

Close up of VFO and Receive PCB.

ment of turning down from maximum.

The compressor action was almost inaudible unless I was being received extremely weakly, and in a way this is a good point since it was not obvious when I was using the compressor at all. I would have preferred, though, to have the availability of more control on the degree of compression and clipping.

Received audio was definitely better than average on FM, although I have heard better. On SSB however, the audio just did not seem clean, for whilst a continuous tone was acceptable, but not good, speech transient seemed to be surprisingly rough from stations that I know always put out very clean sounding signals as heard on my normal station equipment. I suggest that something is not quite right with the attack time of the AGC, or the transient performance of the product detector. Other 726 users tended to agree on this.

I would also have preferred a better quality built-in speaker on such an expensive rig, for it is often

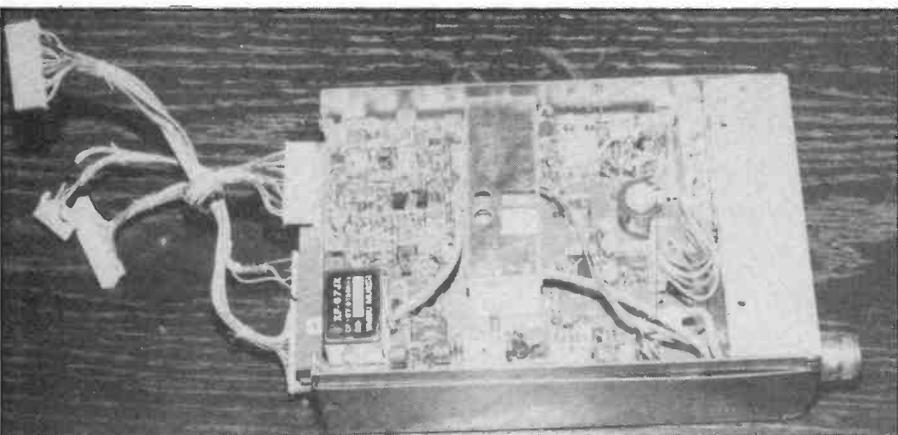
inconvenient to use an external one. An external speaker improved matters, but I would have liked a little more power reserve when using the rig in the open air as a demonstration station.

The IF shift and bandwidth controls are easy to use. I tuned the receiver over the entire width of each band and to my amazement found only one minute spurious tone equivalent to around 0.05uV on 50.926MHz, which I don't think could possibly worry anyone. This is outstandingly good, especially because of the rig's complexity. Oh yes, I almost forgot, I particularly liked the power variation facility — which could be set to give as low as a few mW of RF output on all modes.

All the repeater normal and reverse shifts operated perfectly, reverse repeater being extremely useful, especially on 70cm.

Hot Stuff

The large heat sink on the back left hand corner does get very hot, so you will need to allow plenty of air behind the rig on your bench. I can't see you using this rig in the



70cm module — showing the RF circuitry.

car unless you have a ginormous parcel shelf, but it would be fabulous for Field day.

I have a personal prejudice against plastic bodies and front panels, and I would have much preferred this machine to have a nice shiny metal front rather than its plastic one which could become rather tatty after a while.

The front panel layout could have been better thought out; for example, would it not have been better to have the RF gain with the AF gain, and the squelch with the tone? The up and down band buttons are very inconveniently positioned, and I would have preferred these much higher up.

Many have found the satellite duplex provision to be quite awkward to use, but I would have thought that after a few times most users would find the procedures almost instinctive, although it is not always clear what the frequency readout is indicating during setting up this mode.

Laboratory Tests

Looking over all the vast array of figures from the lab. tests, we can see that the RF sensitivity on all bands is better than average on both FM and SSB, although not quite 'state-of-the-art'. I am particularly impressed with the 70cm performance, as normally one would expect it to be slightly worse than that on 2m. The SSB performance was virtually identical to that of FM, the CW narrow bandwidth with the optional filter of course giving more sensitivity still.

Two-tone radio frequency intermodulation (RFIM) on each of the bands. All the results were reasonably good on 6m, very good on 2m and excellent on 70cm in comparison with other raw black boxes. I gain the impression that Yaesu designers have at last realised the importance of giving a good RFIM performance combined with a good sensitivity, although they could have achieved even better, as was shown in the recent IC251E/Mutek review.

In practice, I did not on any occasion hear any IM products developed from stations outside the 2m band, no problems being noted from the hundreds of police transmitters around my area, which are above 146MHz. Very strong signals on SSB caused no serious problems quite close to a received