

CALIBRATION OF FIELD INTENSITY MEASURING

EQUIPMENT AT RADIO FREQUENCIES

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INTRODUCTION

Object

There are two methods of calibrating field intensity measuring equipment. The first method is to calibrate each measurement in the field as it is taken. This is done by means of a local oscillator taken along as part of the equipment. The second method is to calibrate the measuring equipment at the frequency desired, in the laboratory, and to plot a calibration curve for that frequency. Measurements made in the field can then be obtained immediately from the curve. The purpose of this investigation is to develop a method of calibrating the measurement equipment in the laboratory, so that the equipment available can be used for making measurements in the field.

History and Importance

A method of calibrating this equipment satisfactorily in the laboratory is very desirable. The equipment available is suitable for field strength measurement, but some difficulty has been experienced in calibrating it. Consequently the set has been used more as a means of determining relative field strengths rather than actual field strengths. With an accurate method of calibration, actual values of field intensities can be measured, and the set can be made a useful part of the laboratory equipment.