

Rpt. 13.

No. 37/58

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Date of writing Report 12th Nov. 1953. When handed in at Local Office 1953. Received at London Office. Port of Rotterdam

No. in Survey held at Heusden. Date, First Survey 25-2-53 Last Survey 23-11-1953
Reg. Book. (No. of Visits 12)

35408s on the m.s. "LISBETH. M."

Built at Heusden. By whom built De Haan & Oerlemans. Yard No. 274. When built 1953
Owners Metcalf Motor Coasters Ltd (T.J. Metcalf Mgr.) Port belonging to London.

Installation fitted by Messrs. A. de Hoop NV. When fitted 1953.

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

Plans, have they been submitted and approved Yes. System of Distribution Two wire insulated. Voltage of Lighting 110

Heating 110 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. Diesel Gen. and level compounded under working conditions Yes.

Are the generators arranged to run in parallel Yes. Is the compound winding connected to the negative or positive pole Negative.

Have machines 100 kw. and over been inspected by the Surveyors during manufacture and testing —. Have certificates of test for machines under 100 kw. been supplied and the results found as per Rule Yes.

Position of Generators In engine room. Main generators port side & starboard side. Shaft generators aft.

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 In engine room. On platform; port side.

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.

Material is it an Approved Type —. 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 Main generator: triple pole circuit breakers fitted with o/c, Rev. Curr. & U.V. releases, with third pole as equaliser switch. Shaft generators: D.P. circuit breakers fitted with o/c, Rev. Curr. & U.V. releases.

and the switch and fuse gear (or circuit breakers) for each outgoing circuit D.P. switches & fuses.

Are compartments containing switchboards composed of fire-resisting material or lined as per Rule Yes. Instruments on main switchboard 6

ammeters 4 voltmeters — 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 Earth lamps. Preference Tripping, state if provided No. and tested —.

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

make of fuses Hazemeyer & Weber. Are all fuses labelled Yes. If circuit breakers are provided for the generators, at what

overload do they operate 50% and at what current do the reverse current protective devices operate 10-15%.

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 Under 6% volts.

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 —. State type of cables (if in conduit this should also be stated) in machinery spaces VIR IR type.

galleys VIR IR type; MICE.

and laundries —. State how the cables are supported or protected.

Machinery Spaces: Clipped to steel tray or steelwork.

Accomm. " : 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 —.

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

Are the motors accessible for maintenance at all times —.

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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.....

Searchlights, No. of 1, whether fixed or portable fixed, 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

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. —

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 _____, *are all fuses of an Approved Cartridge Type* _____, *make of fuse* _____ *Are the fittings for pump*

rooms, 'tween deck spaces, etc., in accordance with the special requirements for such ships..... Are all cables lead covered as per Rule.....

E.S.D., if fitted state maker.....*"Subsig"*.....location of transmitter and receiver.....*Av. Sp 32-34 Port Side.*

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 ...	2	Mawdsley.	33	110	300	1000	Diesel	Lister
	2	Higgs.	9	110	818	750/500	Shaft Drum.	—
EMERGENCY ...								
ROTARY								
TRANSFORMER								

GENERATOR CABLES.

[illegible]

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

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

[illegible]

MOTOR CABLES.

ALL IMPORTANT MOTORS TO BE ENUMERATED.	No.	B.H.P.							
Capstan	1	1	1	25	55	63	✓	40	VIR
Windlass	1	20	1	95	154	150	✓	120	"
Winches	2	15	1	70	116	125	✓	28	"
Ballast Pump.	1	7	1	25	58	63	✓	30	"
Bilge	1	5	1	16	42.8	49	✓	30	"
L.O.	1	4.5	1	16	37	49	✓	36	"
F.O. Transfer Pump,	1	2	1	4	17.5	22.5	✓	22	"
Steering	1	3	1	6	27	29	✓	40	"
M.E.F.W. Cooling "	1	4.5	1	16	37	49	✓	16	"
Eng. Rm. Vent Fans	1	0.1	1	1.5	1.5	9.5	✓	20	"

NOTE.—Use Rpt. 13 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.

H. de Hoop
A. de HOOP" N.V. Electrical Contractors. Date *18th November 1953*

COMPASSES.

Have the compasses been adjusted under working conditions

Yes.

Builder's Signature.

Date *23rd Nov 1953.*

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

29th May 1953

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

Yes.

General Remarks. (State quality of workmanship and materials, opinions as to class, etc.) *The electrical equipment of this vessel has been installed under special survey in conformity with the Society's rules and regulations and in accordance with the Secretary's letter and the approved plans.*

The materials used are of a good quality and the design and workmanship are good. On completion the equipment has been tried out under full working conditions and found satisfactory.

This equipment is in my opinion suitable for a classed vessel.

Total Capacity of Generators *84* Kilowatts.

The amount of Fee ... *£ 600.-* : When applied for, *17.12.1953*

Travelling Expenses (if any) *£ 85.-* : When received, *19*

A. Bailey
Surveyor to Lloyd's Register of Shipping.

Committee's Minute

TUESDAY 19 JAN 1954

Assigned

See Ref. 46.