

REPORT ON ^{REWIRE.} ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

30 NOV 1946

Date of writing Report... 8th NOVEMBER 1946... When handed in at Local Office... 11. 11. 46... Port of... NEWCASTLE-ON-TYNE

No. in Survey held at... JARROW + HEBBURN... Date, First Survey... (1946) Feb 19 46... Last Survey... 4th NOVEMBER 1946

Reg. Book... #688 on the... STEAM TRAWLER "NORTHERN DUKE" Tons { Gross... 622 Net... 283

Built at... WESERMUND - G... By whom built... DEUSCHE SEH-W- MASCH. A.G. SEEBECK... Yard No... - When built... 1936

Owners... NORTHERN TRAWLERS LTD... Port belonging to... LONDON

Electrical Installation fitted by... PALMERS HEBBURN G. 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... - Sub.Sig... -

Have plans been submitted and approved... - System of Distribution... TWO WIRE - INSULATED... Voltage of supply for Lighting... 110

Heating... - Power... - Direct or Alternating Current, Lighting... D.C. Power... - 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... - and the results found as per rule... -

Are the lubricating arrangements and the construction of the generators as per rule... YES... Position of Generators... IN ENGINE ROOM.

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... NEAR 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... SINDANYA

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 SWITCH WITH A FUSE ON EACH INSULATED POLE.

and for each outgoing circuit... DOUBLE POLE CHANGEOVER SWITCH WITH A FUSE ON EACH INSULATED POLE

Are compartments containing switchboards composed of fire-resisting material or lined as per Rule... YES 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.

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

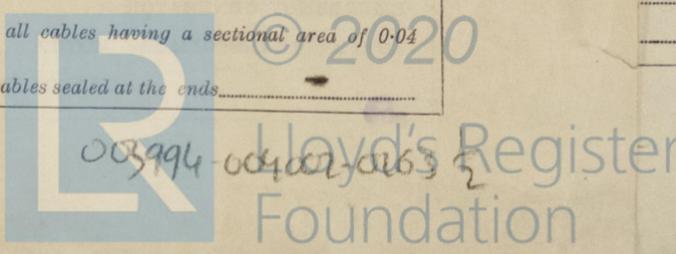
If circuit breakers are provided for the generators, at what overload current did they open when tested... - are the reversed current protection devices connected on the pole opposite to the equaliser connection... - have they been tested under working conditions, and at what current did they operate... -

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... < 4 VOLTS, 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... -



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 PALMERS & CO. LIMITED,
 MANAGING DIRECTOR

E. L. Chambers

Electrical Engineers.

Date 9-11-46

COMPASSES.

Minimum distance between electric generators or motors and standard compass..... 100 FEET

Minimum distance between electric generators or motors and steering compass..... 100 FEET

The nearest cables to the compasses are as follows:—

A cable carrying 0.14 Ampères INSIDE feet from standard compass 6 feet from steering compass.

A cable carrying 0.14 Ampères 6 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 PALMERS & CO. LIMITED,

E. L. Chambers

Conversion
 Builder's Signature.
 Contractor

Date 9-11-46

Is this installation a duplicate of a previous case..... No If so, state name of vessel.....

Plans. Are approved plans forwarded herewith..... If not, state date of approval.....

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

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 REWIRED IN ACCORDANCE WITH THE SOCIETY'S RULES AND REGULATIONS.

THE MATERIALS USED ARE OF GOOD QUALITY AND THE WORKMANSHIP IS SATISFACTORY.

ON COMPLETION THE INSULATION RESISTANCE OF ALL CIRCUITS WAS FOUND TO BE SATISFACTORY, AND THE 10KW. GENERATOR OPERATED ON LOAD AND GOVERNING TRIALS WITH SATISFACTORY RESULTS.

THE 8KW. GENERATOR WAS NOT SATISFACTORY UNDER LOAD CONDITIONS AND AS TIME DID NOT PERMIT OF HAVING THE GENERATOR OVERHAULED BEFORE THE SHIP LEFT THIS PORT, IT WAS TAKEN ASHORE AND WILL BE FORWARDED TO THE SHIP'S HOME PORT ON COMPLETION OF OVERHAUL.

Total Capacity of Generators..... 18 Kilowatts.

The amount of Fee ... £ 9 : 0 : 0

When applied for, 29 NOV 1946

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

R. Stone

Surveyor to Lloyd's Register of Shipping.

Committee's Minute..... 11. 3 JAN 1947

Assigned..... See Rpt 9

501.4.23.—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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