

Those Illegal CB Channels

and the tens of thousands using them

Yes, believe it or not, there are some significant differences between the CB sidebanders and the AMers. Such as local on-the-air conduct. On CB AM it is common to hear something like: "How aboutcha, Ratchet-jaw? We're a-lookin' fer that Ratchet-jaw, one more time!" The CB sidebanders usually talk in ham-type monologues. During round table (net) discussions, the monologing per person is shorter. But not always! Sound familiar? They talk about technical radio subjects, if not about their own rigs. Sound familiar? When the skip is in, a lot of them "let their hair down" and get a bit excited, and their conduct deteriorates, depending upon the individual. Sort of like our weekend contests!

Fancy handles such as "Jailbird," "Sneaky-Snake," and "Buckeye-Badboy" are not condoned. Any newcomers to sideband who bring fancy handles along with them are soon told about it, either politely — or in no uncertain terms! The sidebanders give their first names or nicknames, such as "John," "Mike," "Carol," and "Dave." There is also a tendency to refrain from excessive tens-code use. Personally, "10-4" and "Roger" sound no more weird than our use of "fine business."

Some of our "ham codes" are used the same way, some differently. They use QSO, QTH, and XYL, for

example, verbally the same. However, QRX and QRT are used together: "We'll pass along our 73 to you fellows; we're going to QRX and QRT." Yes, the sidebanders usually "73" instead of "seventy-thirds" or "Threes to ya, Guy!"

The term "CQ" isn't generally used, except a little by a few during skip conditions. Those who use it, use it as we do or some use it in place of the term "break," to catch the attention of skip QSOs already in progress. The latter does sound weird from a ham's point of view. Try to imagine suddenly hearing "CQ-CQ-CQ" from a third party in between transmissions!

Illegalities

Yes, CQing in any matter on the Citizens Band is an FCC no-no. So is working skip. Not to mention general "ragchewing." That's just the beginning!

Ever hear of a Siltronix 1011? Well, for about 650 bucks, this transceiver (that bears a remarkable likeness to Swan's* rigs) will vfo you, not only on all legal 23 class D channels, but also in between, below and well above them! And it will do all

*I am not implying that Swan® of Swan Electronics, Oceanside, California, is producing illegally-used, non type-accepted CB rigs, being marketed under a different name. (Siltronix and Swan are both part of Cubic Corp. — Ed. note)

this with 100 to 150 Watts output, depending on how hard the finals are blasted! Not bad, eh?

Do these rigs sound familiar? Kenwood TS-520, Heath HW-101, Tempo One, Drake's T4X and TR4, and Yaesu FT-101? All of these are very popular with the CB sidebanders. Often these rigs are featured as first prizes at CB gatherings, such as jamborees! These rigs are easily modified to cover eleven meters (the ones without 11 meter bandswitch position). The "10-A" crystal, or its equivalent, is replaced with one suitable to tune "all around" the CB channels.

Maybe we hams are missing out on something here. Do we need more elbow room on 20 phone? Is "75" getting a bit too crowded now, with the foreign broadcasters moving in? Forty meters? And, just think, we can all use that new proposed 10 MHz band *right now!!!* OK, fellows — I was only kidding. Besides, it would only mess up our QSL system, because we would have to resort to phony call signs (usually assigned by a regional club) and central P.O. boxes.

Many CB sidebanders start out with regulation FCC, DOC type accepted radios. However, the "urge-to-slide (vfo)" becomes irresistible. Perhaps the chief reason is to escape from the AM crowd. Channel 16 is the unofficial "sideband-only" slot, but

things get kind of crowded here, and the other twenty-two channels in the metropolitan areas are smothered with AMers. Often "16" gets AMed also. So where do they go? And, how do they do it?

Well, one way is those ham or equivalent type rigs I mentioned earlier. However, using existing gear is sometimes more expedient. The owners of older Hy-Gain CB sets merely purchase the accessory, type-accepted, receiving vfo, and plug it into the vfo socket on the rear panel. Then, by snipping "that famous yellow wire" inside the vfo, a relay is disabled and your set can slide around from a little below channel one clear up to 27.430 MHz, on both receive and transmit! See Fig. 1. Many "friendly dealers" would kindly snip that wire for you. Other brands of CB sets that use a 38 MHz output synthesizer are easily adapted to the Hy-Gain vfo. I quote from part of Hy-Gain's vfo ad: "... and tune in ALL the action!"

Another way to "tune in all the action" is to install one of the other commercial vfos made by such companies as Siltronix (remember them?) and PAL. They have outputs comparable to one of the crystal oscillators in the synthesizer. All you have to do is pull out one of the crystals and run in the vfo line. The AMers do all of this vfo stuff also, but the sidebanders seem to do as much or more of it, percentage-wise.

A popular method is to slightly modify one of the synthesizer oscillators by installing a slug-tuned coil, such as a Miller 4204 in series with the crystal switch and transistor base lead. Tuning the slug will easily get you 10 kHz lower in channel frequency. 27.145 is very popular on sideband. See Fig. 1.

Some Surprises

Would you believe that the vast majority of all those ham rigs I mentioned are *not* illegally used on our own bands?

Most of the CB operators have only an eleven meter beam. (Many of these are 60 to 100 feet high! Legal height for beam-type antennas is 20 feet, and 60 feet for omnidirectional.)

Quite a few CB sidebanders: A) are considering, B) are studying, or C) have taken the amateur exams. This is almost nil with the AMers.

You may find this hard to believe, but it seems that those who become hams will operate legally in the amateur bands. I guess our own peer group won't put up with too much illegal operation.

It's interesting to note that many CB AMers who have listened to two meter FM liked it. However, many CB sidebanders didn't care for it because (quote), "It sounded a little like AM CB!" *Darn* little, I might add!

More Surprises

There are a lot of licensed amateur radio operators using CB sideband. Many use it as personal communications to "home base" and such, complete with FCC call signs and legal rigs. A few find it fun to "join the crowd" — if you know what I mean! Hm-m-m. Did "2" or "75" get boring?

CB sideband has many regional and state-wide clubs. Their original intent was and for the most part still is (quote), "To keep (CB) sideband from becoming another mess like (CB) AM!" It's too bad that most of them didn't also try to uphold entirely

legal operation in terms of using FCC call signs, unmodified type-accepted radios, and limited ragchewing, because I believe that as unified groups they had the potential power to speed up the pending extra "sideband-only" channels legislation, etc. As it now stands, I think they would only get the cold-shoulder treatment, due to the illegal operations by their members.

... And More Opinions

From my own observations and very rough headcount, I will venture to say that less than one percent of the AM CBers use or have possession of illegal, high power gear. The CB sidebanders, however, I suspect are up to 40 percent with high power equipment, mostly from base stations.

While looking at the ham gear ads (by dealers, not the manufacturers) in the Citizens Band publications and club newsletters, and listening to all of those same rigs in use "all over" eleven meters, I get the distinct impression that we hams comprise only about 50 percent of total amateur radio type gear sales here in North America!

As it stands, I believe that there is absolutely no need for a code-free Communicator Class amateur radio license. Because it's already here on eleven meters — clear up to 28 MHz! In fact, it's here in two stages: 1) Basic Communicator, starting with

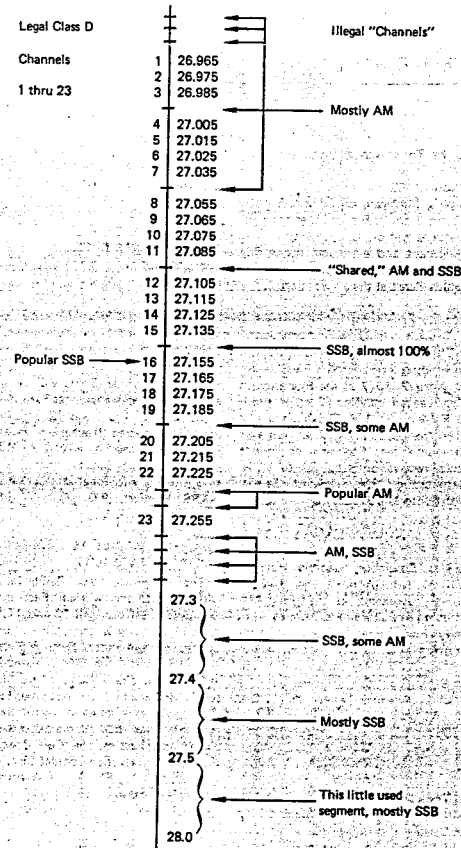


Fig. 1. Actual composite Citizens Band.

AM CB, and essentially cheaper radios; 2) Advanced Communicator, or sideband CB, for those who get tired of infantile type of operations, and can afford the higher priced gear. As I stated earlier, it's mostly the sideband CBers who move up to an amateur radio license. ■

Leading Zero Suppression

W. R. Kappel W6AVL
3030 Oceanside Blvd. #7
Oceanside CA 92054

From the articles on counter construction I have seen, it appears that a feature of the 7446, 7447 and 7448 decoders has been overlooked.

These little gems, along with their uncanny ability to make numbers out of pulses, have the added capacity to automatically suppress leading zeros.

Pin 5 on one of these items, when grounded, suppresses the zero. Pin 4, normally high, becomes low

when the zero is present and suppressed. Therefore, in order to suppress all leading zeros, one grounds pin 5 on the highest decade, connects pin 4 to pin 5 of the next decade and so on, leaving the last decade open.

Now, when a zero is presented to the highest decade, it is blanked. Pin 4 goes low, arming the second highest decade, whose pin 5 goes blank when a zero is presented there.

When any number but zero is presented on any decade, the zero suppression on all lower decades is automatically lifted. Since about the only thing we are allowed to suppress any more is zeros, let's get up to date and do it. ■