

THE TYPE 1360-B MICROWAVE OSCILLATOR

An improved model of the popular Type 1360 Microwave Oscillator is now in production. Amplitude and frequency stabilities of the carrier under squarewave-modulated conditions have been markedly improved by a diode clamp circuit in the klystron repeller modulator. In addition, regulation of the supply voltage for the 1-kc square-wave generator has stabilized the modulation frequency. These improvements are particularly valuable to those customers who will use the oscillator with the TYPE 1640-A Slotted Line Recorder

System.¹ The stringent stability requirements on amplitude and modulation frequency in this system are due to the large available scale expansion ² and the narrow audio bandwidth of the selective amplifier.

The accompanying figure is a graphic record showing the short-term amplitude stability of the new Type 1360-B Oscillator incorporated in a Type 1640-A system. The scale expansion is 1% full scale (1.01 VSWR). The line voltage was varied from 110 to 120 volts at a rate of 1 cycle per second by means of a Variac[®]autotransformer driven by a Type 1750-A Sweep Drive.

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¹ To be described in a forthcoming issue of the General

 ¹ To be described in a forthcomma precision Method for Radio Experimenter.
² A. E. Sanderson, "A New High Precision Method for the Measurement of the VSWR of Coaxial Connectors," IRE Transactions on Microwave Theory and Techniques, 1021 November, 1961.