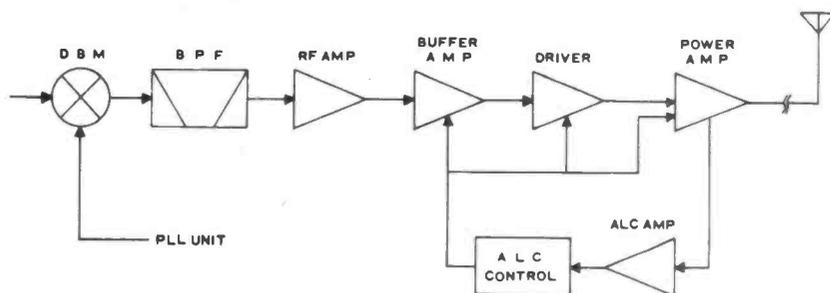


RF POWER AMP CIRCUIT



the manual. We will leave you to ponder on this definition of the squelch circuit (or is it the 'anti-signal' circuit?):-

"This is a noise circuit that suppresses noise when signals enter the set."

One worrying factor was the inclusion of a slip-in warning notice with the IC25-E, cautioning against incorrect initialisation of the microprocessor controlled functions. Icom has obviously had problems in this respect, as it points out that this is not an equipment malfunction, and tell you to switch the rig off and then on again after a short period to overcome this. During the review period, none of the described symptoms materialised, although one other owner reported occasional lack of a display on power up.

Facilities

The IC25-E uses a red seven segment led display, showing the unit MHz + kHz. For some reason best known to themselves, Icom chose to have the unit kHz indicator much smaller (1/4 the area) than the others, and reading '5' or blank. This looks odd, and would have been better at full size. As usual with all led displays, the readability is poor under bright light when mobile — a green fluorescent type would have been a marked improvement.

Under the frequency display is the main frequency control knob — this is very smooth but easily knocked, whereupon you will find yourself on another channel during transmission as there is no control lockout — the button provided on the mic for this purpose can unfortunately be overridden by the front panel knob. Unlike some optical en-

coder controls, this one showed no tendency whatsoever to jump channels, despite attempts in this direction. Nominal frequency coverage is 144-145.995MHz (power up at 145.0MHz) but you can cover 140-150MHz both transmit and receive (see later — not in handbook!).

S-Meter indication is by led bargraph (lemons and cherries type), with somewhat pessimistic indication as supplied — a fairly strong fully quietened signal does not give a reading on the meter (internal adjustment is possible to suit your own S-Meter interpretations).

VFO's

The transceiver has two VFO's (designated A & B controlled by a latching pushbutton, VFO A gives 5kHz increments, while VFO B gives 25kHz, both being usable independently for frequency selection. A separate 6 position switch selects either VFO, or one of 5 memory channels. Both the VFO's and the memory frequencies are retained on switch off, providing power is still present on the connector. No internal memory back up is possible, but the handbook mentions a memory back up supply. No further details are given, but there is a third pin on the power connector which may be for this purpose. A bit of digging around in American journals showed that there is memory back up supply available at around \$38.

Repeaters, hidden MHz

Repeater operation is catered for with two of three pushbuttons to the right of the display. The centre button controls *simplex* or *duplex* modes, and the right, *normal* or *reverse* operation. As you might

guess, depressing both buttons puts you into reverse repeater mode, but it also has another effect — the microprocessor loses control and you have a rig tuneable from 140-150MHz, both transmit and receive! However, you cannot program the memories like this, but you can use the scan facilities. Also, depending on what you try when 'out-of-band', you may find the repeater offset has changed when you return in band. We should add that you will find these facilities of no benefit unless you have the correct licence, but if you are visiting the States it will be of help.

Scanning

Very comprehensive scanning facilities are provided, by front panel control, or from the microphone, although the mic control gives different facilities to the panel. Selectable stop-on-busy or clear channels, together with scan speed and stop delay adjustments are provided, these controls being under the top lid, Icom assuming that they would not be used often.

The left pushbutton of the three already mentioned controls either full (2MHz) or a 'programmed scan', with the lower limit set in Memory 1 and the upper in Memory 2. This is very useful both as a base station, and when mobile, and most of the time was spent scanning 145.5-145.775MHz, which encompasses most activity.

Not quite as the book says...

While the handbook states that the scan will proceed from the lower limit specified in Memory 1, this was not the case — the scan in fact starts one channel above (either 5 or 25kHz, depending on which VFO is setting the step rate). The IC45-E did the same, and it is necessary to set Memory channel 1 one notch lower than actually required ie, if you want to start at 145.50MHz, using 25kHz steps, then Memory 1 has to be programmed with 145.475MHz.

A 'memory scan' is also possible where the scan is of each memory channel, plus each of the VFO frequencies — again useful for a specific set of channels over the band without looking at all intermediate ones. A momentary push