(or stop-on-clear if you adjust the internal switch) delay is adjustable from about 4 to 20 seconds. In all scan modes, the display decimal point flashes at the scan rate.

## Microphone controls

The microphone supplied is not that referred to in the handbook, nor is the supplied one mentioned. Some of the adverts for these rigs state that comprehensive scan facilities are available both from the panel or the mic. This is not quite the case as the mic does not duplicate the front panel scan modes, so no programmed or memory scan is available using this.

By various combinations of the two slide switches and three pushbuttons it is possible to single step up or down, rapid step — either continuously or stop-on-busy but nothing else. This is a shame as it means reaching for the rig while driving, if the other modes, such as memory scan, are required but you could probably change the connections around if wanted (if you don't mind invalidating your warranty).

## Priority

Another pushbutton function is that for the priority channel, where one of the memory channels is checked every five seconds for activity, when nominally receiving on one of the VFO frequencies. This is normally a useful function, but spoint here by too long a dwell on the priority channel (1s), instead of the fraction of a second taken by most rigs. One second is too long while listening to another conversation, and upsets the flow of the main QSO.

The button can also be used to display the repeater offset, and reprogram it in 100kHz increments, useful if you were using the rig to drive a 70cm transceiver for repeater use and wanted to get the 1.6MHz offset required.

The remaining controls are two small knobs for volume/on-off and squelch/high-low power, sensibly separate as they should be on a mobile rig, together with led indicators for receive/transmit, priority, and VFO A 'in-use'. That just leaves one pushbutton — and why put it on the front panel! This is the toneburst which should really be on the microphone for mobile use. The

mic has plenty of room for another button, and the scan-stop control is redundant anyway (a quick press of PTT stops the scan) so this could be rewired.

## Differences with the IC45-E

Frequency coverage is 430-439.995MHz, with power-up at 431.0MHz. A similar led display is used, but green, and still not very good in bright light. Most of the controls perform the same functions except for the following.

The memory-write button performs a dual function as it is also a temporary listen-on-input control for repeater operation. No reverse-repeater operation exists as such, as the corresponding switch on the IC45-E only determines whether the transmit shift is + or − relative to the receive frequency. It is possible to have a pseudo reverse repeater facility by programming the memories for specific repeaters.

While programmed scan is still available, the select switch is now inside the case, with the front panel control instead incrementing the frequency in 1MHz steps — useful in getting round the band, an otherwise slow operation.

And to our delight, the toneburst control is now on the back of the microphone. Someone must have been listening at Icom! The actual toneburst is inside the microphone. The previously allocated button now gives instant access to Memory channel 5, with priority over all other VFO's and memories when selected. Once again you have to reach for the button when mobile though. Incidentally, if you depress this button and then press the front panel scan button, the memory scan feature is duplicated.

The simpler microphone supplied now has only up-down step controls, and so less mic controlled scan facilities with the same constraints on panel versus mic control. It is now only possible to single step or rapid step, with the button held down continuously. With both rigs, it is fairly easy to inadvertantly step a channel while handling the microphone, both in transmit and receive, although the IC25-E can be locked to prevent this.

## Rear Apron

Both rigs have the same line up — antenna socket (SO239 for 2M, N-type for 70cm), and external speaker socket (3.5mm jack), and