

Rpt. 13.

No. 520<sup>e</sup>

# REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office 11 JAN 1951

Date of writing Report 31-12 1950 When handed in at Local Office 19 Port of GRONINGEN

No. in Survey held at WESTERBROEK Date, First Survey 31.10.50 Last Survey 22.12.50  
Reg. Book. (No. of Visits 7)

on the M.V. WESTWARD HO Tons { Gross 3299.83 Net 228.33

Built at WESTERBROEK By whom built MESSRS V/D WERFF Yard No. 260 When built 1950

Owners S. Boudewijn Port belonging to Groningen

Installation fitted by MESSRS JAN BODEWES When fitted 1950

Is vessel equipped for carrying Petroleum in bulk NO Is vessel equipped with D.F. YES E.S.D. NO Gy.C. NO Sub.Sig. NO Radar NO

Plans, have they been submitted and approved yes System of Distribution Two wire insul. Voltage of Lighting 110

Heating - Power 110 D.C. or A.C., Lighting A.C. Power A.C. If A.C. state frequency -

Prime Movers, has the governing been found as per Rule when full load is thrown on and off yes Are turbine emergency governors fitted

with a trip switch - Generators, are they compound wound no, and level compounded under working conditions -

if not compound wound state distance between generators - and from switchboard - Are the generators arranged to run

in parallel no, are shunt field regulators provided yes Is the compound winding connected to the negative or positive pole

- 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

Position of Generators E.R. floor level

is the ventilation in way of generators satisfactory yes are they clear of inflammable material and protected from mechanical injury and

damage from water, steam and oil yes Switchboards, where are main switchboards placed E.R. above deep waterline

are they in accessible positions, free from inflammable gases and acid fumes and protected from mechanical injury and damage from water,

steam and oil yes, what insulation is used for the panels dead front type switchboard, 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 construction as per Rule, including locking of screws and nuts yes Description of Main Switchgear

for each generator and arrangement of equaliser switches I.P. fuses and I.P. I.T. switch

and the switch and fuse gear (or circuit breakers) for each outgoing circuit I.P. fuses and I.P. switch

Are compartments containing switchboards composed of fire-resisting material or lined as per Rule - Instruments on main switchboard 2

ammeters one voltmeters - synchronising devices. For compound machines in parallel are the ammeters and reversed current

protection devices connected on the pole opposite to the equaliser connection - Earth Testing, state means provided earth

indicating lamps connected to "E" through I.P. fuses & I.P. push button

Switches, Circuit Breakers and Fuses, are they as per Rule yes, are the fuses an Approved Type NEMA approved type

make of fuses Heber, are all fuses labelled yes If circuit breakers are provided for the generators, at what

overload do they operate - and at what current do the reversed current protective devices operate -

Joint Boxes, Section Boards and Distribution Boards, is the construction as per Rule yes

Cables, are they insulated and protected as per Rule 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 <6% are the ends of all cables having a sectional

area of 0.01 square inch and above provided with soldering sockets yes Are all paper insulated and varnished cambric insulated

cables sealed at the ends - Are all the cable runs in accessible positions, not exposed to drip or accumulation of water or oil,

high temperatures or risk of mechanical damage yes, are any cables laid under machines or floorplates no, if so, are they

adequately protected - Are cables in machinery spaces, galleys, laundries, etc., lead covered NO or run in conduit no

or of the "HR" type yes State how the cables are supported or protected Machinery spaces: M.R. type cable

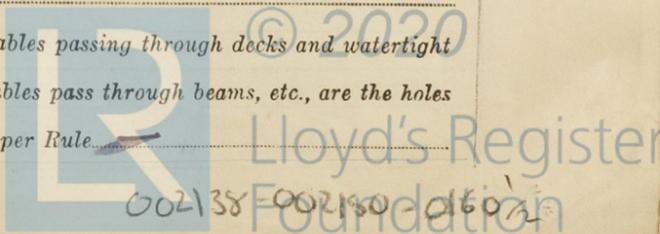
cable fitted on perforated iron plating. Cargo hold: M.R. type cable run in conduit.

Reumination spaces: M.R. type cable clipped to surface in wood grounds

Are all lead sheaths, armouring and conduits effectually bonded and earthed - Are all cables passing through decks and watertight

bulkheads provided with deck tubes or watertight glands yes, where unarmoured cables pass through beams, etc., are the holes

effectively bushed yes Refrigerated chambers, are the cables and fittings as per Rule -



built  
nd found  
n Makers'  
of

Alternative Lighting, are the groups of lights in the engine and boiler rooms arranged as per Rule yes Emergency Supply, state position main battery placed above deck waterline (near main midboard) supplied lighting equipment automatically in case of emergency

Navigation Lamps, are they separately wired yes controlled by separate double pole switches and fuses yes Are the switches and fuses in a position accessible only to the officers on watch yes is an automatic indicator fitted yes Is an alternative supply provided yes

Secondary Batteries, are they constructed and fitted as per Rule yes are they adequately ventilated yes

state battery capacity in ampere hours lead battery 180 amp hours 40 volts

Fittings, are all fittings on weather decks, in stokeholds and engine rooms and wherever exposed to drip or condensed moisture, weatherproof yes

Are any fittings installed where readily combustible materials or inflammable or explosive dust or gases are likely to be present no

if so, how are they protected —

and where are the controlling switches fitted — Are all fittings suitably ventilated —

Searchlight Lamps, No. of one whether fixed or portable portable are they of the carbon arc or of the filament type filament type

Heating and Cooking, is the general construction as per Rule — are the frames effectually earthed — are heaters in the accommodation of the convection type — Motors, are all motors constructed and installed as per Rule and placed in well-ventilated compartments in which inflammable gases cannot accumulate and protected from damage from water, steam and oil yes

Are motors coupled to oil fuel transfer and pressure pumps capable of being stopped from a position accessible in the event of fire in the pump compartment — Have motors of 100 BHP and over been inspected by the Surveyors during manufacture and testing —

Have certificates of test for motors under 100 BHP intended for essential sea services been supplied and the results found as per Rule yes

Control Gear and Resistances, are they constructed and fitted as per Rule yes Lightning Conductors, where required are they fitted as per Rule — Ships carrying Oil having a Flash Point less than 150° F. Have all the special requirements of the Rules for such ships been complied with — are all fuses of an Approved Cartridge Type — make of fuse — Are the fittings for pump rooms, 'tween deck spaces, etc., in accordance with the special requirements for such ships — Are the cables lead covered as per Rule —

E.S.D., if fitted state maker ✓ location of transmitter — and receiver —

Spare Gear, if the vessel is for open sea service have spares been provided as per Rule and suitably stored in dry situations yes

Insulation Tests, has the insulation resistance of all circuits and apparatus been tested and found satisfactory yes

PARTICULARS OF GENERATING PLANT.

DESCRIPTION OF GENERATOR.	No. of	MAKER.	RATED AT				PRIME MOVER.	TYPE.	MAKER.
			Kilowatts per Generator.	Volts.	Ampères.	Revs. per Min.			
MAIN (SHAFT DR.)	1	Crampton Park.	5	110	45.5	900/1400	1 crew shaft		
	1	"	5	110	46.5	900/1400	Triplex engine hister		
EMERGENCY ...									
ROTARY TRANSFORMER									

GENERATOR CABLES.

DESCRIPTION.	KILOWATTS.	CONDUCTORS.		MAXIMUM CURRENT IN AMPERES.		APPROX. LENGTH (lead plus return) m.	INSULATION.	PROTECTIVE COVERING.
		No. in Parallel per Pole.	Sectional Area or No. and Dia. of Strands. Sq. ins. or sq. mm.	In the Circuit.	Rule.			
MAIN GENERATOR (SHAFT DRIVEN)	5	1	25.8	46.5	64	26	N.H.R. H.R. type	
" " EQUALISER ...								
" " (DIESEL DRIVEN)	5	1	25.8	45.5	15	38		
EMERGENCY GENERATOR ...								
ROTARY TRANSFORMER: MOTOR								
" " GENERATOR...								

MAIN DISTRIBUTION CABLES (to Section Boards, Distribution Fuse Boards, etc.).

DESCRIPTION.	No. in Parallel per Pole.	Sectional Area or No. and Dia. of Strands. Sq. ins. or sq. mm.	In the Circuit.	Rule.	APPROX. LENGTH (lead plus return) m.	INSULATION.	PROTECTIVE COVERING.
2.F.B. lighting accommodation	1	6.51	7	31	26	N.H.R. H.R. type	
" navigation lighting	1	2.9	2.5	15	22		

LIGHTING, HEATING, WIRELESS, NAVIGATION LIGHTS, ETC., CABLES.

DESCRIPTION.	CONDUCTORS.		MAXIMUM CURRENT IN AMPERES.		APPROX. LENGTH (lead plus return) m.	INSULATION.	PROTECTIVE COVERING.
	No. in Parallel per Pole.	Sectional Area or No. and Dia. of Strands. Sq. ins. or sq. mm.	In the Circuit.	Rule.			
Supplies from main midboard							
lighting fore ship	1	1.94	3	10	20	N.H.R. H.R. type	
" E.R.	1	1.94	3	10	20		
" left accommodation	1	1.94	3	10	12		
" E.R.	1	1.94	2	10	30		
" bridge space	1	2.9	3.5	15	22		
Wireless equipment	1	6.51	12	31	22		
Supplies from 2.F.B. navigation							
Port side light	1	0.97	0.4	5	14	N.H.R. H.R. type	
Head head light aft	1	0.97	0.4	5	26		
" " fore	1	0.97	0.4	5	100		
Stem light	1	0.97	0.4	5	30		
Aft side light	1	0.97	0.4	5	14		
House signalling light	1	0.97	0.4	5	12		

MOTOR CABLES.

ALL IMPORTANT MOTORS TO BE ENUMERATED.	No.	B.H.P.	No. in Parallel per Pole.	Sectional Area or No. and Dia. of Strands. Sq. ins. or sq. mm.	In the Circuit.	Rule.	APPROX. LENGTH (lead plus return) m.	INSULATION.	PROTECTIVE COVERING.
Supplies from main midboard									
Fresh water pump	1	0.5	1	1.94	5.5	10	16	N.H.R. H.R. type	
Ventilator fan E.R.	1	50W.	1	1.94	0.5	10	25		
" fans cargo hold	2	50W	1	1.94	0.5	10	120		

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.



Electrical Contractors. Date 2-1-51

COMPASSES.

Have the compasses been adjusted under working conditions yes

H. J. de Vries  
Builder's Signature.

Date 2-1-51

Have the foregoing descriptions and schedules been verified and found correct yes

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 24.12.50

Certificates. Are certificates of test for motors engaged on essential sea 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 has been installed under special survey in conformity with the Society's Rules and Regulations and the approved plan. The materials used are of good quality and the design and workmanship are good.  
On completion the equipment was tried out under full working conditions and found satisfactory.

Notes end 19/1/51

Total Capacity of Generators 10 Kilowatts.

The amount of Fee ... £ fl. 175.- When applied for, 0.1-19.51

Travelling Expenses (if any) £ fl. 30.- When received, 19

H. D. Sluis  
Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUES. 23 JAN 1951

Assigned See F.E. ucluy. spb.

2m. 9. 4. - 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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