

# NEWCOMER'S FORUM

By Tony Bailey G3WPO

Firstly, may I say to the anonymous CBer (who appears to reside in Kilburn) that wants his amateur licence by the same method that he got his CB Licence — ie by paying for it, that no amount of four letter words is likely to change the existing situation, either addressed to me or the Home Office.

Like most people, if you want a licence, then you have to follow the accepted procedures, a route which seems acceptable to the majority. Incidentally, I believe you can get put in the Tower for sticking the stamps on the letter upside down.

## CQ DX

As I sit writing this piece, I am occasionally breaking off to have a look at 2 metre SSB on the off-chance that some more Sporadic-E is about. This afternoon saw some nice contacts with Eastern Europe and the Mediterranean, from a less than ideal VHF site nestling at the foot of the South Downs. I often feel like attaching a laser to the beam to cut a hole to the SE, but somehow the RF seems to get over or around the chalk.

I imagine that a lot of the newer licences are having their first experience of Sporadic-E and the sudden appearances it can make. Unfortunately, this year is likely to be less notable than some previous years, due to the lower activity of the Sun not producing the ionisation levels necessary to induce this propagation mode, although the view that the Sunspot Cycle affects Sporadic-E is not held by everyone.

The occurrence of Sporadic-E is not easy to forecast, but it is generally a summertime phenomenon, and the best times are generally in the early morning around 0900-1000 local, and again in the early evening. It can however occur at any time, but not usually during the hours of darkness.

One of the problems that Sporadic-E propagation gives is that of frequency occupancy. It is not uncommon to find the DX either bang on or very close to 144.300MHz, and this seems to upset a lot of people when they insist on working stations on what is the Calling Frequency. Quite honestly, if there is a lift on, the sheer number of stations makes the calling channel invalid anyway. After all, there are a lot of kHz available to the SSBer and spreading out makes sense. You stand a much better chance on a clearer spot, rather than worrying about someone using 144.3.

One other point, if an SP or I9 or some other exotic DX comes up on 2 metres he won't be all that interested in your name, QTH, height a.s.l. and the colour of your socks! Once you've swapped callsigns, reports and QTH Locators, that is probably that. There will be an awful lot of people wanting a contact and the DX station will no doubt want to make as many QSOs as possible in the short time available. The other side of the coin is that if he does want to chat, it's no good muttering profanities over the air about getting on with it etc, as one G4 who should have known better was doing this morning. Its a bit like the television, you don't have to listen, there are always other channels! So be patient if you have to.

## CW anyone?

I apologise to G4NOZ (Letters, July) and his feelings, by casting Nasturtions on the level of CW operation. Active though it may be around Colchester, CW QSOs are still little used by comparison with FM, by I should think a ratio exceeding several thousand to one, if not more. I wish more people would come on the mode when two is at its normal propagation level (which is most of

the time) as they would be surprised at the distances which could be covered, even with low power.

## Direct conversion DSB

There are a couple of points which have come up from letters on the DSB80 project we published a while ago, with several people asking if it is possible to convert the design to single sideband transmit rather than the double sideband version detailed by adding a suitable filter.

Unfortunately, it isn't, because to filter off the unwanted sideband, you have to firstly pick a frequency to do the filtering at so that you can construct a suitable filter. Now, with a conventional single sideband transmitter, using the superhet principle, the RF signal that eventually ends up at the antenna socket is initially generated at some fixed frequency, possibly 9 or 10.7MHz, or as low as 455 or 60kHz, depending on the design.

At these fixed frequencies, it is easy to construct, or purchase, a suitable filter, which, after balancing out the carrier, is used to rid us of the unwanted sideband.

However, the DSB80 is a direct conversion design. In this, the low-level transmit signal is actually generated at the eventual transmit frequency, with the modulation of the carrier taking place at the same frequency, and not at some lower fixed frequency. Balancing out the carrier is no problem, but to get rid of one of the two sidebands resulting is a problem.

You could do it with a filter, but it would have to be rather special, in that it would need to maintain a bandwidth of around 3kHz, while at the same time, have a variable frequency of 3.5 — 3.8MHz, which is clearly difficult.

On the receive side, there is something you can do to remove the additional bandwidth generated by