

# REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office... 30 MAY 1946

29 MAY 1946

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

No. in Survey held at.....HULL..... Date, First Survey.....7. 3. 46..... Last Survey.....3. 4.....19.46.....  
(Number of Visits.....7.....)

Reg. Book.....17406 on the....."NORTHELLA"..... Tons { Gross...550.....  
Net.....-.....

Built at.....Selby..... By whom built.....Cochrane & Sons Ltd. Yard No.....1311 When built.....1946

Owners.....Messrs. J. Marr & Sons Ltd. Port belonging to.....HULL

Electrical Installation fitted by.....Wm. Broady & Sons Ltd. Contract No.....- When fitted.....1946

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.....- 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.....No 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.....Yes 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.....Steam driven engine room starboard side on platform  
Diesel driven generator in tunnel recess.

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 aft bulkhead.

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....."Syndanyo" 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.....- 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 and double pole fuses.

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

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

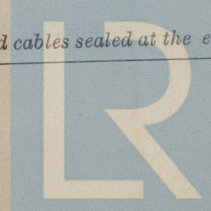
protection devices connected on the pole opposite to the equaliser connection.....- have they been tested under working conditions, and at what current

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.....-



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PARTICULARS OF GENERATING PLANT

## GENERATOR CABLES.

### MAIN DISTRIBUTION CABLES.

LIGHTING AND HEATING, ETC., CABLES.

MOTOR CABLES.

0140 21



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 BROADY & SON LTD.  
BRIDGE STREET,  
HULL.

Electrical Engineers.

Date 8.4.46

COMPASSES.

Minimum distance between electric generators or motors and standard compass 63'0"

Minimum distance between electric generators or motors and steering compass 57'0"

The nearest cables to the compasses are as follows:—

A cable carrying .2 Ampères 6' feet from standard compass inside feet from steering compass.

A cable carrying .2 Ampères inside feet from standard compass 6' 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

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

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

Certificates. Are certificates of test for motors engaged on essential 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 was installed in accordance with the approved drawings and the Rules. The materials used are of good quality and the workmanship is good.

On completion the equipment was operated under working conditions with satisfactory results and the insulation resistance of all circuits and apparatus was measured and found good.

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

Notes  
JRM 6.6.46

Total Capacity of Generators 15 Kilowatts.

The amount of Fee £ 7 : 10 -

When applied for,  
8 MAY 1946

Travelling Expenses (if any) £ : :  
When received,  
19

W. H. Connell  
Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned See F.E. machy. rpt.



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