✓								
" " GENERATOR ...	✓								

MAIN DISTRIBUTION CABLES (to Auxiliary Switchboards, etc.).

DESCRIPTION.	No. of	Kw.	No. in Parallel per Pole.	Sectional Area or No. and Dia. of Strands.	In the Circuit.	Rule.	APPROX. LENGTH (lead plus return feet).	INSULATION.	PROTECTIVE COVERING.
Port (Group starters) Aux. Switchboard	3	195x3=585	815 A	1080 A	85m	VC	LCB		
Starboard (Group starters) Aux. Switchboard	3	195x3=585	767 A	1080 A	31m	VC	LCB		
Lower Engine Room Port	1	48	19 A	84	107	VC	LCAB		
Lower Engine Room Starboard	1	38	19 A	67	85	VC	LCAB		
Auxiliaries Loop 440V.	1	195	107	253	25	VC	LCAB		
Auxiliaries Bridge 440V.	1	94	117	164	95	VC	LCAB		
Galley 440V.	1	28	75	85	34	VC	LCAB		
Auxiliaries Loop 115V.	1	94	118	164	15	VC	LCAB		
Ventilation E.R. Room	1	38	61	85	81	VC	LCAB		
Ventilation Accommodation	1	38	38	85	22	VC	LCAB		

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

DESCRIPTION.	No. in Parallel per Pole.	Sectional Area or No. and Dia. of Strands.	MAXIMUM CURRENT IN AMPERES.		APPROX. LENGTH (lead plus return feet).	INSULATION.	PROTECTIVE COVERING.
			In the Circuit.	Rule.			
Winers	1	7.92	15 A	30 A	85	VC	LCAB
Searchlight	1	14.1	26	53	80	VC	LCAB
Headhead lights	1	2	0.4	9.5	75	VR	LCAB
Side lights	1	2	0.5	9.5	25	VR	LCAB
Compass lights	1	2	0.4	9.5	20	VR	LCAB
Port lights	1	2	0.4	9.5	140	VR	LCAB

MOTOR CABLES.

ALL IMPORTANT MOTORS TO BE ENUMERATED.	No.	B.H.P.							
Main Bridge Drive pumps	1	35	1	21.5 mm ²	47K	60A	15m	VC	LC, A, B
General service pumps	1	38	1	21.5	49	60	17	VC	LC, A, B
Emergency Bridge pump (Aux)	1	5.5	1	3.5	8	12	25	V.R.	LC, A, B.
Sanitary pumps	4	1.5	1	3.5	2.5	12	30	V.R.	LC, A, B.
Circ. Sea Water pumps	3	65	1	48	85	107	22	V.C.	LC, A, B.
Aux. Circ. Sea Water pumps	2	47	1	29.3	58.6	69	26	VC	LC, A, B
Circ. Fresh Water pump.	1	10	1	7.4	13.5	20	32	V.C.	LC, A, B.
Air compressors	3	12	1	7.9	16	20	32	VC	LC, A, B
Feed (Main Bldg) Water Pps	2	175	1	195	285	253	43	VC	LC, A, B
Engine Turning gear	1	50	1	29.3	65	69	19	VC	LC, A, B.
Lubricating oil pumps	2	50	1	29.3	60	69	17	VC	LC, A, B
Oil fuel transfer pumps	1	12	1	7.4	16	20	15	VC	LC, A, B
Steering gear main motor	2	28	1	14.1	36	53	75	VC	LC, A, B
Ventilating fans Eng. Room	2	12	1	7.92	16	20	26	VC	LC, A, B
Vent. fans Boiler flat	2	12	1	7.92	14	20	46	VC	LC, A, B
Forced draught fans	2	48/12	1	29.3	63	69	89	VC	LC, A, B
Oil fuel mist pumps	2	10	1	7.92	13.4	30	45	VC	LC, A, B
Main Extractor pumps	2	35	1	14.1	32.5	53	20	VC	LC, A, B

NOTE.—Use Rpt. 43 Continuation Sheet if the above space is insufficient.

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 9th Nov. 1955

COMPASSES.

Have the compasses been adjusted under working conditions.

Yes

Builder's Signature.

Date 9th Nov. 1955

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

Yes

Is this installation a duplicate of a previous case.

No

If so, state name of vessel.

✓

Plans. Are approved plans forwarded herewith.

No

If not, state date of approval.

4-1-54; 14-1-54; 19-1-54
7-5-54; 14-7-54; 21-10-54

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

yes, see list attached

General Remarks. (State quality of workmanship and materials, opinions as to class, etc.)

The workmanship and the materials are of good quality.

The electrical equipment has been fitted on board in accordance with the approved plans, the Secretary's letters and the applicable requirements of the Rules.

The installation has been tested and examined under full working conditions and is, in my opinion, satisfactorily installed and suitable for a closed ship.

Total Capacity of Generators. 11350 KW Kilowatts.

The amount of Fee ...

£201.200

When applied for,

16 May 1955

Travelling Expenses (if any)

£18.000

When received,

11 July 1955

Surveyor to Lloyd's Register of Shipping.

FRIDAY 25 NOV 1955

Committee's Minute.

Assigned.

See Rpt. 4a.



© 2020

Lloyd's Register
Foundation