

## Scanning Back

### A Look Back At The Opto Xplorer

By Deep Throat

It was about ten years ago that *Scanning USA* did a review of the Optoelectronics Xplorer. At the time it was the top of the line in near field signal interception, and one of the few choices for scannists wishing to explore that facet of the hobby. This was well before \$100 scanners with the Signal Stalker and Close Call features that now allow even budget-minded hobbyists to get a piece of near field action. For some of us however, the line separating business and hobby gets awfully fuzzy. That's how my career started back in high school. A little exercise in hacking and boredom hit a certain level where people started to notice. That sort of thing wasn't even a crime back then (that changed quick enough), and the affected parties didn't want their security vulnerabilities made public. That's how I met Zed. Zed was originally with SOCOM, retired, bounced around "here and there", and now works for Greywater as a "contractor". Back in the day Zed was the one who "discovered" me, and we soon shared the same employer.

Knowing my fetish for exotic RF toys, Zed came to me one morning looking for a solution to a problem he was anticipating. He wanted to be able to know when "people nearby are talking about me". He saw the old Optoelectronics R-10 I carried in my black bag, and was interested in an up-to-date version. This was in the days before Signal Stalker scanners mind you. A quick look through a Optoelectronics catalog showed him the Xplorer, the then current "state of the art" in portable near-field receivers. Out came the credit card, and a couple days later the item arrived via the brown truck of joy. We had fun "testing" the unit for a few days, and Zed took it off on a field assignment. A couple months later I heard back from Zed that the unit worked as expected, and that was all. We transferred to different sections, and although we sort-of kept in contact most of the news we received about each other was via third parties. In our line of work these things happen.

A couple weeks ago, I hear a familiar voice behind me say "Hello (REDACTED)", and I spun around to see Zed. A little older, but still looking as feral and dangerous as the first time we met. He had a familiar object in his hands which I recognized as his Opto Xplorer. "The batteries won't hold a charge." he said. "Can you replace them?". I took the unit from him. "You're still using this?" I asked. "Hell yea!" was his reply. "This things proven its weight in gold too many times to count. Worked so well I bought a second one."

I told him I'd replace out the batteries on the unit ASAP, and he told me there was no rush as he was going to language school for a while and wouldn't need it. "What are they making you learn?" I asked. The reply didn't surprise me, "Farsi." With that Zed left and I found myself in temporary possession yet again of an Opto Xplorer. This was the first time since the introduction of near-field reception capabilities in scanners with Signal Stalker and Close Call that I had access to one, and after a quick battery pack replacement I wanted to see if it was still a viable piece of equipment.

Unlike most gear talked about in "Scanning Back", the Xplorer is still available from Optoelectronics. In addition to the original unit, they also offer an updated version with a spectrum display called the "X Sweeper", and a "Video Sweeper" that is intended for detecting wireless cameras in the 900 MHz. to 2.52 Ghz. frequency range. Earlier versions of the Xplorer were capable of being "unlocked" to provide full 800 MHz reception by sending the string "FE FE B0 E0 7F D6 78 19 52 27 96 34 45 88 01 FD" to the unit via a terminal program.

This has become increasingly important as of late as current hobbyist-grade receivers don't cover this range, and old analog cell phones placed in test mode are seeing increasing use as surveillance devices. Many older Xplorers that are often available on the used market have been previously unblocked. According to old Internet posts you can tell by turning the unit on and checking the display as it powers up. Unblocked units will show "\*\*Xplorer\*" while blocked ones will show "Xplorer".

With the easy and inexpensive availability of Close Call and Signal Stalker scanners, is the Xplorer still relevant? I sought to find out. A search of the Internet found plenty of Usenet postings from the 1990s about the Xplorer on the alt.radio.scanner and rec.radio.scanner groups, but not much of recent mention. For that matter, there wasn't much mention of scanning applications for the Close Call and Signal Stalker or general near-field



reception information among "current" hobbyists. The only people who seemed to be talking about it were in a different scene altogether. A scene filled with former military commo and intelligence types that appeared to have disdain for the average scanner hobbyist. As the saying goes "When the going gets weird, the weird turn pro." The weirdness factor was about to go up a few notches in short order.

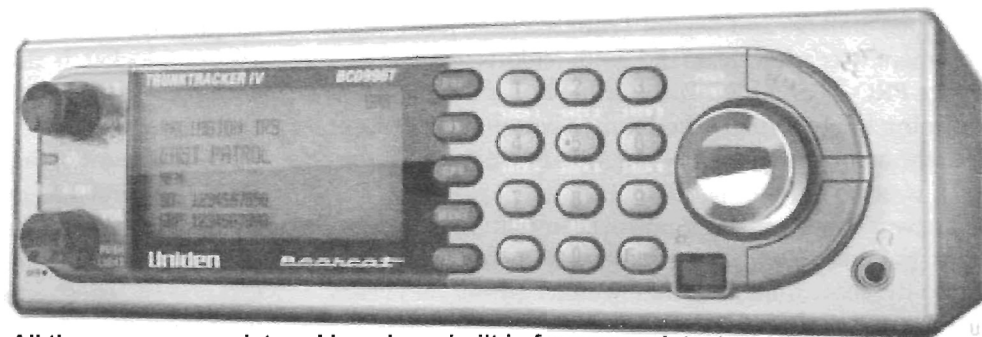
The most interesting results of my web research on near-field reception and the Opto Xplorer resulted in pointing me towards two gentlemen named "Hank Frost" and "Mike Jenkins" who were members of a group called "The Connecticut Survivalist Alliance". Their web presences boasted a lot of information about communications monitoring, and its application in news gathering. Their approachability factor however seemed very small. Following their wishes for establishing contact, I generated a PGP key and sent them out an email. Their reply was quick, and after a brief exchange I found that I had traveled in similar circles with one of the members. It turned out that Jenkins had previously worked with Zed for a while. Once Jenkins found out that I not only was a friend of Zed, but the one who helped him out with his electronics, it was like stepping through a looking glass. "Anything you need, let us know." he mailed me.

Frost and Jenkins are cold war veterans who "went John Galt" as they are fond of saying. No longer on the job, they now do "normal mundane civilian work", and apply their "special skills" towards protecting their families and navigating around the brave new world. It's a sunny Saturday morning, and the three of us are driving towards New Haven in

Jenkins' Subaru Impreza. "They have no (expletive deleted) clue!"

Frost exclaims as we speed down I-91. "They don't even know how to do a search on the FCC's web site for simple frequency data." he states with the disgust in his voice clearly evident. We're heading towards one of the more interesting monitoring destinations in the Nutmeg State to do some monitoring of an immigration rally. "There'll be a lot of different players there." Jenkins tells

me. "We secured an apartment from a like-minded individual where we can set everything up."

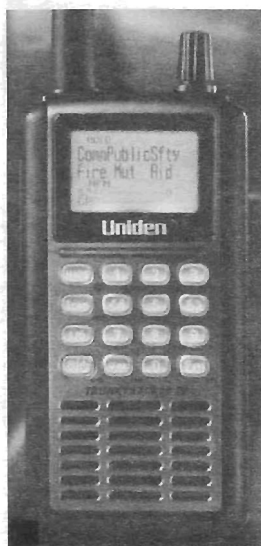


All these scanners pictured here have built in frequency detectors

Soon we're standing at the door of a non-descript looking apartment, and I meet the third musketeer, Ted. We all get settled in and Jenkins explains, "These rallies are good COMINT practice. The last one we did was up in New Hampshire. There are a lot of different players to monitor, and it gives us some real-world practice to keep our skill-sets sharp. They'll be marching right down the street in front of us, and we'll probably get some near-field hits off them."

Sure enough, when the party started the Xplorer went crazy and several new frequencies, not appearing on any hobbyist lists, were noted. From our totally unscientific field tests, the Xplorer managed to keep pace with a Signal Stalker scanner we were also using at the time to sniff out new "on site" frequencies. Ted explains "It's the same group of people who do all these rallies, whether it's immigration, anti-war, whatever. They got this fetish for protesting. For a while they were using FRS radios. It took us about a second to find them, and we gave that information to some guys from Protest Warrior.

Now they switched off to some Motorola XTN radios and change their frequency every event. They thought they'd be pretty safe, but they're pretty wrong." When asked why they single this particular group out, Jenkins responds. "I've got a few buddies who were crippled overseas, and they get (expletive deleted) from the VA. You don't see them protesting for better treatment of veterans, but they protest at the drop of a hat for people who aren't even in this country legally."



asked them how they choose the equipment they use when doing COMINT. "Whatever we find cheapest at hamfests and pawn shops." was the universal reply. Sure enough while there were some newer pieces of equipment like Signal Stalkers and Digital Trunktrackers, most of the equipment was a few years old, with Jenkins using a vintage PRO-43 and PRO-2006 for the bulk of the work he was doing today. When asked if they bought their Xplorer used, the answer was no. "When it hit the market ten years ago, it was the only thing out there." Ted explained. "We knew it'd be a must for 'on-scene' monitoring. Now you've got those \$100 Signal Stalkers from Radio Shack that do the same thing, but they weren't around ten years ago."

When the rally ended, the guys packed up their gear and we found ourselves at a place called Ivy Noodle talking shop. "It's pretty ironic you're sitting here with us right now." Jenkins said around a mouthful of rice noodles. "I got turned onto the Xplorer from Zed who heard about it from you, and it's been a pretty useful piece of gear over the past 10 years. I used it for everything from doing basic service checks on radios to quick and dirty bug detection."

The Xplorer was a pretty sophisticated unit that still holds its own today. It had 30 MHz. to 2 Ghz. coverage (minus cellular). It decoded CTCSS, DCS, DTMF, and LTR signaling. It could even lock of specific annoying frequencies and be set to only scan certain frequency ranges (blocks). It also had full computer control. This full feature set was pretty much unheard of with scanners back in the late 1990s.

The advent of Signal Stalker and Close Call scanners starting at \$100 has made the Xplorer a little pricey for today's hobbyists. For less than the cost of a Xplorer you can get a scanner that has near-field, P25, trunktracking, CTCSS/DCS decoding, and computer control capabilities with the same frequency coverage. That is not to say that you might find one used at a reasonable price, especially if it has a spent battery pack that only needs to be replaced. In that case, you might want to consider this classic piece of near-field receiving gear.



Photo by Tom Finnegan