

Looking West

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CONGRESSMAN TO HELP THE AMATEUR COMMUNITY CONQUER MALICIOUS INTERFERENCE

"Amateur radio is a service, not just a hobby, and must be protected." These were the words of Congressman James Corman, a democrat from Van Nuys, California, spoken in an exclusive interview with this reporter on Monday, August 29, 1979, at the congressman's San Fernando Valley office.

I met with Congressman Corman after it had been reported that he had shown an interest in helping the amateur community to clean house. I wanted to know exactly where he stood on certain issues and thought you might also be interested. In early August, Congressman Corman met with ARRL Southwestern Division Director Jay Holliday W6EJJ and Special Assistant Director Joe Merdler N6AHU to discuss the growing malicious interference and regulatory violation problems. At that time, he voiced strong support for the cleanup task that Jay and Joe had started; many felt that his was the type of help most needed now. It was through Joe Merdler (who also serves as our legal correspondent for the Westlink Amateur Radio News) that the interview with Congressman Corman was arranged.

From the start, Congressman Corman made it clear that this would be a coordinated effort on his part. He stated, "Four hundred thirty-five congressmen going in different directions will accomplish nothing." He intends to meet in Washington with ARRL General Council Bob Booth, along with Joe Merdler. There they will begin attacking the whole problem, with the support of the ARRL. He also stated that he intends to find out the reason why the FCC has failed to act in the case of Scott Lookholder WB6LHB, who was convicted of malicious interference earlier this year. The congressman concluded by stating that the 1st Amendment does not give any person the right to use obscene language or in any other way maliciously interfere with the legitimate use of the airwaves.

THE CREATION OF "NATIONTIE '80" DEPARTMENT

In last month's column we began discussing what might be accomplished were a fair

number of already existing two-meter open repeaters linked together to provide coast-to-coast, border-to-border amateur relay communication. We suggested that you might want to try some interlinking experiments with other repeaters in your general area that are outside your normal system coverage. In essence, we hope that we have whetted your appetite for even bigger and better things. If we have, then I suggest you pay special attention to this column for the next couple of months because the creation of an open national intertie will be the center of attraction for some time to come.

If you have never operated through a repeater intertie, you are really missing something. When you spend a lot of your operating time on local repeaters, it is easy to forget that there are many people out there who, while still living in your general area, may have dramatically different lifestyles than yours. Most HF operators, especially those who enjoy chewing the rag, can easily relate to this. Through long-winded QSOing, amateurs in different areas learn about each other through the interaction that is the classic QSO. It's sad, but true, that this is rarely the case for VHF repeater operation. Most amateurs, even those with the most sophisticated equipment, seem to wind up as habitual users on one or two local repeaters where they become part of that system's "in" crowd.

There is another aspect of repeater operation that tends to be a limiting factor in this area. On many repeaters, holding anything more than a quick "hello, how are you, good-bye" QSO is a taboo, enforced by a device known as a "blab-off timer." I never could see the strict rules barring normal QSOs on repeaters, because "someday an emergency might arise and the repeater will be busy." Believe me, if I ever have an emergency and a repeater is busy, I will find a way to be heard! It is, however, such regulations that tend to discourage true interaction by amateurs. True, two people living six blocks away from each other should not hold their QSOs through a repeater sixty miles away just to have an audience for their rhetoric. Such regulations do tend to discourage this type of activity; however, the same rules also tend to stifle meaningful communication. If necessary, a telephone call to an offender can usually solve

any problem quite quickly.

While we cannot and will not attempt to change the operating rules on a repeater belonging to someone else, we will suggest that one of the objectives of Nationtie '80 must be to develop true lines of intercommunication and interaction among those amateurs who desire it.

Another objective must be the "advancement of the state of the art," or, more simply, "scientific achievement." There are two aspects of science, research and the application of what has been learned. Research is pointless if never applied. I say this because in many ways we will be doing nothing really new. Interlinks of varying sizes have existed for years, but their accessibility has been limited to a select few. These limited operations can be the cornerstone of something bigger and better, available to any amateur who may wish to utilize it. The technology already exists and is waiting for us to develop and utilize it.

Last month, we described a simple linking experiment that might best be termed "hazardous local linking." If we are to build a national intertie, we must have a definite objective. The obvious objective is to find a way for point A (Los Angeles, perhaps) to converse with point G (New York, perhaps) even though they are well outside what is considered normal VHF communications range. They must have their signals relayed several times. Now, if at each of the relay points you place input/output ports (local relay devices that can talk with any other relay point as well as with both terminal points), you will have an interactive radio intertie. There are various ways in which such linking can be accomplished, and we will now touch upon each.

For occasional links over long distances, the most common form of linking is accomplished via the long-distance telephone call—along with its long-distance toll rates. If the two systems involved in such a link have autopatch facilities or telephone accessibility for command purposes, the task of completing such a link is simple. If I, as repeater A, want to link with repeater G, I simply dial their dial-in number. This has been the basis of many long-distance links reported in this column over the years. The major drawback of this method is its cost, and for that reason it has never really become popular.

A second method involves the use of crossband, remote-base operation from spectrum considered local to one of our HF bands, which provides for

longer-distance propagation. Many links have already been accomplished by cross-linking from VHF/UHF to ten-meter FM. However, ten meters is far from the ideal band in which to develop an interlink system that will function with reliability on a day-to-day basis. This is due to the somewhat erratic nature of long-haul ten-meter propagation. Actually, our most crowded HF band, twenty meters, probably offers the best potential for such an operation by crossband/cross-mode (FM to SSB) remoting. Again, this is far from an ideal situation, even though 14.285 MHz has become the de facto HF remote downlink DX frequency, much to the chagrin of many other spectrum users who do not appreciate hearing SSB signals with built-in squelch crashes! Though far more predictable and reliable in its propagation characteristics, the crowding one finds across the twenty-meter spectrum precludes its use on a regular basis for the establishment of an ongoing intertie operation.

This brings us to our third and probably most cost-effective method of interlinking, that of total radio relay. If we were to start from scratch to build a coast-to-coast intertie using multi-hop radio relay techniques, there would be very few able to foot the bill. However, with over 3,000 operational open two-meter repeaters throughout the country already, the cost factor looks a little more positive. Most of what is needed is already in place. The equipment sits atop tall buildings, towers, and mountaintops, and is already in day-to-day operation. The cost of interlinking is thereby minimal, since only one receiver and one transmitter need to be added to any existing system in order to interlink with any other system, and only two receivers and two transmitters are needed for it to become an interactive radio-relay device as part of a large intertie. (This is assuming that the existing two-meter facilities will take on a second job as the local access port to such a national system.) If the 220 band were used for the actual linking, then, at today's current market prices for new equipment, you are talking under \$500 for the basic hardware (including your yagi-type antennas). You can get very elaborate and "go for broke," but that is neither necessary nor encouraged. If we keep sight of the old computer-industry adage of KISS (Keep It Simple, Stupid), we are far better off. The less complex we make it, the fewer headaches we will have in days to come.

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