

In the August issue, David Johnson described a unique Transverter one which enabled you to turn your 2 metre multimode into an HF Transceiver running on 20, 15 and 10 metres. This of course is the opposite way round to most Transverter designs — you normally find them taking 10 metres up to 2 metres.

diode switched local oscillator which produces the required output frequency. It is important that the mixer is driven with the correct power level of around 5mW, and is terminated in a 50 ohm load. Higher powers will cause saturation of the diodes and lots of spurious products.

A pair of relays switch in an at-

In the August issue, we described a natty little transverter to effectively turn your 2 metre multimode into an HF transceiver. Due to many requests, here is a modified version which will get you an 160, 80, and 40 metres at considerably lower cost than buying an HF rig! It is useable on SSB, CW and even FM is you want. Modification by Tony Bailey, G3WPO.

tenuator pad, which is selected to reduce the output power of the 2 metre rig down to the MW level on transmit only. In the original a 30dB pad was used for a 3 watt input it is possible to use almost any input power down to the actual 5mW by selection of the appropriate resistor values in the pad. The three diode switched oscillators are identical in design, except for some inductor values, and produce stable, low-noise, low harmonic outputs of approx 0.7V RMS correctly terminated at the mixer. For the lower frequency bands in question (taking 80 metres as an example), an input of 144,000MHz requires an injection frequency of 141.000MHz to produce a 3.0MHz output. The 2 metre rig then tunes 144.5 -

This article has raised a lot of interest, together with many requests for a version which covers the lower frequency bands.

With David's permission, a modified version is to be described which enables coverage of these three lower bands. Reference should be made to the original article in the August issue for the main circuit details although a precis is given here for those without the original. The modified circuit diagram and pcb layouts are reproduced here together with full constructional details for constructors convience.

## Circuit

The transverter is designed around an SBL-1 bi-directional mixer, with the VHF signal on 2 metres mixing both transmit and receive with a

