

# REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office.....

Date of writing Report. 12<sup>th</sup> SEPT. 1945 When handed in at Local Office. 12<sup>th</sup> SEPT. 1945 Port of DARTMOUTH

No. in Survey held at DARTMOUTH Date, First Survey 3-3-45 Last Survey 24-8-1945  
Reg. Book. (Number of Visits. 22)

on the SINGLE SCREW BOOM DEFENCE H.M.S. "BARITONE" (J6139) Tons { Gross 625.68  
Net 291.99

Built at DARTMOUTH By whom built MESSRS PHILIP & SON Yard No. 1115 When built 1945

Owners THE ADMIRALTY Port belonging to ✓

Electrical Installation fitted by MESSRS PHILIP & SON, LTD Contract No. 1115 When fitted 1945

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

Have plans been submitted and approved YES System of Distribution TWO WIRE Voltage of supply for Lighting 110

Heating 110 Power 110 Direct or Alternating Current, Lighting D.C. 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 No, are they level compounded under working conditions No

if not compound wound state distance between generators 21 FT and from switchboard PORT 15' STAB 6' Where more than one generator is fitted are they

arranged to run in parallel YES, 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 Are the lubricating arrangements and the construction

of the generators as per rule YES Position of Generators PORT & STAB SIDES OF ENG ROOM AFT AT LEVEL

OF TOP GRATING, 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 AFT ENG ROOM BULKHEAD (STAB SIDE OF CENTRE

LINE AT LEVEL OF TOP GRATING.

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 MICANITE/INSULATED STEEL RODS & FRAMEWORK, 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 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. CIRCUIT BREAKERS.

✓

✓

and for each outgoing circuit D.P. KNIFE SWITCHES.

✓

Are compartments containing switchboards composed of fire-resisting material or lined as per Rule ✓ 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 TWO EARTH LAMPS

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 5% OVERLOAD 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 35 AMPS. 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 NIL, 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 ✓







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 PHILIP & SON, LIMITED.

*John J. Bunter*

MANAGING DIRECTOR

Electrical Engineers.

Date *2<sup>nd</sup> Oct 1945*

#### COMPASSES.

Minimum distance between electric generators or motors and standard compass *75 FEET*

Minimum distance between electric generators or motors and steering compass *74 FEET*

The nearest cables to the compasses are as follows:—

A cable carrying *.5* Ampères *2* feet from standard compass *2* 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 *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 *N. N. W.* course in the case of the standard compass, and *✓* degrees on *✓* course in the case of the steering compass.

FOR PHILIP & SON, LIMITED.

*John J. Bunter*

Builder's Signature.

Date *2<sup>nd</sup> Oct 1945*

Is this installation a duplicate of a previous case *YES*

If so, state name of vessel *H.M.S. "BARFLANE"*

*BARFOIL*  
*BARFON*

Plans. Are approved plans forwarded herewith *✓*

If not, state date of approval *✓*

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

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

*THIS INSTALLATION HAS BEEN CARRIED OUT ACCORDING TO THE RULES AND THE REQUIREMENTS OF THE SPECIFICATION. TESTS HAVE BEEN CARRIED OUT AND THE MACHINERY AND FITTINGS EXAMINED UNDER WORKING CONDITIONS.*

*THE MATERIALS AND WORKMANSHIP ARE GOOD AND IN MY OPINION THE INSTALLATION IS ELIGIBLE TO BE CLASSED.*

*Noted*

*HRM 9.10.45*

Total Capacity of Generators *40* Kilowatts.

CLASSIFICATION & SUPERVISOR

The amount of Fee *50-0-0*

When applied for,

*25-9-1945*

When received.

*19*

Travelling Expenses (if any) £ *✓*

*Atkinson*  
Surveyor to Lloyd's Register of Shipping.

Committee's Minute

*FRI. 9 NOV 1945*

Assigned *See F.E. machy. rph.*