

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office 15 AUG 1944

Date of writing Report.....19..... When handed in at Local Office 21/7/44 Port of NEWCASTLE-ON-TYNE.

No. in Survey held at WALKER-ON-TYNE Date, First Survey (1944) Mar 28th Last Survey 4th July 1944
Reg. Book. (Number of Visits 9)

on the M.V. "NEVERITA" Tons { Gross 8265
Net 4781

Built at WALLSEND-ON-TYNE By whom built SWAN HUNTER & WIGHAM RICHARDSON Yard No. 1684. When built 1944.

Owners ANGLO SAXON PETROLEUM CO. LTD. Port belonging to LONDON.

Electrical Installation fitted by SWAN HUNTER AND WIGHAM RICHARDSON LTD. Contract No. 1684. When fitted 1944.

Is vessel fitted for carrying Petroleum in bulk YES. Is vessel equipped with D.F. YES. E.S.D. YES. Gy.C. YES. Sub.Sig. —

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 DC. 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 ENGINE ROOM STBD OF MAIN ENGINE.

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 STBD AND OUTBOARD OF MAIN

ENGINE. AUX SWITCHBOARD MIDSHIPS IN OWN LOCKER.

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 INTEROHM., 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 Q.B.

SWITCHES AND DOUBLE POLE FUSES.

and for each outgoing circuit DOUBLE POLE, DOUBLE THROW SWITCHES, AND DOUBLE POLE FUSES.

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 CONNECTED TO E THROUGH 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

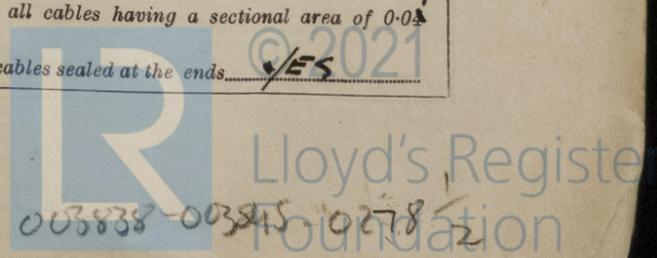
protection devices connected on the pole opposite to the equaliser connection —, have they been tested under working conditions, and at what current

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 16 V., 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 YES.



with insulating compound YES or waterproof insulating tape YES. 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 cables laid under machines or floorplates YES, if so, are they adequately protected YES. Are cables in machinery spaces, galleys, laundries, etc., lead covered YES or run in conduit —. State how the cables are supported and protected. L.C. & A. CABLES ON UPPER DECK RUN IN GALVANISED IRON PIPE. CABLES ON FORE & AFT GANGWAY ARE L.C. & A. CABLES RUN IN WOOD CLIPS ON INVERTED STEEL TROUGHING. CABLES IN MACHINERY SPACES & FOCSLE ARE L.C. & A. CABLES IN ACCOMMODATION ARE L.C.

Are all lead sheaths, armouring and conduits effectually bonded and earthed YES. Refrigerated chambers, are the cables and fittings as per Rule YES. 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 effectually bushed YES and with what material LEAD. Alternative Lighting, are the groups of lights in the engine and boiler rooms arranged as per Rule YES. Emergency Supply, state position — and method of control —.

Navigation Lamps, are they separately wired YES controlled by separate double pole switches YES 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. Secondary Batteries, are they constructed and fitted as per Rule —, are they adequately ventilated — what is the battery capacity in ampere hours —.

Fittings, are all fittings on weather decks, in stokeholds and engine rooms and wherever exposed to drip or condensed moisture, weatherproof YES. Are fittings installed where readily combustible materials or inflammable or explosive dust or gases are likely to be present YES, if so, how are they protected —.

GASTIGHT FITTINGS WITH SEPARATE GASTIGHT BOX FOR CABLE ENTRY. and where are the controlling switches fitted ON DECK ABOVE IN DISTRIBUTION BOXES. are all fittings suitably ventilated YES.

are all fittings and accessories constructed and installed as per Rule YES. Searchlight Lamps, No. of —, whether fixed or portable —, are their fittings as per Rule —. 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 YES and placed in well-ventilated compartments in which inflammable gases cannot accumulate and free from damage from water, steam and oil YES, if situated near unprotected combustible material state minimum distance from same horizontally — and vertically —. Are motors coupled to oil fuel transfer and unit 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 services been supplied and the results found as per Rule —. 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 YES, are all fuses of the cartridge type YES.

are they of an approved type YES. Are the fittings for pump rooms, 'tween deck spaces, etc., in accordance with the special requirements for such ships YES. Are the cables lead covered as per Rule YES. Spare Gear, if the vessel is for open sea service have spares been provided as per 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.

PARTICULARS OF GENERATING PLANT.

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	30	110	273	675	STEAM ENGINE		
	1	30	110	273	675	DIESEL		
EMERGENCY								
ROTARY TRANSFORMER								

GENERATOR CABLES.

DESCRIPTION.	KILOWATTS.	CONDUCTORS.		MAXIMUM CURRENT IN AMPERES.		APPROX. LENGTH (lead plus return feet).	INSULATED WITH.	HOW PROTECTED.
		No. in Parallel Per Pole.	Sectional Area or No. and Dia. of Strands. Sq. ins. or sq. mm.	In the Circuit.	Rule.			
MAIN GENERATOR	2 X 30	1	37/083	273	296	18/18	Y.C.	L.C.
" " EQUALISER								
EMERGENCY GENERATOR								
ROTARY TRANSFORMER: MOTOR								
" " GENERATOR								

MAIN DISTRIBUTION CABLES.

DESCRIPTION.	CONDUCTORS.		MAXIMUM CURRENT IN AMPERES.		APPROX. LENGTH (lead plus return feet).	INSULATED WITH.	HOW PROTECTED.
	No. in Parallel Per Pole.	Sectional Area or No. and Dia. of Strands. Sq. ins. or sq. mm.	In the Circuit.	Rule.			
AUX. SWITCHBOARDS AND SECTION BOARDS							
AUXILIARY SWITCHBOARD MIDSHIPS.	1	37/103	200	385	600	V.C.	L.C. & A.B.
SECTION BOX No. 1 BRIDGE DECK PORT	1	7/064	71.3	75	10	"	L.C.
" " No. 2 UPPER DECK STBR AFT.	1	"	255	75	171	"	L.C. & A.
" " No. 3 ENGINE ROOM.	1	7/052	53.8	57	30	"	"
" " No. 4 " "	1	19/064	96	135	213	"	"

LIGHTING (Ctd)

DIS. BOX No.	DESCRIPTION.	No.	Sectional Area or No. and Dia. of Strands. Sq. ins. or sq. mm.	MAXIMUM CURRENT IN AMPERES.	APPROX. LENGTH (lead plus return feet).	INSULATED WITH.	HOW PROTECTED.
14	ENGINE ROOM	1	7/036	85	28	30	V.C. L.C. & A.
15	POOP DECK.	1	7/064	30	75	201	" "
16	WHEELHOUSE.	1	7/036	25	28	600	" "

MOTOR CABLES.

ALL IMPORTANT MOTORS TO BE ENUMERATED.	No.	B.H.P.	Sectional Area or No. and Dia. of Strands. Sq. ins. or sq. mm.	MAXIMUM CURRENT IN AMPERES.	APPROX. LENGTH (lead plus return feet).	INSULATED WITH.	HOW PROTECTED.
TURNING MOTOR.	1	7/2	7/064	60	75	195	V.C. L.C. & A.
LATHE.	1	3	7/036	24	28	60	" "
DRILL.	1	3	7/036	24	28	60	" "
GRINDER.	1	3	7/036	24	28	60	" "
OIL FUEL SERVICE PUMP	1	1	7/036	8	28	150	" "
LUB. OIL PURIFIER.	1	2	7/036	16	28	150	" "
THERMOTANK MOTOR AFT	1	4	7/064	32	75	300	" "
" " MIDSHIPS	1	4	7/052	32	57	195	" L.C.

MAIN DISTRIBUTION CABLES.

DESCRIPTION.	CONDUCTORS.		MAXIMUM CURRENT IN AMPERES.		APPROX. LENGTH (lead plus return feet).	INSULATED WITH.	HOW PROTECTED.
	No. in Parallel Per Pole.	Sectional Area or No. and Dia. of Strands. Sq. ins. or sq. mm.	In the Circuit.	Rule.			
AUX. SWITCHBOARDS AND SECTION BOARDS ...							
AUXILIARY SWITCHBOARD MIDSHIPS.	1	37/063	200	385 ✓	600	V.C.	L.C.A.&B.
SECTION BOX No 1 BRIDGE DECK PORT	1	7/064	71.3	75 ✓	10	"	L.C.
" " No 2 UPPER DECK STBD AFT.	1	"	25.5	75 ✓	171	"	L.C.A.
" " No 3 ENGINE ROOM.	1	7/052	53.8	57 ✓	30	"	"
" " No 4 " "	1	19/064	96	135 ✓	213	"	"

LIGHTING AND HEATING, ETC., CABLES.

RELESS ...	1	7/036	27	28 ✓	48	V.C.	L.C.
VIGATION LIGHTS ...	1	"	2.5	28 ✓	48	"	"
HTING AND HEATING ...							
DS. Box No 0 FOC'SLE.	1	7/064	5.8	75 ✓	405	V.C.	L.C.A.&B.
" " No 1 CHART ROOM.	1	7/044	18.	42 ✓	120	"	L.C.
" " No 2 UPPER BRIDGE.	1	7/036	12.7	28 ✓	69	"	"
" " No 3 BRIDGE DECK PORT.	1	7/036	28.2	28 ✓	15	"	"
" " No 4 " " STBD	1	7/036	15.4	28 ✓	60	"	"
" " No 5 " " PORT	1	7/036	13.1	28 ✓	27	"	"
" " No 6 UPPER DECK STBD AFT	1	7/036	3.8	28 ✓	180	"	L.C.A.
" " No 7 " " PORT AFT.	1	7/044	13.3	42 ✓	168	"	L.C.
" " No 8 " " STBD AFT.	1	7/036	12.	28 ✓	24	"	"
" " No 9 ENGINE ROOM.	1	7/036	14.6	28 ✓	160	"	L.C.&A.
" " No 10. " "	1	7/036	5.6	28 ✓	120	"	"
" " No 11. " "	1	7/036	10.9	28 ✓	150	"	"
" " No 12. " "	1	7/036	8.2	28 ✓	75	"	"
" " No 13. " "	1	7/036	6.0	28 ✓	210	"	"

MOTOR CABLES.

ALL IMPORTANT MOTORS TO BE ENUMERATED.	No.	B.H.P.							
TURNING MOTOR.	1	7/2	1	7/064	60	75 ✓	195	V.C.	L.C.&A.
LATHE.	1	3	1	7/036	24	28 ✓	60	"	"
DRILL.	1	3	1	7/036	24	28 ✓	60	"	"
GRINDER.	1	3	1	7/036	24	28 ✓	60	"	"
DIL FUEL SERVICE PUMP	1	1	1	7/036	8	28 ✓	150	"	"
LUB DIL PURIFIER.	1	2	1	7/036	16	28 ✓	150	"	"
THERMOTANK MOTOR AFT.	1	4	1	7/064	32	75 ✓	300	"	"
" " MIDSHIPS	1	4	1	7/052	32	57 ✓	195	"	L.C.

SWAN, HUNTER, & WIGHAM RICHARDSON, LTD.
WALLESEND-ON-TYNE.



© 2021

Lloyd's Register Foundation

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

SWAN, HUNTER, & WIGHAM RICHARDSON, LTD.

Electrical Engineers.

Date

12th July 1944.

COMPASSES.

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

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

The nearest cables to the compasses are as follows:—

A cable carrying $\frac{1}{4}$ Ampères ^{INSIDE} feet from standard compass feet from steering compass.

A cable carrying $\frac{1}{4}$ Ampères 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.

SWAN, HUNTER, & WIGHAM RICHARDSON, LTD.

Builder's Signature.

Date 12.7.44.

Is this installation a duplicate of a previous case YES. If so, state name of vessel M. V. "NACELLA"

Plans. Are approved plans forwarded herewith — If not, state date of approval 12-4-43.

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 has been installed in conformity with the Society's rules and Regulations, and the arrangements are in accordance with, or equivalent to those shown on the approved plans.

Materials used are of good quality, and the workmanship is satisfactory.

On completion, the insulation resistance of all circuits was good and the generator operated on normal working conditions with satisfactory results.

The equipment, as installed, is, in my opinion, suitable for a blended vessel.

Noted

J.Rus

17.8.44

Total Capacity of Generators 60 Kilowatts.

The amount of Fee ... £ 28: 10 : { When applied for, 14 AUG 1944

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

W.D. O'Brien
Surveyor to Lloyd's Register of Shipping.

Committee's Minute 18 AUG 1944

Assigned see minute on J.R.R.P.

5m.4.39.—Transfer. (MADE AND PRINTED IN ENGLAND.)
(The Surveyors are requested not to write on or below the space for Committee's Minute.)



© 2021
Lloyd's Register
Foundation