

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

DEC 12 1939

Received at London Office

Date of writing Report.....19..... When handed in at Local Office.....11 DEC 1939..... Port of HULL

No. in Survey held at Hull Date, First Survey 6. 11. 89. Last Survey 24. 11. 89.
Reg. Book. (Number of Visits.....4.....)

on the Steam Trawler LADY MADELEINE. Tons {Gross... 581
Net... 214

Built at Beverley, By whom built Cook, Walton & Gemmell, Ltd. Yard No. 651 When built 1939-11

Owners Jutland Amalgamated Trawlers Ltd. Port belonging to Hull.

Electrical Installation fitted by Humber Shipwrights Ltd. Contract No. - When fitted 1939-11

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

Have plans been submitted and approved No. System of Distribution Parallel - Constant Pressure Voltage of supply for Lighting 110
Two wire

Heating 110 Power None Direct or Alternating Current, Lighting Direct Power ✓ If Alternating Current state frequency ✓ Prime Movers,

has the governing been tested and found efficient when the whole 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 Herewith 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 Engine Room. Starboard side. Ford. & Aft.

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 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 Slate, if of synthetic insulating material is it an Approved Type ✓, if of

semi-insulating material (slate or marble) are all conducting parts insulated therefrom as per Rule yes 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

D.P. linked switch and fuses. Separate bus bars to each dynamo.

and for each outgoing circuit D.P. linked change over switches & fuses.

Are compartments containing switchboards composed of fire-resisting material or lined as per Rule ✓ 011. 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 and change over switches.

supported and protected. Chipped to steel or wood work.

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 No. Secondary Batteries, are they constructed and fitted as per Rule None, are they adequately ventilated ✓. Fittings, are all fittings on weather decks, in stokeholds and engine rooms and wherever exposed to drip or condensed moisture, weatherproof yes. Are fittings

installed as per Rule None and placed in well-ventilated compartments in which inflammable gases cannot accumulate and free from damage from water steam and oil ☒ , if situated near unprotected combustible material state minimum distance from same horizontally ☒ and vertically ☒ Have motors of 100 BHP and over been inspected by the Surveyors during manufacture and testing ☒ Have certificates of test for motors under

are they of an approved type.....☒..... If portable lamps for use in dangerous spaces are supplied, are they of a self-contained battery-fed flameproof type.....☒..... Spare Gear, if the vessel is for open sea service have spares been provided as per Rule.....☒....., are they suitably stored in dry situations.....☒..... Insulation Tests, has the insulation resistance of all circuits and apparatus been megger 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.	Ampères.	Revs. per Min.		Fuel Used.	Flash Point of Fuel.
MAIN	2	6	110	34.5	650	Steam Engine	✓	✓

[illegible]

DESCRIPTION.	KILOWATTS.	CONDUCTORS.		MAXIMUM CURRENT IN AMPERES.		APPROX. LENGTH (load plus return lost).	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 GENERATOR	6	One	19.064	54.5	64	20	V.I.R.	Conduit
" " EQUALISER								
EMERGENCY GENERATOR								
ROTARY TRANSFORMER: MOTOR								
GENERATOR								

SECTION BOARDS ...							
Navigation	One	7.036	4	24	170	V.I.R	L.C. & Arm.
Engine Room	One	7.036	5	24	4	"	"
Wheel House	One	7.064	25	46	170	"	"
Accommodation	One	7.036	4	24	300	"	"
Fouleslee	One Pair	7.036	8.8		300	"	"
First Room	"	"	8.0		"	"	"

WIRELESS	NAVIGATION LIGHTS	LIGHTING	Engine & Boiler Space.	Cargo lights.	Navigation side lights.	Heater
One.	One.	One.	One.	One.	One.	One.
7.036.	1.044.	3.029.	1.044.	3.029.	3.029.	7.044.
8.	1.4	1.5	1	2	4	10
24	6.1	7.8	6.1	7.8	7.8	31
180.	max. 260	max. 40.	max. 100	70.	24	48
V.I.R.	"	H.R.	V.I.R.	H.R.	"	V.I.R.
L.C. & Arm.	"	L.C. & Arm.				L.C. & Arm.

[illegible]

DESCRIPTION OF GENERATOR.	No. of	RATED AT				DRIVEN BY	WHERE DRIVEN BY AN INTERNAL COMBUSTION ENGINE.	
		Kilowatts.	Volts.	Ampères.	Revs. per Min.		Fuel Used.	Flash Point of Fuel.
MAIN ...	2	6	110	54.5	650	Steam Engine	✓	✓
EMERGENCY ...								
ROTARY TRANSFORMER								

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.

Fred Green
Manager

Electrical Engineers.

Date *Nov 24th 1939*

COMPASSES.

Minimum distance between electric generators or motors and standard compass *80 feet*

Minimum distance between electric generators or motors and steering compass *70 feet*

The nearest cables to the compasses are as follows:—

A cable carrying *4* Ampères *to* feet from standard compass *to* feet from steering compass.

A cable carrying *4* Ampères *12* feet from standard compass *2* feet from steering compass.

A cable carrying *✓* Ampères *005* feet from standard compass *✓* 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 *nil* degrees on *any* course in the case of the standard compass, and *nil* degrees on *any* course in the case of the steering compass.

COOK, WELTON & GEMMEL LTD

A. D. Campbell
Manager

Builder's Signature.

Date *Nov. 28th 1939*

Is this installation a duplicate of a previous case *yes* If so, state name of vessel *"LADY LILIAN"*

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

This Electrical installation has been fitted on board in accordance with the Rules, and under special survey. The workmanship and materials are good and when tested as prescribed by the Rules it was found satisfactory in every respect, with the exception of the fuses on the sub-distribution boards which are not of an approved type. Owing to supply difficulties, the Contractors have not been able to replace these before the vessel sailed, but will do so as soon as supplies become available, and probably on the vessel's return in about 3 weeks.

W. H. L. H.
15/12/39

Total Capacity of Generators *12* Kilowatts.

The amount of Fee ... £ *5 : 0* : When applied for, *11 DEC 1939*

Travelling Expenses (if any) £ : : When received, *11/11/39*

Spence W. H. Robinson
Surveyor to Lloyd's Register of Shipping.

WED 20 DEC 1939

Committee's Minute

Assigned *See Sub JE 50403*

2m.10.33.—Transfer. (MADE IN ENGLAND.)
(The Surveyors are requested not to write on or below the space for Committee's Minute.)