

The Heart of a Signal Generator

MORE THAN £100,000 worth of sales in a year for just one class of signal generator made by Marconi Instruments highlights the importance of this type of instrument. Indeed, there are few test operations in the maintenance or manufacture of telecommunications equipment which do not at some stage require the use of a signal generator. M.I. make more than twenty different types, and new equipments are constantly being added to the range.

The heart of a signal generator is the R.F. Box, containing the arrangement of capacitors and coils which determines the frequency of the signal. On the design and manufacture of this vital unit much of the quality of the instrument depends.

The TF 801 series have become particularly popular largely because of innovations in design. The more usual practice is to use a high-frequency multi-range generator around a coil turret, with the associated contacts considered as an inseparable part of the system. These contacts have often been the cause of instability in the output, and the TF 801 substitutes for them a capacitive connection between the oscillator valve and the appropriate coil for the selected frequency range. This is a Marconi Instruments patent.

ABOVE: R.F. boxes for the TF801A/1 Signal Generator going through Mechanical Assembly. From front to rear: Ernest Matthews, Leslie Pinner, Ferenc Keszthelyi and Tony Walker

RIGHT: It is part of Tony Walker's job to assemble the valve deck. He also aligns the pick-up vanes with the stators

