

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

28 FEB 1944

Received at London Office

Date of writing Report. 25-1-44 When handed in at Local Office. 20 FEB 1944 Port of Newcastle-upon-Tyne

No. in Survey held at. Blyth Date, First Survey 8-6-43 Last Survey 24-1-1944
Reg. Book. (Number of Visits.....)23818 on the M/V. "ERODONA" Tons { Gross 6356
Net 3588Built at KRIMPEN By whom built. NYC. VAN DER GLESSSEN ZONEN'S SCHIPS. Yard No. — When built 1937
(Built at Blyth D.D. 7 SB. G. LTD)

Owners Anglo-Saxon Petroleum Co. Ltd Port belonging to London

Electrical Installation fitted by Sundeland Forge & Engineering Co. Ltd Contract No. 225 When fitted 1943-4

Is vessel fitted for carrying Petroleum in bulk 40 Is vessel equipped with D.F. 40 E.S.D. 40 Gy.C. 40 Sub.Sig. No.

Have plans been submitted and approved. 40 System of Distribution Two-Wire insulated Voltage of supply for Lighting 110

Heating — Power 110 Direct or Alternating Current, Lighting 40 Power 40 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 40 Are turbine emergency governors fitted with a

trip switch as per Rule — Generators, are they compound wound 40, are they level compounded under working conditions 40

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 40 Is the compound winding connected to the negative or positive pole

positive Have machines over 100 kw. been inspected by the Surveyors during manufacture and testing 40 Have certificates of

test for machines under 100 kw. been supplied 40 and the results found as per rule 40 Are the lubricating arrangements and the construction

of the generators as per rule 40 Position of Generators engine room floor level starboard side

is the ventilation in way of generators satisfactory 40 are they clear of inflammable material 40, 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 40, are the bedplates and frames earthed 40 and the prime movers and generators in metallic

contact 40 Switchboards, where are main switchboards placed engine room, adjacent to main generators

are they in accessible positions, free from inflammable gases and acid fumes 40, are they protected from mechanical injury and damage from water, steam

and oil 40, if situated near unprotected combustible material state distance from same horizontally — and vertically —, what insulation

material is used for the panels. Ebon "Sindango" if of synthetic insulating material is it an Approved Type 40, if of

semi-insulating material (slate or marble) are all conducting parts insulated therefrom as per Rule — Is the frame effectually earthed 40

Is the construction as per Rule 40, including accessibility of parts 40, absence of fuses on the back of the board 40, individual fuses

to pilot and earth lamps, voltmeters, etc. 40 locking of screws and nuts 40, labelling of apparatus and fuses 40, fuses on the "dead"

side of switches 40 Description of Main Switchgear for each generator and arrangement of equaliser switches a double-pole single-

throw quick-break knife switch and double-pole fuse: a double-pole quick-break knife

switch for supplying D.F. from either generator.

and for each outgoing circuit a double-pole, double-throw quick-break knife switch and double-

pole fuse.

Are compartments containing switchboards composed of fire-resisting material or lined as per Rule 40 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 E lamps coupled to E through bus & fuses

Switches, Circuit Breakers and Fuses, are they as per Rule 40, are the fuses an approved type 40, are all fuses labelled as

per Rule 40 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 40

Cables, are they insulated and protected as per the appropriate Tables of the Rules 40, 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 > 6.6 V.

square inch and above provided with soldering sockets 40 Are paper insulated and varnished cambric insulated cables sealed at the ends 40

Have motors of 100 BHP and over been inspected by the Surveyors during manufacture and testing none fitted. Have certificates of test for motors under 100 BHP intended for essential 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 none fitted. 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.

DESCRIPTION OF GENERATOR.	No. of	RATED AT				DRIVEN BY	WHERE DRIVEN BY AN INTERNAL COMBUSTION ENGINE.	
		Kilowatts.	Volts.	Amperes.	Revs. per Min.		Fuel Used.	Flash Point of Fuel.
MAIN	1	30	110	273	675	Engle Gylander Vertical Steam Engine		
	1	30	110	273	675	Gylander Horizontal-Horsefly Steam Engine	oil	about 150°
EMERGENCY ...								
ROTARY TRANSFORMER								

DESCRIPTION.	KILOWATTS.	CONDUCTORS.		MAXIMUM CURRENT		APPROX. LENGTH (lead plus return feet).	INSULATED WITH.	HOW PROTECTED.
		No. in Parallel For Pole.	Sectional Area or No. and Dia. of Strands. Sq. ins. or sq. mm.	In the Circuit.	Rate.			
MAIN GENERATOR ... <i>Shaw</i>	<i>30</i>	<i>1</i>	<i>37/083</i>	<i>273</i>	<i>296</i>	<i>40</i>	<i>V.C.</i>	<i>L.C.A.</i>
" " Emergency								
" " <i>Direct</i>	<i>30</i>	<i>1</i>	<i>37/083</i>	<i>273</i>	<i>296</i>	<i>32</i>	<i>V.C.</i>	<i>L.C.A.</i>
EMERGENCY GENERATOR ...								
ROTARY TRANSFORMER: MOTOR								
" " GENERATOR								

[illegible]

WIRELESS ... (off Main Switchboard)	1	19/064	-	135	626	V.C.	L.C.A.
NAVIGATION LIGHTS ... Main	1						
" " Alternator - off Mtd. Sec. Panel	1	7/044	12	42		V.C.	L.C.
LIGHTING AND HEATING							
apt. cargo lighting D.B.	1	7/044	25	42	144	"	L.C.A.
Emergency W/T. Supply (off Mtd. Panel)	1	19/064	-	135	198	"	"
H.F. D.F. Supply	1	19/064	-	135	240	"	"
Workshop Motor D.B.	1	19/064	56	135	270	"	"
Battery Charging Circuit	1	7/036	-	27	240	"	"

[illegible]

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.

P. PRO THE SUNDERLAND FORGE & ENGINEERING CO., LTD.

A. S. Gurney

Electrical Engineers.

Date 26-1-1944

COMPASSES.

Minimum distance between electric generators or motors and standard compass 26'

Minimum distance between electric generators or motors and steering compass 34'

The nearest cables to the compasses are as follows:—

A cable carrying 14 Ampères 7 feet from standard compass sk 7 ft feet from steering compass.

A cable carrying 14 Ampères on 7 ft feet from standard compass 7 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 any course in the case of the standard compass, and nil degrees on FOR ANY HALF OF course in the case of the steering compass.

ELTHAM DRY DOCKS & SHIPBUILDING CO., LTD.

M. W. Turnbull

Builder's Signature.

Date 29-1-1944

Reconstructed Tanker

Director & General Manager.

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 22-3-43

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 reviewed throughout in accordance with the approved plans for the reconstruction of the vessel. The materials used are of good quality and design and the workmanship is good. On completion the equipment was operated on load with satisfactory results and the insulation resistance was measured and found good. This equipment is now in my opinion in good order and safe working condition.

Total Capacity of Generators (2x30) 60 Kilowatts.

The amount of Fee ... £28 10 0

When applied for,

.....19.....

Travelling Expenses (if any) £ : :

When received,

.....19.....

S. X. Ward
Surveyor to Lloyd's Register of Shipping.

TUES. 28 MAR 1944

Committee's Minute

Assigned

*See minute on
machs rft*