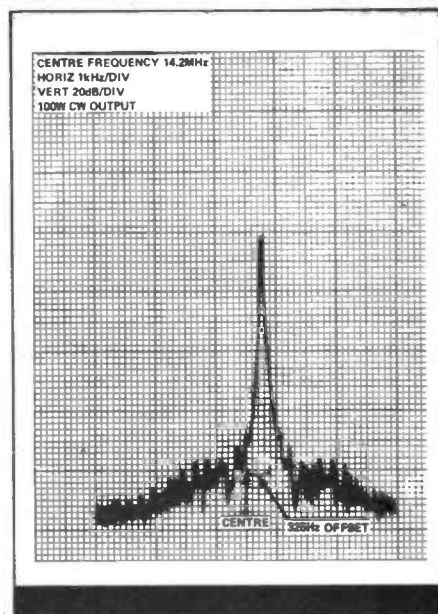
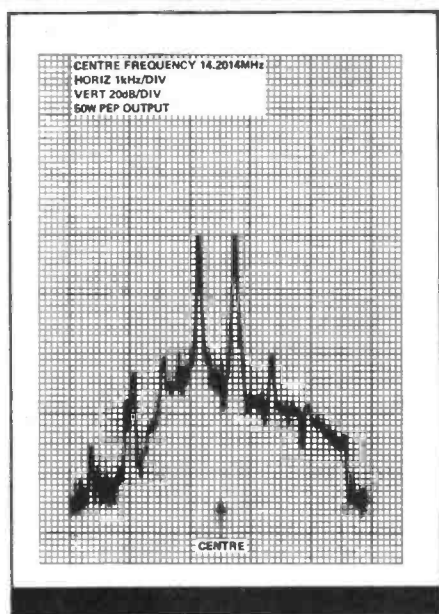
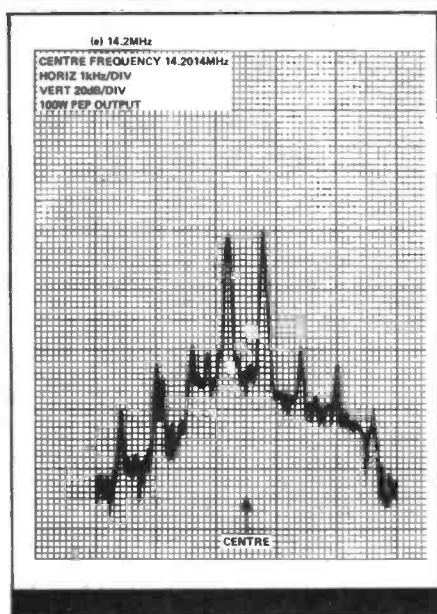




amplifier, or bypassed direct to the switched bandpass filters (Yaesu claim over 100dB dynamic range in the bypassed mode). The first active balanced mixer (again at 24v) converts signals to the first I.F. of 8.2MHz, and then via a monolithic crystal filter to the main I.F. unit. The wideband I.F. output is taken off immediately before the crystal filter, and can be used to drive a panoramic adaptor or spectrum analyser.

After I.F. amplification (again at 24v and using discrete devices rather than I.C.'s), the signal passes to the first of the crystal filters providing the main selectivity. Just prior to the filter, and positioned to avoid degradation of noise pulses is the noise blanker gate. The AGC circuit of the blanker has a front panel adjustable time constant to

cope with varying noise pulse widths, doing this with commendable efficiency on man-made sources, although it is unable to cope with interference such as static etc., as would be expected.

A large number of options are available with the filters — in addition to the fixed 2.9kHz 8 pole crystal filter through which both SSB and CW signals pass (except AM which has its own 6kHz option), if the narrow facility is fitted extra cascaded filters can be placed in the signal path to take benefit from the pre-filtering. A further dual gate mosfet provides additional I.F. amplification, then to the second mosfet mixer, producing the final I.F. of 455kHz.

More filtering is provided by a 2.9kHz 3 pole ceramic filter, again with options for additional CW nar-

row crystal filters at 500 or 270Hz bandwidths. If the AM option is fitted, then these last set of filters are bypassed. All signals are processed further by a bipolar Q-Multiplier, and the optional tuneable notch filter if required (40db notch claimed), followed by additional I.F. amplification, prior to product detecting for SSB and CW modes. Some of the amplified signal is fed to a narrow band I.F. monitor output, and to the AGC detectors (diode) and AM detector unit, if fitted. AGC is amplified and fed to the RF and first i.f. amplifiers for control, as well as the S-Meter circuit.

After diode product detecting, with injection from a 455kHz third local oscillator, both CW and SSB signals are routed through independent active filters, and the audio peak filter (CW only) prior to AF

