

Wild West

By Jock Elliott

If you think the frontier disappeared when things quieted down in Dodge, or when the law came to Yellowknife, just tune your receiver between 26 and 28 MHz and have a listen. These are the badlands, hombre, the wild west of radio.

It's the home of unlicensed operators, RF gunslingers packing beam antennas and powerful linear amplifiers. They call it the "freeband" or the "extra channels."

Whatever your bent, the freebands can be mighty entertaining to monitor. Here you will find almost everything you can imagine: experienced operators with skill and polish enough to make an Extra Class amateur proud, and sophisticated discussions on radio technology, agriculture, politics and more.

It is also an insane asylum, with someone endlessly chanting "Ray dee oh, ray dee oh" and others spitting out the vilest of racial and geographic epithets to no one in particular.

The frequency range that is home to this diverse population is sandwiched around the legal citizens band frequencies, 26.965 to 27.405 MHz, and that's where the story begins.

As the CB craze mushroomed in the 1970s, the legally assigned channels began to get overcrowded. The Federal Communications Commission responded by expanding the frequency assignment to 40 channels. Still, the scope of the fad was such that the bands remained overcrowded.

At about this point, a number of technically-minded CBers discovered that their transceivers could be easily modified to operate in a range of frequencies that extended outside those assigned by the FCC. For example, with the addition of two wires and a couple of switches, an SSB transceiver such as the Uniden Madison can be made to operate on 15 channels below channel one and 55 channels above channel 40. The frequencies range from 26.835 MHz right up into the 10-meter ham band.

Other radios require the replacement of microchips and/or crystals, but by and large, the changeover can be done easily by any competent technician.

In twos and threes, CBers put the "extra channels" in their radios to

escape the noise and confusion, and freeband was born. And although the CB craze has long since subsided, freebanding persists.

Freebanders appear to be a dedicated bunch: at the first hint of good propagation, you'll find droves of them working to establish out of state or out of country contacts. The results are often impressive. One Florida operator has contacted 50 countries so far *this year*.

The Federal Communications Commission, however, isn't impressed.

Elliott Ours, Chief of the FCC's Enforcement Branch, says, "Anyone who persists in operating out of frequency is eventually going to receive some attention from us."

Rick Engleman, the FCC's Chief of Inspections and Investigations says he sees the free banders as a problem because of the actual or potential interference they may cause with legitimate users of the frequencies and with other electronic devices like TVs and stereos. Last year, the FCC received between 28 and 29 thousand interference complaints. Fifty seven percent of them were caused by CBers.

Legally, a CBER may transmit up to 4 watts AM and 12 watts PEP single sideband. Many operators within the 26 to 28 MHz range, however, have boosted their power by modifying ham equipment (capable of running 150 watts or so), running so-called "export" radios that were designed for other countries and are illegal to own in the U.S., or installing linear amplifiers with power ratings up to several thousand watts.

"Excessive power is perhaps more of a concern than out of band operations because many of our enforcement activities are primarily complaint-driven," Engleman says. "But I wouldn't want anyone to get the idea we are going to look the other way just because we find that an operator is working illegal frequencies at low power."

Attracting the attention of "Uncle Charlie," as the FCC is known in the freeband community, can be a singularly unpleasant experience: fines start at \$750 and can go as high as \$2,000 for even a first offense. There are no warnings.

Recently, for example, the FCC field office in New York City levied more



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than \$10,000 in fines on gypsy cab companies that were operating in the free band, using linear amplifiers and illegal export radios. The companies had attracted the attention of the FCC because of complaints of TV interference.

With perhaps hundreds of thousands of free banders and only hundreds of FCC investigators to enforce the rules, Engleman likens the situation to highway speeding: "There are lots of speeders, and we're not going to catch all of them, but we are going to catch some." To some extent, his analogy, operating out of band and with excessive power is somewhat like speeding and driving recklessly -- it's more likely to attract attention.

But there is another side to the freeband story, according to Bill Cheek, a.k.a. "Dr. Rigormortis," publisher of the *Eleven Meter Times and Journal* (a national newsletter for high performance CBers and freebanders). As a professional radio communications engineer and consultant, Cheek carries an impressive list of credentials, including membership in the Radio Club of America, the Institute of Electrical and Electronics Engineers, the Instrument Society of America, the National Association of Radio and Telecommunications Engineers and American MENSA.

Cheek has thought long and hard about the free band issue, and he takes exception to the FCC's position.

"In terms of operating out of band at low power -- and at high power if it is done correctly -- freebanders do virtually no harm. That's because there are vanishingly few legitimate users in that portion of the spectrum. Of the few that are licensed to operate there, such as the Civil Air Patrol on 26.620 and some mobile-to-broadcast links for local TV stations, most have moved to VHF or UHF where reception is more reliable for short-range communications," he says.

Cheek adds, "As to the issue of enforcement, you might as well pass a law that says the sun won't come up tomorrow and try to enforce that. The reality is that, as the DX cycle favors long-distance propagation on the bands, more and more operators are going to move into the extra channels for the same reason that they did ten years ago -- DX congestion will render CB channels

1-40 unusable unless you operate at very high power."

Right now, Cheek estimates that fully half of the millions of CB operators in the United States have freeband capabilities, and ten to twenty-five percent of them are using the freeband on a regular basis.

In regard to high power operations, Cheek admits there is a problem. "There is no doubt that improper high-power operations probably cause more interference problems than the FCC realizes." But the solution, he feels, lies in making sure that linear amplifiers, export radios, and ham rigs are operated properly. To this end, he has supported a non-code technical license for high-power freeband operations.

But why don't freebanders become hams and legitimize their operations?

"Most freebanders have absolutely no interest in learning Morse Code. Otherwise, I think many would be willing to study for a license," says Cheek. Interestingly, though, a surprising number of freebanders are also hams.

There is, according to people like Cheek, a more important issue at stake than simply playing radio. "As a publisher and citizen," says Dr. Rigormortis, "I support the Constitution and the Bill of Rights. The founding fathers believed that taxation without representation was tyranny. Now notice this: no one elected the people at the FCC. They are making rules regarding use of the airwaves without the people's representation. Congress, which does represent the people, does *not* vote on the rules. Due process isn't involved, and I question the FCC's authority to say that freeband radio is illegal."

"In short, a kind of peaceful rebellion has taken place. The airwaves belong to everyone, and we, the people, have taken back control of the free band by right of eminent domain."

Whether the issue of freebanding as legal vs illegal or people's rights vs the tyranny of big government, the freeband appears to be here to stay, pardner. Welcome to the untamed frontier of radio.

Want to know more about freeband action? Write to *Eleven Meter Time and Journal*, P.O. Box 1019, Lemon Grove, CA 92045. Send an SASE for info, \$2.00 for a sample copy, or \$15.00 for a one-year subscription.

