

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

5 SEP 1949

Date of writing Report 23-8-49 19... When handed in at Local Office 18th August 1949... Port of Sunderland
 Received at London Office

No. in Survey held at Sunderland... Date, First Survey 12-7-49... Last Survey 19-8-49 19...
 Reg. Book. (No. of Visits 5)

40048 on the s.s. "POOLE RIVER" Tons { Gross 1366
 Net 662

Built at Sunderland By whom built Wm. Pickersgill & Sons Ltd Part No. 313 When built 1949

Owners British Electricity Authority Port belonging to London.

Installation fitted by Sunderland Forge & Engineering Co. Ltd When fitted 1949

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

Plans, have they been submitted and approved yes System of Distribution two-wire ins. Voltage of Lighting IIO

Heating IIO Power IIO D.C. or A.C., Lighting D.C. Power D.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 yes, and level compounded under working conditions yes

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

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

Position of Generators on raised flat aft end of engine room

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 on angle framework

adjacent to generators

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 Ebony 'Syddanyo' 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 construction as per Rule, including locking of screws and nuts yes Description of Main Switchgear

for each generator and arrangement of equaliser switches a double pole, quick-break knife switch and double

pole fuse.

and the switch and fuse gear (or circuit breakers) for each outgoing circuit as for generators

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

ammeters two 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 E. lamps

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

make of fuses G.E.C., 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 less than 6 v. 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 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 any cables laid under machines or floorplates no, if so, are they

adequately protected - Are cables in machinery spaces, galleys, laundries, etc., lead covered yes or run in conduit -

or of the "HR" type - State how the cables are supported or protected engine rm and fowrad mains are VIR

in steel conduit : in accommodation, L.C. cables on the surface clipped to wooden grounds.

Are all lead sheaths, armouring and conduits effectually bonded and earthed 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

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

Alternative Lighting, are the groups of lights in the engine and boiler rooms arranged as per Rule... **yes** Emergency Supply, state position

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... are they adequately ventilated... state 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 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... whether fixed or portable... are they of the carbon arc or of the filament type...

Heating and Cooling, is the general construction as per Rule... **yes** are the frames effectually earthed... **yes** are heaters in the accommodation of the convection type... **yes** 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...

Control Gear and Resistances, are they constructed and fitted as per Rule... 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 **Hughes MSXII** location of transmitter **frame 64/5 port** and receiver **frame 64/5 star**

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.	
			Kilowatts per Generator.	Volts.	Ampères.	Revs. per Min.	TYPE.	MAKER.
MAIN ...	I	Sunderland Forge	10	110	91	600	steam	S.F.&Eng.Co.Ltd
	I	ditte	6	110	54.5	1100	diesel	Russel-Newberry Ltd
EMERGENCY ...								
ROTARY TRANSFORMER								

GENERATOR CABLES.

DESCRIPTION.	KILOWATTS.	CONDUCTORS.		MAXIMUM CURRENT IN AMPERES.		APPROX. LENGTH (lead plus return feet).	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 ... steam	10	I	19/.052	91 ✓	104	46	V.C.	L.C.A.
" " steam diesel	6	I	7/.052	54.5 ✓	57	28	"	"
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.	MAXIMUM CURRENT IN AMPERES.	APPROX. LENGTH (lead plus return feet).	INSULATION.	PROTECTIVE COVERING.
Aft Section Panel S.B.I.	I	7/.052	36 ✓ 37	90	V.I.R.	Braided
Midship Section Panel S.B.2	I	19/.083	68 ✓ 118	310	"	Conduit
Shore Connection	I	19/.083	- 118	74	"	"
Engine Rm.D.B.	I	7/.064	10 ✓ 46	12	"	L.C.

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

DESCRIPTION.	CONDUCTORS.		MAXIMUM CURRENT IN AMPERES.		APPROX. LENGTH (lead plus return feet).	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.			
Aft S.B.I. to Peop D.B.	I	1/.064	7.1 ✓	10	45	V.I.R.	L.C.
" Crew Accommodation	I	1/.064	8.4 ✓	10	45	"	"
" " "	I	1/.064	8.1 ✓	10	45	"	"
" " "	I	1/.064	4.9 ✓	10	45	"	"
" " "	I	1/.064	7.9 ✓	10	45	"	"
Midship S.B.2 to Navigation C.O.S.	I	1/.064	1.5 ✓	10	60	"	"
" " "	I	7/.044	22.4 ✓	31	60	"	"
" Upper Bridge	I	7/.044	21 ✓	31	45	"	"
" Lower Bridge	I	1/.064	9.7 ✓	10	30	"	"
" Forecastle	I	7/.044	6.7 ✓	31	210	"	"
Captain's Heater	I	1/.064	9 ✓	10	60	"	"
Echo Sounding	I	1/.044	5 ✓	5	60	"	"

MOTOR CABLES.

ALL IMPORTANT MOTORS TO BE ENUMERATED.	No.	B.H.P.	CONDUCTORS.	MAXIMUM CURRENT IN AMPERES.	APPROX. LENGTH (lead plus return feet).	INSULATION.	PROTECTIVE COVERING.
Domestic Refrig.	I	0.75	I 3/.036	8.5 ✓	10	30	V.I.R. L.C.A.B.

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.

Sunderland Forge & Eng Co Ltd Electrical Contractors. Date *28-8-1949*
H. Green

COMPASSES.

Have the compasses been adjusted under working conditions. yes

Wm. PICKERSGILL & SONS, LIMITED.

E. D. Heppit Builder's Signature. Date _____
DIRECTOR

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

Is this installation a duplicate of a previous case. yes If so, state name of vessel. S.S. "POOLE HARBOUR"

Plans. Are approved plans forwarded herewith. no If not, state date of approval. 24.6.48

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 accordance with the approved plans and the "Rules For Electrical Equipment" : The materials and workmanship are good : Upon completion, trials of the equipment were witnessed as satisfactory and the insulation resistance of all circuits was measured and found good. This equipment is in my opinion suitable for a classed vessel.

noted. P.M. 5/10/49

Total Capacity of Generators. (1x10, 1x6) 16 Kilowatts.

The amount of Fee ... £ 20 0 0 When applied for, SEP - 3 1949
When received, _____
Travelling Expenses (if any) £ : : _____

B. D. [Signature]
Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI. 7 OCT 1949

Assigned See F.E. [Signature] rpt.

