

980 works very well, and is capable of virtually eliminating the Woodpecker when the threshold level is correctly set. It didn't seem to upset the dynamic range much, unless well advanced, and was very effective on the random pulse type interference we get on the lower frequency bands most of the day. Most of the time saw it switched into circuit.

Frequency stability could not be faulted, and the display is easy to read in any light. The provision of 10Hz accuracy on the main display is a little superfluous, but this can easily be blanked if preferred.

The transmitter didn't show any funnies on any band, except for one session on 21MHz when the PA seemed to be self oscillating, driving the 2 metre monitor berserk. After checks on the antenna system, the fault persisted, then suddenly cleared and couldn't be re-induced. TVI on UHF TV was also apparent, so something certainly was coming out that shouldn't have been, but the cause remains unknown.

There were no spurious signals on the receive side within the

amateur bands, except for some at very low level which wouldn't constitute a nuisance. With the complexity of the synthesiser, this is quite commendable.

General coverage

Tuning from 150kHz to 29.000MHz, the 980 offers versatile general coverage for those who require it. The AM and FM modules are effective (there is a SQUELCH control for FM), and the variable selectivity is very useful on the short wave broadcast bands. The audio response is a bit bassy for this type of work, although this does add something to Radio 4 on a communications receiver if you listen that low in frequency.

Conclusions

A difficult one. The FT-980R offers many facilities, probably more than anyone is likely to need at any time, including the option to have a computer controlled station if desired. There doesn't seem to be much missing in the way of

facilities, although the manner of implementing them could be queried in some cases. Overall, the rig was easy enough to use once the multiple buttons were mastered, but it may be a bit formidable for the newcomer to the hobby. With the right microphone, received reports were complimentary, and the performance of the receive side was mainly very good.

On the debit side, the AGC and noisy fan were not good features — possibly the AGC is not representative. The manual does mention that the fan may run on receive if ventilation is poor, but the reviewer's set-up is not unusual, and no other similar transceiver has shown this continual fan running. The lack of frequency storage on the RIT control could be lived with but is annoying, as is the mode storage in the memory system.

At a price in excess of £1000 the FT-980R is at the top end of the market — if you want the sort of facilities it offers then it is worth considering along with the FT-ONE and Trio TS-930S as other contenders.

CORRECTIONS

We bring to your attention a number of errors which have slipped in to some of our constructional articles despite our best endeavours to keep them out!

Omega Part 1 (July)

There is an error in the PCB layout and the legends around Q7 resulting from some last minute changes to the way that the Active Filter module is connected into the circuit. These changes did not get translated onto the final PCB layout so the following alterations are needed:

Points E and F on the PCB layout diagram are transposed ie, E should be F and F should be E. Also point D is shown on the PCB foil but not on the overlay or circuit diagram. It is located on the right hand side of R25.

Next, break the curving track which joins points E and F on the PCB foil. Then, using an insulated wire link, connect point D to the new point E. These changes will now make the PCB agree with the circuit diagram and the instructions, except that C24 is now attached to point F and not point E (this makes no difference to operation).

If you are not using an Active Filter module, then simply join D and E together. (E and F will already be joined on the PCB) and ignore the other changes listed so far.

One component not shown on the PCB overlay is C44. This located in the holes immediately to the right of R48. This is not the electrical position as shown on the circuit diagram but this will be allowed for in those future modules which connect with point K.

D9 and R71 are located slightly lower on the PCB than the overlay indicates (about 3mm) as shown up by the incorrect registration.

Most copies had bad print of part of the text on page 16. It should read 'so as to create a two turn centre tapped winding'

G3WPO asks us to point out that PCBs, sent out with recent kits, have been suitably modified.

As an observation about the operation of the Project Omega CIFPU board, the source resistors, R15 and R19, are not needed. Superior AGC performance results by connecting the source leads of Q4 and Q5 directly to the PCB groundplane. C15 and C17 are then superfluous. The noise performance can be improved even further by connecting a 470nH choke in parallel with R1, the parasitic stopper on the input to Q1.

There are some mistakes on the voltage table on page 17. We are trying to draw up a corrected table but this is not ready at the time of writing.

Project Omega (August)

The notch filter PCB layout was an early issue and did not take account of C73, a padding capacitor although this unit was shown on the circuit diagram. The 5p value unit connects directly across the variable capacitor.

VHF To HF Transverter (August)

The components list (page 10) requires the following additions and corrections: C33, 27p; C34, C35, 22p; C50, C51, 18p.

The bottom of the components list: 301-KN-0800 not 301-KU-0800.

G3WPO asks us to point out that oscillator components for all three bands are provided.

PCB overlay (page 12) shows diode D1 the wrong way around. The end marked 'k' should be the anode.

At the top of circuit diagram (page 13) the legend should indicate that a 63MHz crystal is to be used for 18MHz coverage, not 64MHz.

Top of page 14, end of first para: the emitter of TR2 is soldered to the top foil, not TR1.

Halfway down the same column: the para beginning 'Both TR5 and TR6 have...' should read 'TR5 has...' ie not TR6 as well.