

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office 17 JUN 1942

Date of writing Report 16-5-42 When handed in at Local Office 15 JUN 1942 Port of Hull

No. in Survey held at Hull Date, First Survey 18-4-42 Last Survey 7-5-42
Reg. Book. (Number of Visits 7)

on the S.S. Trawler WHITING. Tons { Gross 38.7
Net 12.7

Built at Selby By whom built Lawrence & Sons Ltd Yard No. 1240 When built 1942-5

Owners The Admiralty Port belonging to

Electrical Installation fitted by Wm Broadley & Son Ltd Contract No. When fitted do

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

Have plans been submitted and approved Yes System of Distribution Parallel circuit from 200V Voltage of supply for Lighting 110

Heating Yes Power Yes Direct or Alternating Current, Lighting D.C. Power Yes If Alternating Current state periodicity Yes 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 Yes Generators, are they compound wound Yes, are they level compounded under working conditions Yes

if not compound wound state distance between generators Yes and from switchboard Yes Where more than one generator is fitted are they

arranged to run in parallel One only, are shunt field regulators provided Yes 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 Yes 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.

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 Yes and vertically Yes, 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, adjacent to General

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 Yes and vertically Yes, what insulation

material is used for the panels Units mounted on frame work, insulation, 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 Yes 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.

D.P. Switches & fuses

and for each outgoing circuit D.P. Switches & fuses.

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

ammeters One voltmeters Yes synchronising devices. For compound machines in parallel is the ammeter connected on the pole opposite to the

equaliser connection Yes Earth Testing, state means provided Earth lamps & Sustelene

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 Yes, are the reversed current

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

did they operate Yes 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 Yes

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 Yes

with insulating compound ☒ or waterproof insulating tape ☒. 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. *lps*, are cables laid under machines or floorplates. *clb*, if so, are they adequately protected. *lps*. Are cables in machinery spaces, galleys, laundries, etc., lead covered. *lps* or run in conduit. ☒ State how the cables are supported and protected. *Clipped to truss or bulkheads*

Cables run in solid drawn conduit in bunkers & magazine spaces
D.G. Cables run in special steel tube in bunkers with gland & drainage arrangements

Are all lead sheaths, armouring and conduits effectually bonded and earthed. *lps*. Refrigerated chambers, are the cables and fittings as per Rule. ☒

Are all cables passing through decks and watertight bulkheads provided with deck tubes or watertight glands. *lps*, where unarmoured cables pass through beams, etc., are the holes effectively bushed. *lps* and with what material. *Lead*. Alternative Lighting, are the groups of lights in the engine and boiler rooms arranged as per Rule. *lps*. Emergency Supply, state position. *None*

and method of control. ☒

Navigation Lamps, are they separately wired. *lps* controlled by separate

double pole switches. *lps* and fuses. *lps*. Are the switches and fuses in a position accessible only to the officers on watch. *lps*, is an

automatic indicator fitted. *clb*. Secondary Batteries, are they constructed and fitted as per Rule. *lps*, are they adequately ventilated. *lps*

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. *lps*. Are fittings

installed where readily combustible materials or inflammable or explosive dust or gases are likely to be present. *lps*, if so, how are they protected.

Special Admiralty pattern lamps w/ magazine & spirit room.

and where are the controlling switches fitted. *Men deck above*, are all fittings suitably ventilated. *lps*

are all fittings and accessories constructed and installed as per Rule. *lps*. Searchlight Lamps, No. of *One - 20"* *fixed* *One - 6"* *portable*

, are their fittings as per Rule. *lps*. Heating and Cooking, is the general construction as per Rule. *lps*

are the frames effectually earthed. *lps*, are heaters in the accommodation of the convection type. *lps*. Motors, are all motors constructed and

installed as per Rule. *lps* and placed in well-ventilated compartments in which inflammable gases cannot accumulate and free from damage from water,

steam and oil. *lps*, 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. *Supply*. Control Gear and Resistances, are they constructed and

tested as per Rule. *lps*. Lightning Conductors, where required are they fitted as per Rule. *None*. 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 the cartridge type. ☒

are they of an approved type. ☒ 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. ☒ 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. *lps*. Insulation Tests, has the insulation resistance of all circuits and apparatus been tested

and found satisfactory. *lps*.

PARTICULARS OF GENERATING PLANT.

DESCRIPTION OF GENERATOR.	No. of	RATED AT				DRIVEN BY	WHERE DRIVEN BY AN INTERNAL COMBUSTION ENGINE.	
		Kilowatts.	Volts.	Amps.	Revs. per Min.		Fuel Used.	Flash Point of Fuel.
MAIN	<i>Gne</i>	<i>15</i>	<i>110</i>	<i>136</i>	<i>500</i>	<i>Steam Engine.</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
EMERGENCY								
ROTARY TRANSFORMER								

GENERATOR CABLES.

DESCRIPTION.	KILOWATTS.	CONDUCTORS.		MAXIMUM CURRENT IN AMPERES.		APPROX. LENGTH (lead plus return feet).	INSULA-TED 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	<i>15</i>	<i>Gne</i>	<i>37/072</i>	<i>136</i>	<i>152</i>	<i>22</i>	<i>V.I.R.</i>	<i>L.C. AP 6187</i>
" EQUALISER						<i>36</i>		
" SHORE CONNECTION.								
EMERGENCY GENERATOR								
ROTARY TRANSFORMER: MOTOR								
" GENERATOR								

MAIN DISTRIBUTION CABLES.

DESCRIPTION.	CONDUCTORS.		MAXIMUM CURRENT IN AMPERES.		APPROX. LENGTH (lead plus return feet).	INSULA-TED 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							
<i>For'd Radiator</i>	<i>Gne</i>	<i>7/064</i>	<i>44</i>	<i>46</i>	<i>110</i>	<i>V.I.R.</i>	<i>L.C. AP 6191A</i>
<i>Lighting & Bell Circuits</i>		<i>7/044</i>	<i>31</i>	<i>31</i>	<i>130</i>		<i>" 6192A</i>
<i>Alm</i>			<i>39</i>		<i>24</i>		
<i>Basic</i>			<i>14</i>		<i>190</i>		
<i>D.G.</i>			<i>25</i>				
<i>W/T.</i>		<i>7/036</i>	<i>25</i>	<i>24</i>	<i>110</i>		<i>" 6193A</i>
<i>Navigation</i>			<i>19</i>				
<i>20" Search light</i>			<i>10</i>		<i>115</i>		
<i>6"</i>		<i>7/029</i>	<i>3</i>	<i>15</i>	<i>110</i>		<i>" 6194A</i>

LIGHTING AND HEATING, ETC., CABLES.

WIRELESS	...	...	...	...	...	...	...	...
NAVIGATION LIGHTS	...	...	...	...	...	...	...	...
HEATING AND HEATING	...	...	...	...	...	...	...	...
Sub circuits	...	...	...	...	...	...	...	...
Radiator	...	...	...	...	...	...	...	...

					

MOTOR CABLES.

ALL IMPORTANT MOTORS TO BE ENUMERATED.	No.	B.H.P.					
<i>Ventilator Fan 5"</i>		<i>Gne</i>	<i>3/036</i>	<i>10</i>		<i>V.I.R.</i>	<i>L.C. AP 6195A</i>
<i>7 1/2"</i>							
<i>Refrigerator 3 1/2 hp</i>							
<i>7 1/2"</i>							
<i>Four Refrigerators are not yet fitted. Boxes + pumps are wired as far as practicable.</i>							

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.

WM BROADY & SON LTD
ENGINEERS

Electrical Engineers.

Date

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 Ampères feet from standard compass feet from steering compass.

A cable carrying Ampères feet from standard compass 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

Has the effect of switching on and off circuits, motors and other electro-magnetic apparatus within the vicinity of the compasses been noted

The maximum deviation due to electric currents was found to be degrees on course in the case of the standard compass and degrees on course in the case of the steering compass.

Builder's Signature.

Date

Is this installation a duplicate of a previous case. *Yes* If so, state name of vessel *BONITO.*

Plans. Are approved plans forwarded herewith. *Yes* If not, state date of approval. *16. 9. 41*

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

General Remarks (State quality of workmanship, whether insulation tests, etc., have been made, opinions as to class, etc.)

This Electrical installation has been fitted on board in accordance with the approved plans, the Society's Rules, & the Admiralty requirements & Specification.

When tested under working conditions & as specified in the Rules it was found satisfactory in every respect.

Noted
19/6/42

Total Capacity of Generators *15* Kilowatts.

The amount of Fee ... £ *30 : 0* : When applied for, *15 JUN 1942*

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

Committee's Minute *FRI. 19 JUN 1942*

Assigned *See Sub 26 51628*

W. S. Shields
Surveyor to Lloyd's Register of Shipping.



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Foundation