

## REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

4 DEC 1948

Received at London Office.....

Date of writing Report..... 18. 11. 48 When handed in at Local Office..... 23. 11. 48 Port of..... West Hartlepool.

No. in Survey held at..... West Hartlepool. Date, First Survey..... 24-8-48. Last Survey..... 11. 11. 1948  
Reg. Book. (Number of Visits..... 14.....)90033 on the..... S. S. "AVONDENE" Tons { Gross..... 4850  
Net.....

Built at..... West Hartlepool By whom built..... Wm Gray &amp; Co. Ltd. Yard No. 1220 When built..... 1948

Owners..... Dene Shipping Co. Ltd. Port belonging to..... London.

Electrical Installation fitted by..... Wm Gray &amp; Co. Ltd. Contract No. 1220 When fitted..... 1948.

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

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

Heating..... - 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..... 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..... Inboard &amp; Outboard, starboard side forward on

starting platform level 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..... on platform above generators, adjacent to

forward bulkhead facing aft on starboard side.

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..... Sindanyo (Ebony finish), 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

Single Throw Quick Break Knife Switch 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..... 3

ammeters..... 3 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 connected to 'E' thro switches &amp; 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..... &lt; 6.6v are the ends of all cables having a sectional area of 0.01

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



PARTICULARS OF GENERATING PLANT.

## GENERATOR CABLES.

### MAIN DISTRIBUTION CABLES

LIGHTING AND HEATING, ETC., CABLES.

MOTOR CABLES.

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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 for William Gray & Co. Limited.

*J.W. Scott*  
CHIEF DRAUGHTSMAN

Electrical Engineers.

Date 19 November 1948

#### COMPASSES

Minimum distance between electric generators or motors and standard compass 25 feet.

Minimum distance between electric generators or motors and steering compass 27 feet.

The nearest cables to the compasses are as follows:—

A cable carrying 0.14 Ampères 10 feet from standard compass inside steering compass.

A cable carrying 0.14 Ampères inside standard compass 10 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 for William Gray & Co. Limited in the case of the steering compass.

*J.W. Scott*  
CHIEF DRAUGHTSMAN

Builder's Signature.

Date 19 November 1948

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 26.7.48 and 8.9.48.

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

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

equipment of this vessel has been installed under special survey and the arrangements are in accordance with or equivalent to those shown on the approved plans and the Rules for Electrical Equipment.

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

On completion the equipment was operated under working conditions, and the insulation resistance of all circuits measured and found good.

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

Noted *W.S.* 22/12/48

Total Capacity of Generators 40 Kilowatts.

The amount of Fee ... £ 42 : 10 : When applied for, 3-12-1948

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

*W. H. H. H.*

Surveyor to Lloyd's Register of Shipping.

THURS 23 DEC 1948

Committee's Minute

Assigned See F.E. Welch rpt

5m4.30.—Transfer. (MADE AND PRINTED IN ENGLAND.)  
(The Surveyors are requested not to write on or below the space for Committee's Minute.)



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