

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office.

17 JAN 1945

16 JAN 1945

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

No. in Survey held at.....Selby & Hull..... Date, First Survey.....29. 11. 44..... Last Survey.....6. 1. 1945.....
Reg. Book..... (Number of Visits.....13.....)

on the.....Danlayer "LINGAY"..... J.2696..... Tons { Gross.....451.90
Not.....143.80

Built at.....Selby..... By whom built.....Messrs. Cochrane & Sons, Ltd. 1290..... When built.....1944

Owners.....The Admiralty..... Port belonging to.....-

Electrical Installation fitted by.....Wm. Broady & Sons, Ltd...... Contract No.....-..... When fitted.....1944

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

Have plans been submitted and approved.....Yes..... System of Distribution.....two wire..... Voltage of supply for Lighting.....110

Heating.....110 Power.....110..... Direct or Alternating Current, Lighting.....D.C. Power.....D.C. If Alternating Current state periodicity.....-..... Prime Movers,

has the governing been tested and found as per Rule when full 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.....Supply..... 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 on platform

....., 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 starboard side near generator

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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.....Insulated with mica, units mounted on framework....., 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.....-..... 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.....Double pole quick

break knife switches.

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and for each outgoing circuit.....Double pole quick break knife switches and double pole fuses.

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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 is the ammeter connected on the pole opposite to the

equaliser connection.....-..... Earth Testing, state means provided.....Lamps coupled to earth via switches and fuses.

Switches, Circuit Breakers and Fuses, are they as per Rule.....Yes....., are the fuses an approved type.....Yes....., are all fuses labelled as

per Rule.....Yes..... If circuit breakers are provided for the generators, at what overload current did they open when tested.....-....., are the reversed current

protection devices connected on the pole opposite to the equaliser connection.....-....., have they been tested under working conditions, and at what current

did they operate.....-..... Joint Boxes, Section Boards and Distribution Boards, is the construction and position as per Rule.....Yes.....

Cables, are they insulated and protected as per the appropriate Tables of the Rules.....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.....3V....., are the ends of all cables having a sectional area of 0.04

square inch and above provided with soldering sockets.....Yes..... Are paper insulated and varnished cambric insulated cables sealed at the ends.....Yes.....

Rule.....Yes are they suitably stored in dry situations.....Yes..... Insulation Tests, has the insulation resistance of all circuits and apparatus been tested and found satisfactory.....Yes.

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	1	20	115	174	500	Steam Engine		
	1	7½	110	68	550	" "		
EMERGENCY ...								
ROTARY TRANSFORMER								

DESCRIPTION.	KILOWATTS.	CONDUCTORS.		MAXIMUM CURRENT IN AMPERES.		APPROX. LENGTH (lead plus return feet).	INSULATED WITH.	HOW PROTECTED.
		No. in Parallel Per Fold.	Sectional Area or No. and Dia. of Strands. Sq. ins. or sq. mm.	In the Circuit.	Rule.			
MAIN GENERATORNo.1	20	1	37/.083	174	184✓	20'	V.I.R.	L.C. A.P.13972
" " EQUALISER No.2....	7½	1	19/.064	68	134✓	22'	V.B.	" - " 13975
EMERGENCY GENERATOR								
ROTARY TRANSFORMER: MOTOR ...								
GENERATOR								

[illegible]

WIRELESS	1	77.036	15	24	140'	V.I.R.	L.C.	A.P.	6193D	WE
NAVIGATION LIGHTS	1	77.036	3	24	150'	"	"	"	"	"
LIGHTING AND HEATING										
Engine & boiler rooms	1	77.036	10	24	30'	"	"	"	"	"
Aft accom. lighting	1	77.036	10	24	30'	"	"	"	"	"
" " heating	1	77.064	10	46	30'	"	"	"	6191A	"
Search lights	1	77.044	18	31	150'	"	"	"	6192A	"
Forward lighting (crews)	1	77.044	15	31	40'	"	"	"	"	"
" " (officers)	1	77.036	10	24	40'	"	"	"	6193A	"
" heating	1	77.044	25	31	16'	"	"	"	6192A	"
R.A.D.A.R.	1	77.044	25	31	160'	"	"	"	"	"
F.M.7.	1	77.044	10	31	160'	"	"	"	"	"
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[illegible]

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.

WM BROADBENT & SONS
10, ROYAL STREET,
HULL.
Electrical Engineers. Date 28.12.44.

COMPASSES.

Minimum distance between electric generators or motors and standard compass 20'0"

Minimum distance between electric generators or motors and steering compass 75'0"

The nearest cables to the compasses are as follows:—

A cable carrying 1 Ampères inside feet from standard compass 5' feet from steering compass.

A cable carrying 25 Ampères 5 feet from standard compass inside feet from steering compass.

A cable carrying Ampères 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 every course in the case of the

standard compass, and Nil degrees on every course in the case of the steering compass.

FOR COCHRANE & SONS, LTD. Builder's Signature. Date
V. Gray. DIRECTOR

Is this installation a duplicate of a previous case Yes If so, state name of vessel "TILERSAY"

Plans. Are approved plans forwarded herewith No: If not, state date of approval 19.4.41.

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

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

The Electrical Equipment of this vessel was installed under special survey and in accordance with the approved plans and with the specification.

The materials used are of good quality and the workmanship is good.

On completion the equipment was operated under working conditions

results and the insulation resistance of all circuits and apparatus

found good.

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

Total Capacity of Generators 27.5 Kilowatts.

The amount of Fee £ : : When applied for, 16 JAN 1945

Specification 21 5

Travelling Expenses (if any) £ : : When received.

Classification 21 5

Committee's Minute Fri. 2 FEB 1945

Assigned Su F.E. Mackay rph

ADMIRALTY
A/c rendered from
5 FEB 45
London

J. G. Cornwell
Surveyor to Lloyd's Register of Shipping.



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Lloyd's Register
Foundation

5m438—Transfer. (MADE AND PRINTED IN ENGLAND)
(The Surveyors are requested not to write on or below the space for Committee's Minute.)