

NATIONAL COMMUNICATIONS

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- Citizens' Band
- Two-Way Radio

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*Kurt Farmer (K8DIV)
while working on one of
many radio projects.*

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Scanning • Citizens' Band • Two-Way Radio

Table of Contents

Features & Columns

Weather Scanning a Complete Guide..... 4

Classic CB Radios Are *FUN* to See..... 8

HISTORY

The Evolution of Scanner Clubs..... 12

Midwest Scanning 16

COBRA 148 GTL...

A Classic Mobile Sideband CB..... 17

Smart Charger for Emergency Batteries..... 19

There is Always Something to Scan 21

Product Announcements 25

BEFORE SCANNERS

Antique Wireless Association Electronic
Communication Museum..... 26

A Primer On The Coming FCC Auction 28

Over The Road 29

Nat-Com BOLO Report..... 30

NatCom On The Road 33

Classifieds..... 33

COVER STORY

Closing Comments 37

Last Page Out 38

Advertisers

CES 7

Cobra 2

Communication Electronics 24

Hobby Radio Stop 23

National Communications
Frequencies 9

National Communications
Subscription Form..... 13

Radio Shack 40

REACT 9

Scancat..... 18

St. Jude Children's Hospital 9

Uniden 39

Universal Radio 11

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Weather Scanning, a Complete Guide

By Jon Van Allen, KF7YN

It seems that everybody is watching the weather closer than ever nowadays. The prospect of hurricanes, tornados, floods, fires, severe snowstorms and avalanche danger and any other number of severe weather related incidents are important monitoring targets. It is crucial to know what is going on before, during and after a severe weather incident. This guide will assist you in being better prepared and armed with the best thing any of us can possess, knowledge!

You are undoubtedly aware of the VHF weather channels operated by NOAA in conjunction with the National Weather Service. These weather broadcasts can be heard on any scanner or weather receiver almost anywhere in the United States. The following frequencies and associated channels are the national standard:

Channel Frequency

- 1 162.550
- 2 162.400
- 3 162.475
- 4 162.425
- 5 162.450
- 6 162.500
- 7 162.525

If your scanner does not have a WX search button, program in these frequencies, you should hear at least one NOAA station. Many

National Parks transmit NOAA weather broadcasts on one of the above frequencies. I regularly monitor weather broadcasts when I am camping, fishing, hiking or sightseeing in our national parks. You never know when the weather will suddenly change!

Most of us know that EAS (Emergency Alert System) is used to transmit urgent weather warnings to radio and TV stations, but EAS can also be used as a nationwide warning for any number of threats that fall under the jurisdiction of the Dept of Homeland Security. EAS can also be activated locally to transmit severe weather warnings, hazmat incidents Amber alerts, etc.

If you live in an area prone to extreme weather or you do not want to tie up your scanner listening to weather broadcasts, get yourself a dedicated weather radio. Radio Shack, Oregon Scientific, Midland and many other brands are available. They are fairly inexpensive and can be on duty continuously around the clock. In addition to general weather broadcasts, most new weather radios (and scanners) have a feature called SAME, which is an acronym for Specific Area Message Encoding. Any receiver or scanner with SAME can be programmed with your specific area (city, county, etc.) so that warnings for other areas are not setting off your weather alert, like in the middle of the night! Most weather radios have SAME codes in the manual or a way to find them locally. If you can't find your local SAME code, you can look it up on the NWR website <http://www.nws.noaa.gov/nwr/nwrsame.htm>



or use your favorite internet search engine.

Most national and state parks, national and state forests, recreation areas, monuments, etc. broadcast some sort of daily report with weather forecasts on their dispatch frequencies. These are always a valuable source of weather information!

Marine weather:

The US Coast Guard (USCG) transmits voice high seas weather broadcasts on the following HF frequencies, all in USB mode (upper sideband):

- NMC (West Coast) 4426.0, 8764.0, 13089.0 and 17314.0 kHz.
- NMG (Gulf Coast) 4316.0, 8502.0 and 12788.0 kHz.
- NMN (East Coast) 4426.0, 6501.0, 8764.0, 13089.0 and 17314.0 kHz.
- NOJ (Alaska) 6501.0 kHz.
- NMO (Hawaii) 6501.0, 8764.0 and 13089.0 kHz.
- NRV (Guam) 6501.0 and 13089.0 kHz.

In navigable waters the US and

Territories, US Coast Guard transmits urgent navigational and weather bulletins on Marine VHF channel 22A, 157.100 MHz. Prior announcement is made on VHF channel 16, 156.800 MHz. The same is also broadcast on 2670.0 kHz (USB) with prior announcement on 2182 kHz.

Aviation weather:

Pilots need a way to get the latest weather updates prior to filing a flight plan, we can get the same weather “right from the tap” as pilots. Have a listen to these frequencies: Ham radio nets and WARN Storm Chasers: The amateur radio 146 MHz and 440 MHz bands are very popular for advance warning storm chasers and WARN nets. There are too many individual frequencies to list but if there is bad weather in your area and you are in an area where tornados are possible, keep an ear on those ham radio bands and program your scanner with anything you find active in your area along with your NOAA VHF weather frequencies.

Hurricane Hunters

We have all seen the Hurricane Hunters flying into a storm to gather crucial information. These aircraft can be heard for hundreds or thousands of miles on HF and up to 100 miles or so on VHF and UHF airbands. Here are a few frequencies:

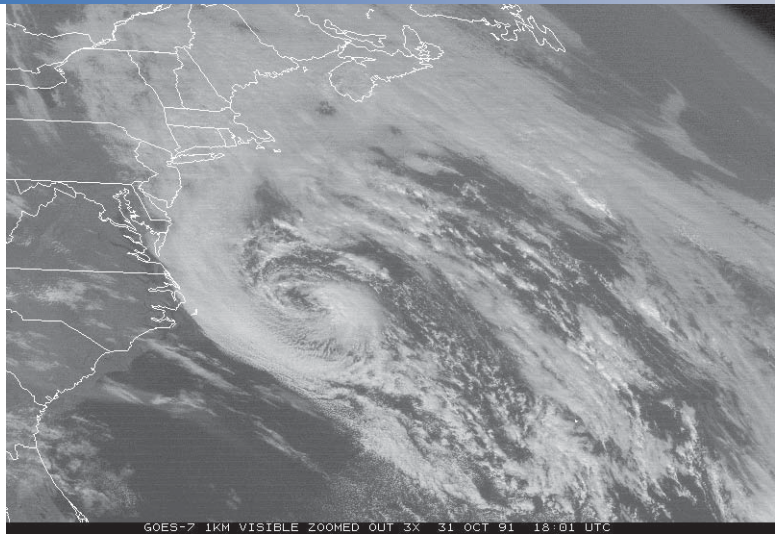
6712 kHz Hurricane and rescue support

9019 kHz Command post to aircraft.

11440 kHz Hurricane and rescue support

WWV and WWVH time and frequency stations operated by the US Government National Institute of Standards and Technology (NIST) also transmit high seas weather on 2.500, 5.000, 10.000, 15.000 and 20.000 MHz, AM mode.

Non-voice modes for weather related info include Navtex (Navigational Text) and HF WX Fax. Ships of all sorts receive weather charts and text over the MF and



HF shortwave bands. If you have a way to decode these transmissions, here are some frequencies operated by the US Coast Guard: Navtex 518 kHz. WX Fax:

If you would like more info on decoding these modes, please drop me a line to the email address below. I would be happy to assist.

As always, I welcome your questions and comments. My email address is jonvanallen@msn.com please be patient for a reply, it may take up to a month for me to reply because I may be working overseas with limited ability to access my email.

Until next time, happy scanning! ●

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WIRELESS

Classic CB Radios Are FUN to See

By Chuck Gysi, N2DUP

I recently attended a ham radio show, which is called a hamfest, and there were plenty of classic CB radios for sale – more than I have seen in the past. I loved seeing tables of these old rigs – 23 and 40 channels – for sale. It is more of a trip down memory lane.

For those who have been in CB as long as me, you'll remember some of these classic rigs. There were a few CB rigs back in the 1970s that had telephone sets on them. One was an E.F. Johnson radio and the other was a Sears unit, I recall. Every once in a while, you will see them for sale at hamfests and other electronics shows.

Then there are the tube rigs of the 1960s that occasionally surface at flea markets, too, and they are becoming rarer. You might find an old Lafayette Comstat base station, either 23 channels or even one that requires crystals for each channel you want to talk on.

I also saw a lot of old Astatic D104 "lollipop" base microphones during the recent hamfest. I had one on my old tube CB radios back in the 1970s and loved the amplification it offered and I just loved holding that big microphone. It's a classic microphone for both CBers and hams and it's still popular, even though it stopped production several years ago. If you ever see one in great shape, you might want to consider buying this piece of history.



Check the tables carefully at hamfests, which are electronics flea markets, for classic CB radios that may be had for the right price. Photo by Lisa Stephens/scancomm.net

One of these days, I'll probably pick up an old CB base station similar to one I owned in the past. It will have to be in excellent condition for me to make the investment – to add to my collection of other old-time favorite rigs.

The CB e-mail box for Nat-Com has been filling up recently. Here is a sampling of some of the e-mails that have come in recently.

First, we hear from Lee Clausen of Oshkosh, Wis.:

"Chuck, I read your story in National Communications. You are right. I had a CB radio for years. I think a CB is a good thing to have when you travel.

"If more people would have them, I think there would be less accidents on the highways. A lot of people I know think all you need is a cell phone. You and I know that is not true.

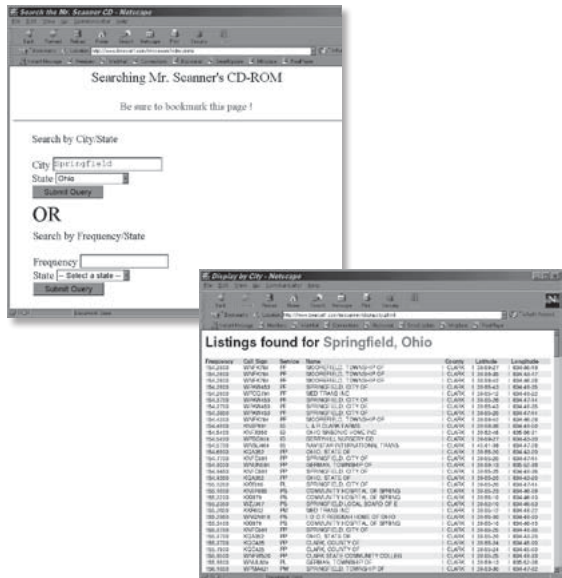
"I have a speech impairment. I do not let that stop me from talking on the CB. I also like scanner and short-wave radio. I take my hand scanner on all my trips.

"I live in Oshkosh, Wis., where the home of the Experimental Aircraft Association air show is. There is a lot to listen on the scanner when the air show is going on.

"I also like to listen to police calls over the Internet."

Thank you for writing, Lee.

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- On the next screen (first time) pick register for CD, (subsequent times) pick search
- When the form comes up fill it out with the exception of the credit card information. Be sure to include an e-mail address so we can send your user name and password back to you
- Pick Option #4 and insert your member number (which can be found on your mailing label) e.g. OH 8 AAA

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Classic CB Radios Are FUN to See

We also heard from Warren Bartman, KD5IJH. He said:

“Reference your articles in the March-April issue of National Communications ... great articles and lots of memories stirred up.

“My first CB set was a Knight kit from Allied Radio in the 1959-1960 era. That didn’t work too well, but it sure got me interested. From there, I went to the Eico CB kit that worked so great. I could talk to Santa Barbara and to San Diego from San Nicholas Island, off the California coast.

“I probably built every CB Radio kit that I could find. I have had or built Lafayette radios, Uniden radios, Heathkits (almost every kit they sold).

“My radio monitoring started in 1952, building small boxes that connected between the automobile radio and the antenna. When switched on, the radio frequency would be converted to a portion of the local police band. Then you had to manually tune this little box as you drove down the road. It was not too safe, to say the least.

“I was in the U.S. Air Force in the late 1950s and worked on various electronic equipment that gave me an excellent basis for my future. I worked for most of the aerospace companies just to gain experience. In those days a college degree meant that you went to school, but had no knowledge or experience of the real world. The person that had actual experience received the good positions.

“I worked for RCA, Bendix Field Engineering Corp, Litton Data

Systems and Computer Sciences Corp., all on government contracts. I worked on the first weather satellite, “Tiros,” the NASA Mercury program, the Apollo program and the space shuttle program. Then I retired from Logicon Corp. in 1999. I have always had CB, scanner and ham radio equipment.

“One period of my life I was working in Alaska on an Air Force contract. It happened in 1964 when the Alaskan earthquake ravaged Anchorage, Alaska. All communications had been knocked out by the quake. All the local communications required power and there was no power in the city.

“Ham operators tried to bring up the emergency 2-meter Civil Defense Net, but it wasn’t much use in the local 50-mile range. It worked great to Seattle, but not across town. A group of us CBers gathered all the CB equipment and antennas that we could find, and set up a Communications network for the distribution of services to those devastated by the earthquake – emergency food centers, shelters, medical services, and etc. Thanks for the great job.”

We also heard from Allen Lutins, KC2KLC, of Johnson City, N.Y. Allen used to be KGBI4242 on CB back when the FCC required licenses for CB operators.

“I also am a ham who appreciates the usefulness of an 11-meter rig in my vehicles. Some common uses of mine include: “— I can find out which are “cash” lanes when approaching a tollbooth

The Astatic D104 desk microphone is one of the most famous ever. Many CBers used this microphone in some form, and many still have one today.



(I frequent the NJ-NY metropolitan area, and most of the lanes are reserved for ‘E-Z Pass’; often times the toll amounts are not posted much in advance, and I can find out about those as well.

“— If traffic is backed up because of construction or an accident, I can find out early on which lane I will need to merge into, rather than having to squeeze in at the last minute. “— When I’m on a winding country mountain road (frequently, living in upstate New York) and I’m stuck behind a big rig, I can communicate with the driver to request his assistance to get around him. Truckers are usually quite helpful in this regard. “I enjoyed the article – keep up the good work!”

Write in

What do you remember about classic CB rigs? I’d love to hear what you recall. Feel free to drop me a line via e-mail to this address: cbnatcom@scanning1.com. Make sure you put Nat-Com in the subject line so if your message gets spiked to my spam bucket, I can easily spot the “Nat-Com” in the subject line and move your message right to the in basket.

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The Evolution of Scanner Clubs

By Ed Muro - K2EPM

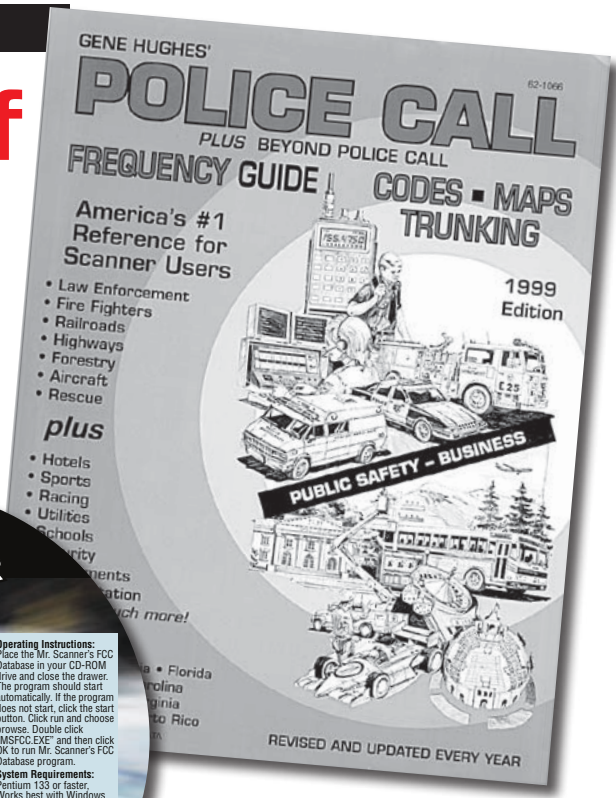
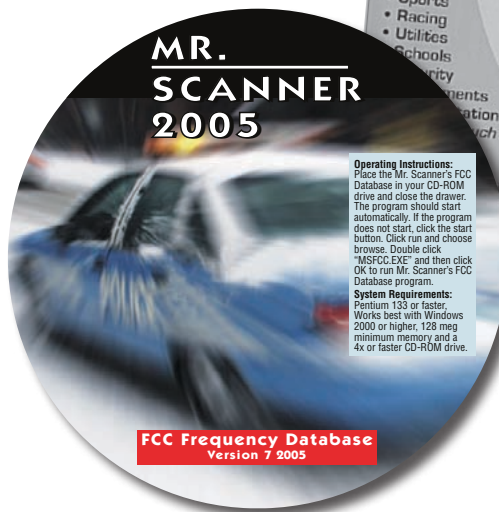
My involvement in the radio listening hobby dates back to the late 1970's when programmable scanners were first coming on the market. It was a time where cable TV didn't offer much more than 30 channels, there was no Internet, the average home owner didn't own a computer, and there were no Ipods. The type of people who today might turn towards X-boxes, I-Phones, Ipods, and text messaging might have picked up an interest in Ham Radio, CB, Shortwave listening, or scanning back in those days.

Today's radio hobbyist, whether he knows it or not, lives a very spoiled life with the resources at his hands because of the evolution of the personal computer and the Internet.

So, as these programmable scanners came to market how did the hobbyist find out which frequencies his local agencies were using? Well, if you lived in a rural area you could do some old fashioned detective work and try to estimate what band the local cops were using by looking at their antennas....then you could use the search function of your scanner and hope you heard them. For many, that system worked but for others it was like looking for a needle in a haystack.

There were printed frequency directories such as Police Call or the Betty Bearcat directory, but at best these were updated annually.

Then there were the scanner clubs. The largest, and most well known in the 70's, 80's, and early 90's was the



Radio Communications Monitoring Association or as it was known by its members RCMA. RCMA started out as a Southern California based scanner club but through publicity provided by Gene Hughes of Police Call and word of mouth the club quickly expanded with members world wide.

The club's newsletter was the vehicle that members used to exchange frequency information and the newsletter's columns were broken down in to various geographic areas. As my old mentor, Ed Hesse - WN2RED, used to say "All scanning is local." Unlike shortwave radio which can be heard around the world, scanner signals are local by nature and the best source of information about various

systems are from the local listeners who monitor these systems on a regular basis.

Going back to the part of the story that takes place before the personal computer and Internet explosion, when we (the hobbyist) had a question we were looking for help with we would often write in to the column editor, be it with RCMA, or one of the other clubs, they would publish the question, and then you would wait for an answer. This process often took a few months. Sometimes if you wanted to go in to detail members would exchange letters with each other through the good old Pony Express often including self addressed stamped envelopes (SASE's).

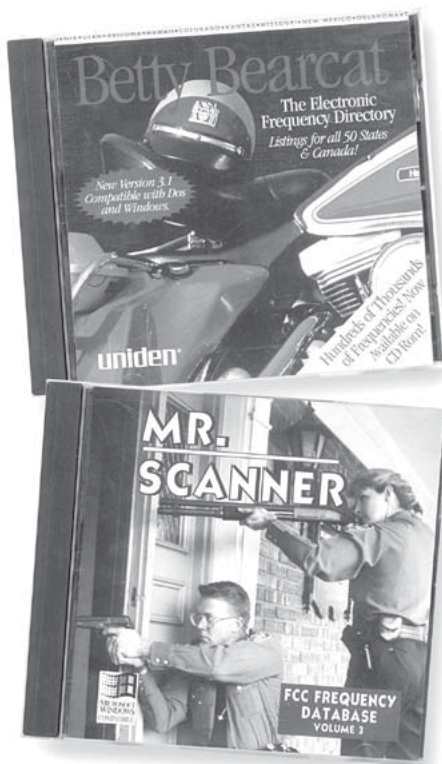
HISTORY

Besides RCMA, there were other more regionalized scanner clubs that catered to specific areas such as the All Ohio Scanner Club (AOSC), The North East Scanning News (NESN), The Cincinnati/Dayton Area Monitoring Exchange (MONIX), Monitoring Long Island Sounds (MLIS), Long Island Monitoring Association (LIMA), The Chicago Area Radio Monitoring Association (CARMA), Capital Hill Monitors and several others scattered across the country.

As home computers progressed and modems became accessible people began setting up local text based BBS systems where you could call in and read various messages pertaining to the hobby. Then with the development of HTML and popularity of the Internet and e-mail access to information that used to take days, weeks, or months to get through the print media became almost instantaneous.

While this advancement in how we gather information has made it easy for the scanner hobbyist it also lead to the demise of many clubs that relied on print based newsletters. Not to mention increased printing and postage costs. In 1996, RCMA folded... as did NESN and several others. Yet, others have managed to adjust and survive, such as AOSC, MONIX, CARMA, and The Southern California Monitoring Association (SCMA.)

Why were some clubs able to adapt and survive while others folded? To help answer this question we have enlisted the help of Dave Marshall- N8 OAY of the All Ohio Scanner Club. In an ongoing dialog I have had with Dave and Mark Meece -N8ICW, I have come to the conclusion that what makes AOSC Continue forward is the dedication



of it's members to continue to contribute to the club and help new hobbyists along with their pursuit of the hobby.

Dave's expertise is in the area of Springfield and Dayton, Ohio and the club he runs covers the greater Ohio area as well as the East Coast from New England to Virginia.

Ed: Dave, you've been around the block a few times so to speak with regard to the radio hobby. How did you become interested in the radio hobby and what are your earliest recollections of scanning?

Dave: I am a railfan first and foremost, and used to hang out at the local hobby shop with other railfans and model railroaders. One of the guys, the late AOSC column editor Jim Saunders, was a dispatcher for the Springfield Fire Department and an avid scanner listener. During the spring of 1981, he provided me with my first scanner - a very much used

Continued on page 14

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The Evolution of Scanner Clubs

but working Regency 8-channel crystal scanner. Of course, it had crystals for the 3 active (at that time) railroad frequencies, plus the local fire, police and sheriff channels. Yep, 8 channels was all that was needed to hear everything! Less than 48 hours later, I was totally hooked. About a year later, I discovered programmable scanners at Radio Shack, and bought the PRO-2002. It had 50 channels! I could listen to everything not only in Clark County, but all of the counties that surrounded. Then came an outdoor antenna. Then I discovered the fantastic phenomenon that we know as Low Band Skip.

The Urbana, Ohio fire department was on 33.980 , which happened to be the same frequency as the primary channel for the California Office of Emergency Services. It was a classic “double take” when I heard Sacramento calling several other northern California fire departments for the “morning radio check”. During this time, I found out that the Bearcat 250 had the ability to activate a VOX tape recorder, so I had to have one, and programmed it entirely with VHF Low Band fire and EMS frequencies. With a better outdoor antenna, I was hearing low band skip from New England, California, Texas, Florida, Puerto Rico and some Spanish language stuff that I later learned was a Mexican oil company in southern Mexico. Then suddenly, the seasons changed, and I was back to listening to just the local stuff, and I rediscovered the forgotten railroad frequencies.

Ed: Publicly, you are known as the man behind the All Ohio Scanner Club, but I also know you as Amateur Radio Operator - N8 OAY, and as an avid Short-wave listener. How have you evolved over the years as a radio hobbyist?

Dave: That’s a tough question. I evolved, then kind of devolved... Amateur Radio was pretty much an after-thought. Shortwave listening started as a result of listening to radio as a young kid. We had one of those big console radios (at the time, it was taller than I was!) that had some of the shortwave bands. My father, being of German heritage, frequently listened to Deutsch Wella, but at the time, I did not understand what I was hearing. After I got interested in scanners and low band skip and reading about shortwave listening, I remembered that old console radio, and happened to notice that my Mom’s GE portable radio also had a couple shortwave bands. Hhmmm...when she did not really want to share, I saved up the bucks and bought the only shortwave radio that the local Radio Shack had. It was the el-cheapo DX-100. It was a lousy radio, but enough to get me interested. A few months after I bought that, Uniden started selling the CR-201 portable shortwave radio about the time that I got an Income Tax refund. In a few months, I had QSLs from Deutsch Wella , Radio Netherlands, HCJB and a couple others. I have never been more than a casual shortwave listener. Now I rarely listen. After I moved 11 years ago, I found



myself in an area where there is a lot of outside interference from nearby sources that makes it almost impossible with the receivers that I have, and I am not interested enough to spend the big bucks to get a new receiver with synchronous detection that should be able to overcome the local noise.

I was a scanner and shortwave listener for several years before the thought of Amateur Radio even crossed my mind. I had got to know several AOSC members, and in 1990, one of them told me about the soon to come No-Code Technician license. Okay...might as well give it a shot. I was lucky enough to be able to get into the very first No-Code Tech exam that was in the area, and aced it. I was the first No-Code Tech in southwestern Ohio, licensed in February (or March, can’t remember for sure) of 1991. I got interested in some of the public service stuff that some of the area ham clubs did, joined a couple clubs and the Red Cross.

A job change in January of 1993 brought an end to the public service stuff, and along with it, a fading interest in amateur radio. For the last 13-14 years, my use of ham radio has dwindled to the point that the only time I have keyed up in almost a year was at Dayton Hamvention this year.

Ed: Taking a broad look at the scanning hobby from where we have come from in the early days, to where we are today both from the standpoint of the end user and the scanning target, for better or worse, how do you feel the hobby has evolved over the years?

Dave: The hobby has changed 100% from what it was when I got started. 25 years ago, a 50 channel scanner was overkill, big time! Now, when I want to do some serious listening (other than the local Township Fire Department and the Sheriff), I usually have 2 or 3 scanners going. The rural area where I live is all on VHF High Band, but the other counties that I want to listen to has 4 trunk systems, one of which is a P25 digital system.

When I got started, a \$200.00 scanner was all that was needed to listen to everything. Now, when I do some serious listening, I am using over \$1000.00 worth of radios. And they are damn near impossible to program from the keypad, so I use a computer to program the memory with frequencies and trunk system talk groups. The situation of the hobby now is so complicated that it is very difficult for someone new coming in to the hobby to understand.

Ed: Let's put aside the actual radio listening for a moment and discuss how hobbyists gather information. This is an area that has evolved greatly over the years and has seen unprecedented changes on par with or even surpassing the changes we have seen in radio equipment. What changes in these behavioral patterns have you seen?

Dave: Police Call was the main source of information for most people at the time I started, but living

near Dayton, Ohio, I had a better source - the frequency directories written by Norm Schrein had a lot more detailed local information than Police Call. There were other regional directories in other areas over the years, notably Daryll Symington's Northwest Ohio book, and the Scanner Master books and a few others. Now, printed directories just about do not exist. These days all of the information can be found on the Internet. That has made it less expensive for the hobbyist to find the data.

Ed: Where do you see the scanning hobby ten years from today?

Dave: That's a tough call to make. It is a done deal that more and more communications will be digital, both trunk systems and conventional. There will be very few, if any, scanners on the market that do not track trunk systems, and almost all of the scanners will be computer programmable. I'm not sure where shortwave listening is going, but with broadcasters slowly disappearing, and a lot of the utilities going to satellite communications, I am guessing that shortwave may unfortunately become a novelty, or at the very best, a small fraction of what it used to be.

Ed: Dave, thanks for being so candid with us.

Now lets fly across the country and take a quick look at The Southern California Monitoring Association, (SCMA) is an organization for persons interested in listening to all kinds of radio communications. The SCMA was founded by members of the West L.A. Chapter of the nationwide Radio Communications Monitoring Association (RCMA) after its demise in 1996.

You should receive your next issue of *National Communications* prior to Jan 15, 2008.

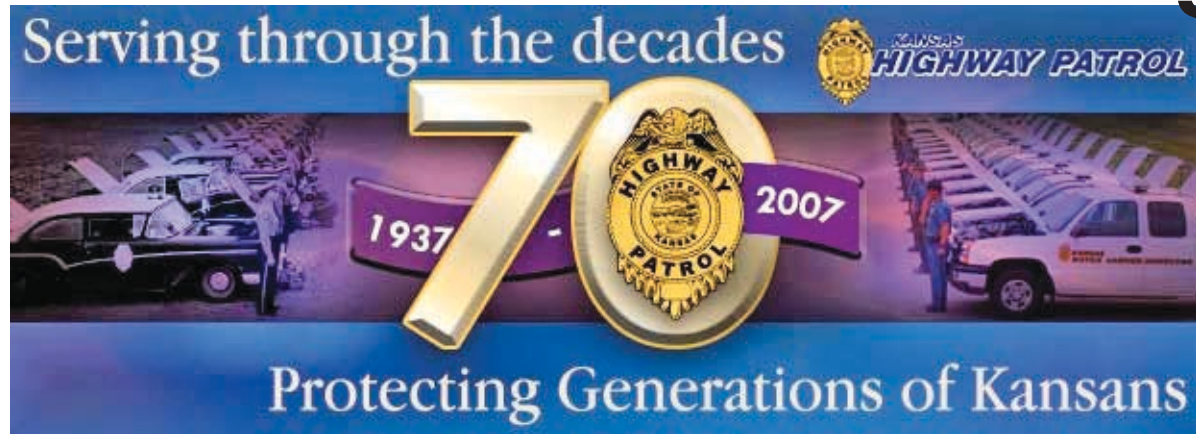
The Goals of the SCMA are:

1. To share information and help others in the radio monitoring community.
2. To conduct and encourage the organization of meetings and tours for its members.
3. To encourage and facilitate contact and interaction among its members.
4. To publish a club newsletter devoted to the monitoring hobby in Southern California.
5. To be a "clearing house" of knowledge about two-way radio systems and communications radios.
6. To offer suggestions and recommendations to the manufacturers of monitor receivers and other equipment related to the hobby.

More information on the SCMA can be found at: <http://www.socalscanner.com/>



Midwest Scanning



By Mark Meece, N8ICW

Being the radio nut that I am I practically take my radios everywhere. At this point my wife thinks it unusual if I don't have them with me. Of course as with anything else in life a little common sense must be practiced also. There are some places you just don't take a radio. A wedding would not be a good place and a graduation would be verboten as well. That being said, one place I cannot go without my radios is of course - vacation!

Vacation planning for me not only involves researching what we are going to see and do, but what frequencies and locations I need to program into my radios. This also generates the need for good mapping software. I have found this to be especially true for those states that are now implementing statewide trunked radio systems. Some that come to my mind are my home state of Ohio (MARCS), its next door neighbors Indiana (SAFE-T) and Michigan (MPSCS) and Kentucky's non-trunked digital conventional system.

Illinois, Kansas and Oklahoma are in the process of building such systems as well. With these new systems building multiple tower sites a good mapping program will help in finding the locations of those sites, some of which are in obscure areas

with names that won't show up on regular maps. If added features are available such as GPS, then that makes your job finding which sites to program in your radios that much easier. So far the mapping program I like the best is Microsoft Streets and Trips, yeah I know it's a M\$ product, but I like it and it works for me and it is still fairly priced.

HEAD WEST YOUNG MAN

This summer vacation once again took us out west to the far side of Missouri to visit my wife's family. It had been several years since we were last out there, and this year I decided to pack 'radio light' and only brought along my Pro-97 and Yaesu VX-150. As I mentioned in an earlier article my Pro-97 has a discriminator tap in case I wanted to do any data type monitoring, and I didn't see any need for a digital scanner.

MISTAKE #1

After the second day I could not understand why I wasn't hearing the Joplin Public Safety system. A little investigating revealed that it became a full P-25 system two weeks before we arrived. An area that still uses a majority of VHF low band frequencies has went digital. So that lesson has been learned, if you have a digital scanner take it with you wherever you go!

KANSAS CITY HERE WE COME

We took one day out to head three hours north to visit a good friend in Kansas City. The drive there was rather boring through sparsely populated areas still using VHF and UHF. Kansas City utilizes a rather large 25 channel standard EDACS system that covers three counties. Once I had it programmed in we were good to go. TABLE 1 lists the Kansas City Public Safety system.

For all the frequencies listing
visit www.nat-com.org.

The State of Oklahoma is also in the process of building a statewide 800 MHz trunked radio system. So far the system is a part of the City of Tulsa's system and covers the area around Tulsa, some parts around Oklahoma City and the northeastern part of the state. I was able to monitor this system from Joplin, Missouri to some 50 miles north of Tulsa. In TABLE 3 we list the State of Oklahoma DPS/City of Tulsa system.

While this system is easily monitored with an analog scanner for now, the lesson learned here if you do any traveling with your scanners its best to include a digital capable scanner. You just never know when a change will occur along your route. ●

Cobra 148 GTL...

A Classic Mobile Sideband CB



By Jock Elliott

Cobra Electronics is once again manufacturing the mobile AM/single-sideband CB with the most enduring legacy: the 148 GTL. Over the years, the company has manufactured variants on the 148: the 148 ST with Cobra's SoundTracker system, and 148 NW ST with the NightWatch glow-in-the-dark faceplate and SoundTracker system. But now, the classic 148 GTL is back.

The 148 GTL is a 40-channel, AM and SSB rig with a front-mounted microphone connector that makes mounting easier, a 9-foot microphone cord, and the ability to use the CB as a public address system with a PA speaker. Tactile controls – with fins and flats -- allow you to feel the position of a control without taking your eyes off the road, which is always a good idea.

The 148 GTL measures 9-3/4 inches deep by 7-7/8 inches wide by 2-3/8 inches high. At the upper left corner of the front panel is a meter for measuring transmitted power, received signal strength, and SWR. Immediately to the right is a three-position switch for controlling the noise blanker

and automatic noise limiter. Next to that is a two-position switch for selecting between CB and PA functions, followed by a three-position switch for selecting meter functions. Next, there is a switch for selecting USB, AM or LSB operating modes and a switch for adjusting tone. These are followed by an LED for indicating transmit and receive. At the upper right of the front panel is the channel indicator.

Beneath the channel indicator, in the lower right corner, is a larger channel selector knob. Next to it is the knob for controlling the brightness of the channel display, followed by a knob for the SSB clarifier (called the "Voicelock" in Cobra parlance). That is followed by the microphone gain control (Dynamike), a concentric knob for RF gain and SWR calibration, and another concentric knob for volume and squelch. Next to that is the 4-pin screw-on microphone connector. On the back panel of the rig are an antenna connector, power connector, and connectors for a PA speaker and an external speaker.

All the goodies aside, what really sets this rig apart is its ability to operate in single sideband (SSB) mode. Now, if you're new to CBing or maybe you haven't had any experience with sideband CB, here's the deal. An ordinary, AM-only CB is legally limited (by Federal Communications Commission rules) to four watts. The signal that an AM-only CB transmits consists of a carrier and two sidebands. The sidebands, (which are identical, except that one is upper and one is lower) contain the actual voice signal that is decoded at the receiver. The carrier exists only to help the receiver "lock" onto the signal. Not only does the carrier contain NO information; fully half of the transmitted power is wasted in the carrier.

Some years ago, bright electronics engineers figured out that, if you could eliminate the carrier and one of the sidebands, you could transmit a "single sideband" signal that would pack a heck of a wallop. They built it, and it works like crazy: a CB in single sideband mode has nearly twice the range of

Continued on page 18

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Cobra 148 GTL...

A Classic Mobile Sideband CB



an AM-only CB. That's because it's putting 12 watts behind that one sideband. And it's all completely legal!

But, like anything else, all that extra performance comes at a price. First, it costs more to manufacture a CB with single sideband capability. Second, sideband works only when one station in sideband mode is talking to another station on the same channel and on the same sideband (upper or lower). A sideband signal is essentially unintelligible when received by a CB in AM mode. Finally, sideband is more complicated to operate. Because there is no carrier for the receiver to lock onto, sideband CBs are equipped with an extra control called a clarifier (Cobra calls it "Voicelock") that allows

you to tune the received signal for maximum clarity.

Because of its extra range and because it's just plain fun, sidebanding has become a kind of subculture within CBing. Instead of "handles," sidebanders often use sideband club identification numbers, like SSB-734, and some special terms and lingo on the air. Throughout the years, Cobra has been one of the brands that sidebanders have relied on for top-of-the-line performance.

The performance of this radio is classic Cobra 148 – excellent audio on both receive and transmit. No wonder the 148 GTL has been loved by so many Cbers for both mobile and base operation over the years. Suggested retail price of this AM/SSB CB is \$179.95.

SMART CHARGER FOR EMERGENCY BATTERIES

By Gordon West, WB6NOA

Emergency communicators regularly rely on sealed rechargeable lead-acid batteries to keep them on the air during a power outage. The most popular battery offers 7 amp hours of capacity, and is characterized by the grey bottom and black top with tab terminals.

These little hard working voltage sources may be paralleled for increased playing power. Two 7s in parallel now give you 14 amp hours of capacity, plenty to keep you on the air during an entire shift with your portable radio setup.

Recharging the sealed, lead-acid battery is now easier, safer, and smarter with a 5-stage maintenance charger from a company called PulseTech. The charger runs on 110v. AC, and offers a series of status lights (actually LEDs) along with a Light emitting diode arrangement to show percent of battery charge.

Maximum charge current per pulse is 2.5 amps, plenty of current even to charge an automobile battery overnight, too. This small charger is NOT designed to bring a dead battery back to life. If it detects a dead battery, it simply won't attempt to charge it. For a low battery, this 5-stage maintenance charger works well.

When you plug the charger into any depleted battery, it will take about 5 seconds to analyze the type and capacity of the battery to



A day of pulsing brought this older battery back in to good service.

be charged. It does this by pulsing voltage to the battery, drawing a little bit of current, and monitoring the charge current and delta voltage. (change in voltage) If it detects a small battery, by the voltage rising too rapidly, it will immediately compensate by reducing current and reducing the number of pulses.

Pulsing a battery is a patented feature of this charger. The quick pulse allows for an intermediate sample of how the battery reacts after being hit with a shot of current. This every second or more analysis between pulse and rest gives the charger the "smarts" to determine

just the right amount of charging current to safely bring the battery back up to full charge, without overheating the inside electrolyte.

The repeated sharp pulses also reduce the size of lead sulfate crystals to keep new batteries lasting longer, and sometimes recovering sulfated older batteries back to a useful charge.

Old-timers will tell you a cautious, quick "zap" of a battery with a careful quick current draw helps recondition the inside plates. While 2.5 amps is not a lot of current to

Continued on page 20

SMART CHARGER FOR EMERGENCY BATTERIES

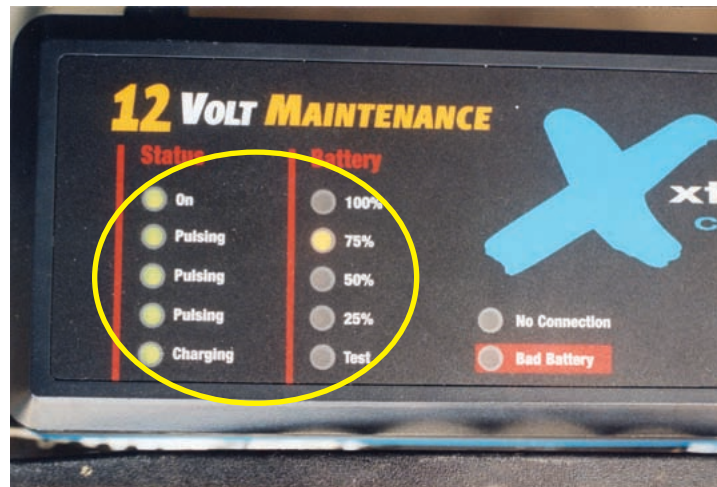
influence the plates on large car batteries, it may do some good on the small rechargeable portable batteries used in emergency radio systems.

During the pulse charging sequence, we tested for radio frequency interference broadband noise. This charger was fairly RFI quiet! This was a relief because other switcher technology chargers had to be shut off when using high frequency equipment. With this new pulse technology, we could keep the charger running most of the time we were on the HF bands. On weak signals however, shut the charger off to pull them in.

If you want to check the performance of this charger, as we did, hook an amp meter in series, and a volt meter in parallel, with the battery. Watch both of them dance around as the battery achieves a full 14.5 volt charge, with the pulse duration declining as the inside sensing circuits detect battery voltage rising during absorption and saturation.

At this point, stage 4, the charger automatically goes into the pulse-float mode, dropping the terminal voltage down to about 13.8 volts, continuously pulsing the battery to minimize the size of lead sulfate crystals. The pulse rate gets slower and slower so not to overcharge the battery.

They say this pulse technology will extend the life of your emergency



LEDs constantly track battery charging status.

The noise interference to short wave, 3-30 MHz, was a problem, on scanner channels no problem.



battery system by multiple times. You are no longer boiling your battery, or starving it. I imagine it might for most of you currently plugged into a "dumb" 2 amp trickle charger.

For more information, go to www.pulsetech.net www.xtremecharge.com and look at the technical specs on this lightweight inexpensive battery charger system.

There is Always Something to Scan

Put your radio to double duty

By Chuck Gysi, N2DUP

I like to think that my scanner serves two purposes, one to let me know about all that goes on around me, and the other is to help me find new things to listen to. Most of the time, my scanners are in the mode of keeping me posted on my environs.

Like many scanner users, I want to know what's going on in my hometown. I live in a small community, and often we know who is getting pulled over or who has been picked up on a warrant from another county. We also want to know what's going on when sirens are going off or a helicopter lands at the nearby hospital.

Because I am a journalist, I also use my scanner on the job. From when I leave home in the morning, it's on all day so I can keep tabs on the community in which I work. It sits on my desk and it goes with me in the car. When I chase fire trucks, it's still with me. And it's still on for my hourlong ride home at night.

But in addition to having a need to know, and keeping me posted on what's going on in either the community in which I live or work (or visit during traveling), the scanner also let's me enjoy the hobby in searching out new and different channels to monitor. So, at the end of the day when I'm off work and things are relatively quiet

around town (it is a small rural town after all), there are new things to search out on the scanner. Perhaps I will monitor the Family Radio or General Mobile channels at 462- and 467-MHz and hear neighbors or even nearby businesses using these channels.

As I write this for the magazine, it's also harvest time. Farmers use their radios typically twice a year – when they are planting and when they are harvesting. If you hear them use their radios any other time of the year, it's more likely for personal things like running a family. Farmers use business radio frequencies, as well as FRS/GMRS channels. You'll find farmers using 151-, 154-, 158-, 451-453- and 461-465-MHz channels. On UHF, they may have simplex radio systems that may just run on itinerant frequencies such as 451.800, 464.500 or 464.550. They also may have repeaters to extend the reach of their farm radios, especially when hauling grain to the elevator.

Because I live in a rural area, I take advantage of planting and harvest time to log all the area farmers' radio systems. Some use FRS/GMRS handhelds, which sometimes is hard to figure out the user unless you recognize voices or locations on the radio, while others have base stations or repeaters on business



After doing searches for frequencies, you may consider putting some of those channels into an experimental bank on your scanner for possible future identification. Photo by Lisa Stephens/scancomm.net

Continued on page 22

There is Always Something to Scan

Put your radio to double duty

channels that you can look up in the FCC databases.

While I like to have my scanner loaded up with frequencies I really need to monitor, from emergency services to utilities to railroads and more. In addition, I always have one bank in my scanner for experimental listening. Some of my older scanners that don't have hundreds of channels, I may use just one or two channels for experimental listening. I may load the experimental bank on the scanner with 467-MHz low-power business frequencies for checking usage, or perhaps some federal frequencies to monitor usage, too. Some of these channels from the experimental bank may work their way into the regular banks if they prove interesting listening. Others may never be listened to again if they prove uninteresting or don't even result in any traffic from monitoring.

This is a good method for finding new frequencies to monitor. For those who have more than one scanner, you may want to use one scanner as an experimental scanner just for tracking down new frequencies worth monitoring.

The scanner e-mailbag has been overflowing lately. Here are some of the comments received recently that I would like to share with our readers.

Schon Garciaq, N8UPB, a retired law enforcement officer, said he recently was listening to his Yaesu

FT-7100 dual-band amateur radio. Here's his report:

"A mayday call came in on 121.500 (MHz) but very faint, and the caller was not very clear. No sooner than a few minutes, someone in Kelly's Island (Ohio) picked up the signal. I didn't have the time to call the U.S. Coast Guard. Then real quick, helicopters from the USCG and Royal Canadian Coast Guard were in the air searching and putting out messages to all mariners on the marine band.

"My ham rig was locked on 157.150 MHz and my Radio Shack Pro-96 was scanning the other bands such as EMS and police for all other traffic. I listened all night and into the next day, until the pilot and passenger were found. The USCG and Canadian CG were busy in tandem helping each other. USCG Hilo refueled at the Canadian side because of a lack of time going into the U.S. side to refuel.

"With due respect to the victims, it was an exciting two to three days of radio traffic. The youngest member of that family was rescued by a man in a canoe; he should be given a medal to risk his own life to go out in the darkness and find survivors, which is a good deed on his part.

"Thanks to the USCG and Canadian CG for their efforts in completing the rescue and searching for the victims that died in this crash. Now we know we have trained crews out there to help in time of distress."

Thanks for a great report on monitoring a major event, N8UPB.

Mike Eshleman of Devine, Texas, wrote in about his scanner:

"I enjoyed your 'Scanning Has Changed' article. I first started in scanning in 1983 and until last year I had simple basic scanners that I was able to understand the concepts, able to program and operate with relative ease. All that changed when I purchased the Radio Shack Pro-97. I live about 30 miles from San Antonio, Texas, and all the local frequencies are not in the 800s nor trunked. But in San Antonio they are, so I bought the Pro-97.

"When I first started using the Pro-97, the squelch worked fine, but now it doesn't squelch anything even though I turn the knob its full range. I don't know if when I was doing something with the different bands or modes or functions I changed the configuration somehow so that now the squelch knob is useless and the scanner won't scan or if the squelch knob is just not working, even though it turns like it is suppose to. Do you have any experience or knowledge on this problem?

"Also if the squelch knob is broken, do you know, in general is it cheaper to get it repaired through a place like Radio Shack (I paid \$149) or to buy a new scanner. I'm thinking I should go back to a more basic scanner."

First of all, I wonder whether you are talking about squelch on

Continued on page 23



trunked systems you may be monitoring. When you monitor trunked radio systems, there is no squelch because there is no need. So, if you are trying to squelch the scanner while it is on a trunked system, it just won't work. If your squelch isn't working on conventional channels (non-trunked frequencies), then there probably is a problem with the radio. You can take it to your local RadioShack store and ask them for advice and an estimate, and you may have to commit to paying at least a set rate to check the radio. Typically, if you decide to have the radio repaired, the fee to check the radio is waived. Once you have an estimate for repairs, you can decide whether or not to pay the price or spend more money for a new scanner.

Write in

What are you hearing on your scanner? Have a question about a specific feature on your radios? You can write to me at nat-com@scanning1.com (be sure to put "Nat-Com" in the subject line or your e-mail may wind up in my spam bin).

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Size: 7.06" Wide x 6.10" Deep x 2.44" High

Frequency Coverage: 25,000-54,000 MHz., 108,000-174,000 MHz., 400,000-512,000 MHz., 806,000-823,995 MHz., 849,0125-868,9950 MHz., 894,0125-956,0000 MHz.

The Bearcat BCT8 scanner, licensed by NASCAR, is a superb preprogrammed 800 MHz trunked highway patrol system scanner. Featuring TrunkTracker III, PC Programming, 250 Channels with unique BearTracker warning system to alert you to activity on highway patrol link frequencies. Preprogrammed service searches makes finding interesting active frequencies even easier and include preprogrammed police, fire and emergency medical, news agency, weather, CB band, air band, railroad, marine band and department of transportation service searches. The BCT8 also has preprogrammed highway patrol alert frequencies by state to help you quickly find frequencies likely to be active when you are driving. The BCT8 includes AC adapter, DC power cable, cigarette lighter adapter plug, telescopic antenna, window mount antenna, owner's manual, one year limited Uniden warranty, frequency guide and free mobile mounting bracket. For maximum scanning enjoyment, also order the following optional accessories: External speaker ESP20 with mounting bracket & 10 feet of cable with plug attached \$19.95. Magnetic Mount mobile antenna ANTMMBNC for \$29.95.



Bearcat® BCD396T Trunk Tracker IV

Suggested list price \$799.95/CEI price \$519.95

APCO 25 9,600 baud compact digital ready handheld TrunkTracker IV scanner featuring Fire Tone Out Paging, Close Call and Dynamically Allocated Channel Memory (up to 6,000 channels), SAME Weather Alert, CTCSS/DCS, Alpha Tagging. Size: 2.40" Wide x 1.22" Deep x 5.35" High

Frequency Coverage:

25,000-512,000 MHz., 764,000-775,9875 MHz., 794,000-823,9875 MHz., 849,0125-868,8765 MHz., 894,0125-956,000 MHz., 1,240,000 MHz. - 1,300,000 MHz.

The handheld BCD396T scanner was designed for National Security/Emergency Preparedness (NS/EP) and homeland security use with new features such as Fire Tone Out Decoder. This feature lets you set the BCD396T to alert if your selected two-tone sequential paging tones are received. Ideal for on-call firefighters, emergency response staff and for activating individual scanners used for incident management and population attack warning.

Close Call Radio Frequency Capture - Bearcat exclusive technology locks onto nearby radio transmissions, even if you haven't programmed anything into your scanner. Useful for intelligence agencies for use at events where you don't have advance notice or knowledge of the radio communications systems and assets you need to intercept. The BCD396T scanner is designed to track Motorola Type I, Type II, Hybrid, SMARTNET, PRIVACY Plus, LTR and EDACS' analog trunking systems on any band. Now, follow UHF High Band, UHF 800/900 MHz trunked public safety and public service systems just as if conventional two-way communications were used. **Dynamically Allocated Channel Memory** - The BCD396T scanner's memory is

organized so that it more closely matches how radio systems actually work. Organize channels any way you want, using Uniden's exclusive dynamic memory management system. 3,000 channels are typical but over 6,000 channels are possible depending on the scanner features used. You can also easily determine how much memory you have used and how much memory you have left. **Preprogrammed Systems** - The BCD396T is preprogrammed with over 400 channels covering police, fire and ambulance operations in the 25 most populated counties in the United States, plus the most popular digital systems. **3 AA NiMH or Alkaline battery operation and Charger** - 3 AA battery operation - The BCD396T includes 3 premium 2,300 mAh Nickel Metal Hydride AA batteries to give you the most economical power option available. You may also operate the BCD396T using 3 AA alkaline batteries. **Unique Data Skip** - Allows your scanner to skip unwanted data transmissions and reduces unwanted birdies. **Memory Backup** - If the battery completely discharges or if power is disconnected, the frequencies programmed in the BCD396T scanner are retained in memory. **Manual Channel Access** - Go directly to any channel LCD Back Light - A blue LCD light remains on when the back light key is pressed. **Autolight** - Automatically turns the blue LCD backlight on when your scanner stops on a transmission. **Battery Save** - In manual mode, the BCD396T automatically reduces its power requirements to extend the battery's charge. **Attenuator** - Reduces the signal strength to help prevent signal overload. The BCD396T also works as a conventional scanner to continuously monitor many radio conversations even though the message is switching frequencies. The BCD396T comes with AC adapter, 3 AA nickel metal hydride batteries, belt clip, flexible rubber antenna, wrist strap, SMA/BNC adapter, RS232C cable, Trunk Tracker frequency guide, owner's manual and one year limited Uniden warranty. Not compatible with AGE/IS, ASTRO or ESAS systems. Order on-line at www.usascan.com or call 1-800-USA-SCAN.

More Radio Products

Save even more on radio scanners when purchased directly from CEI. Price includes delivery in the continental USA excluding Alaska.

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Bearcat 796DGV 1,000 channel TrunkTracker III base/mobile.....	\$519.95
Bearcat BCD396T APCO 25 Digital scanner with Fire Tone Out.....	\$519.95
Bearcat 246T upto 2,500 ch. TrunkTracker III handheld scanner.....	\$214.95
Bearcat Sportcat 230 alpha display handheld sports scanner.....	\$184.95
Bearcat 278CLT 100 channel AM/FM/SAME WX alert scanner.....	\$129.95
Bearcat 248CLT 60 channel base AM/FM/WEATHER alert scanner.....	\$104.95
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Bearcat BCT8 250 channel information mobile scanner.....	\$169.95
Bearcat 350C 50 channel desktop/mobile scanner.....	\$104.95
AOR AR16B0 Wide Band scanner with quick charger.....	\$199.95
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Bearcat® BC246T Trunk Tracker III

Suggested list price \$399.95/CEI price \$214.95

Compact professional handheld TrunkTracker III scanner featuring Close Call and Dynamically Allocated Channel Memory (up to 2,500 channels), SAME Weather Alert, CTCSS/DCS, Alpha Tagging. Size: 2.72" Wide x 1.26" Deep x 4.6" High

Frequency Coverage:

25,000-54,000 MHz., 108,000-174,000 MHz., 216,000-224,9800 MHz., 400,000-512,000 MHz., 806,000-823,9875 MHz., 849,0125-868,9875 MHz., 894,0125-956,000 MHz., 1,240,000 MHz. - 1,300,000 MHz.

The handheld BC246T TrunkTracker scanner has so many features, we recommend you visit our web site at www.usascan.com and download the free owner's manual. Popular features include **Close Call Radio Frequency Capture** - Bearcat exclusive technology locks onto nearby radio transmissions, even if you haven't programmed anything into your scanner. **Dynamically Allocated Channel Memory** - Organize channels any way you want, using Uniden's exclusive dynamic memory management system. 1,600 channels are typical but over 2,500 channels are possible depending on the scanner features used. You can also easily determine how much memory is used. **Preprogrammed Service Search (10)** - Makes it easy to find interesting frequencies used by public safety, news media TV broadcast audio, Amateur (ham) radio, CB radio, Family Radio Service, special low power, railroad, aircraft, marine, racing and weather frequencies. **Quick Keys** - allow you to select systems and groups by pressing a single key. **Text Tagging** - Name each system, group, channel, talk group



ID, custom search range, and S.A.M.E. group with 16 characters per name. **Memory Backup** - When power is lost or disconnected, your BC246T retains the frequencies that were programmed in memory. **Unique Data Skip** - Allows the BC246T to skip over unwanted data transmissions and birdies. **Attenuator** - You can set the BC246T attenuator to reduce the input strength of strong signals by about 18 dB. **Duplicate Frequency Alert** - Alerts you if you try to enter a duplicate name or frequency already stored in the scanner. **22 Bands** - with aircraft and 800 MHz. The BC246T comes with AC adapter, 2 AA 1,800 mAh nickel metal hydride batteries, belt clip, flexible rubber antenna, wrist strap, RS232C cable, Trunk Tracker frequency guide, owner's manual and one year limited Uniden warranty. For more fun, order our optional deluxe racing headset part #HF24RS for \$29.95. Order now at www.usascan.com or call 1-800-USA-SCAN.

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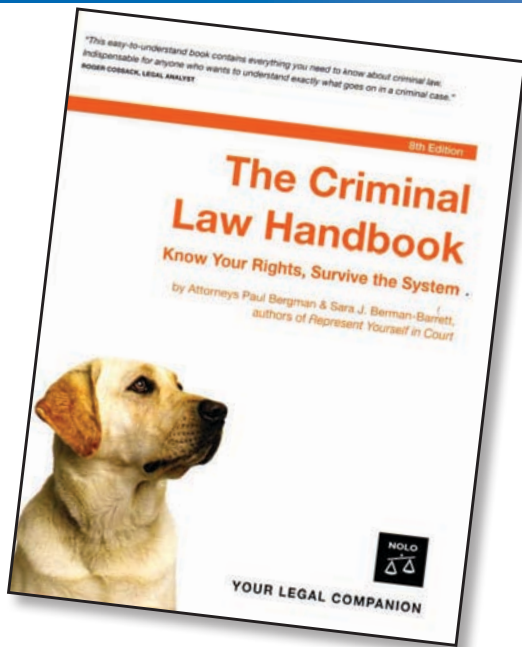
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The Criminal Law Handbook 8th edition by Paul Bergman & Sandra J. Berman-Barrett is published by Nolo books (www.nolo.com).

The criminal justice system is a complex maze, full of confusing rules and procedures. Fortunately you can turn to this book for clear and complete explanations.

The Criminal Law Handbook answers your questions about every part of a criminal case. Find out everything you've ever wanted to know about how the system works and why police, lawyers and judges do what they can do.

The book covers talking to police, search and seizure, criminal investigations, drunk driving, arrests, booking charges, bail, public defenders, defense lawyers arraignment as well as lineups, criminal courts, grand jury proceedings, preliminary hearings, trials, plea bargains, common defenses, evidence, sentencing, "crime speak", and much more.

The 8th edition covers all of the latest changes in criminal law and the Supreme Court cases.

Paul Bergman is a professor of law at the UCLA School of Law. He is the author of many legal books, and co-author of Nolo's "Represent Yourself in Court". Sandra J. Berman-Barrett is an attorney and professor, and the co-author of "Represent Yourself in Court".

Something In The Air -- Radio, Rock And The Revolution That Shaped A Generation is written by Marc Fisher and published by Random House. The book's price is \$27.95.

The book is a sweeping, anecdotal account of the great sounds and voices of radio – and how it became a bonding agent for a generation of American Youth.

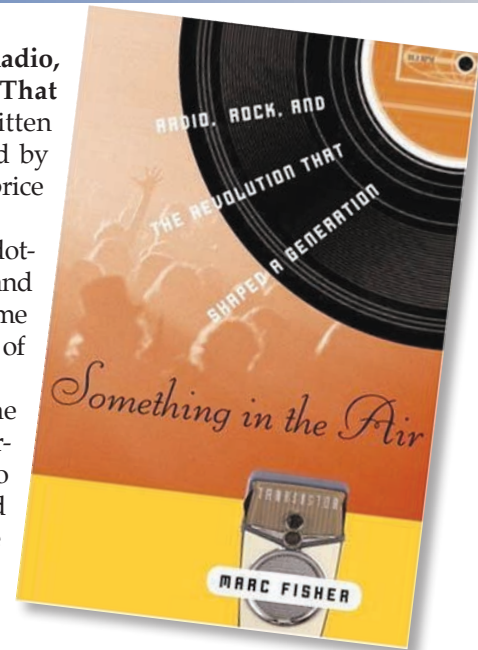
When television became the next big thing in broadcast entertainment, everyone figured video would kill the radio star -- and the radio, period. But radio came roaring back with a whole new concept. The war was over, the baby boom was on, the country

was in clover, and a bold new beat was giving the syrupy songs of yesteryear a run for their money. Add transistors, 45 rpm records, and a young man named Elvis to the mix, and the result was the perfect storm that rocked, rolled and reinvented radio.

Visionary entrepreneurs like Todd Storz pioneered the Top 40 concept, which united a generation. But it took trendsetting "disc jockeys" like Alan Freed, Murray the K, Wolfman Jack, Cousin Brucie, and their fast-talking, too-cool-for-school counterparts across the land to turn time, temperature and the same irresistible hit tunes played again and again into the ubiquitous sound track of the fifties and sixties. The Top 40 sound broke through racial barriers, galvanized coming-of-age kids (and scandalized their perplexed parents), and provided the insistent, inescapable backbeat for times that were-a-changin'.

Along with rock-and-roll music came the attitude that would literally change the "voice" of radio forever, via the likes of raconteur Jean Shepherd, who captivated his loyal following of "Night People"; the inimitable Bob Fass, whose groundbreaking Radio Unnamable inaugurated the anything-goes-free-form style that would come to define the alternative frontier of FM; and a small-time Top 40 deejay who would ultimately find national fame as a political talk-show host name Rush Limbaugh.

From Hunter Hancock, who pushed beyond the limits of 1950s racial segregation with rhythm and blues and hepcat patter, to Howard Stern, who blew through all the limits with a blue streak of outrageous on-air antics; from the heyday of summer songs that united carefree listeners to the latter days of political talk that divides contentious callers; from the haze of classic rock to the latest craze in hip-hop, "Something in the Air" chronicles the extraordinary evolution of the unique and timeless medium that captured our hearts and minds, shook up our souls, tuned in-and turned on- our consciousness, and went from being written off to rewriting the rules of pop culture.



BEFORE SCANNERS

Antique Wireless Association Electronic Communication Museum

By Jim Sutton N2OPS

Have you ever wondered what life was like before scanners? Discover the roots of one way and two way radio at the Antique Wireless Association Electronic Communication Museum located in Bloomfield, New York just south of Rochester, New York.

In this second story we will look at early police, amateur, military and emergency communications equipment from around the world, much of it still in working order. You will see the results of many hours in the labor of the love of antique radio.

EARLY VHF LISTENING

Before scanners police and fire calls were Monitored on receivers like this early Lafayette tunable high band receiver in photo 1.

THE FIRST HAM RADIOS

The very early ham radio in photo 2 had a range of about one mile. Later setups allowed communications over a whopping 10 miles.

THE FIRST "ALL BAND" RECEIVERS

This vintage Strongberg Carlson receiver in Photo 3 picked up AM broadcasts, international broadcasts, police, ham and aircraft.

The close-up of the dial of the Strongberg Carlson receiver in photo 4 shows how the band was divided.

DISASTER COMMUNICATIONS

Cold war era disaster communications were conducted on civil defense radios like the one in photo 5.



Early Ham Radio Photo 2



Early Comm Receiver Photo 3



Police Receiver Photo 1



Early Comm Receiver Photo 4

BEFORE SCANNERS

Antique Wireless Association Electronic Communication Museum

THE FIRST POLICE RADIO SYSTEMS

Photo 6 shows the original Rochester NY WPDR police transmitter that broadcast in the 2.4 MHz band.

Cars could only receive calls. Acknowledgement was done via call boxes.

BC (BEFORE CELLULAR)

Before cellular phones, mobile mounted VHF/UHF mobile phones, like the one in photo 7, provided phone communications to only the most wealthy. Signals were on dedicated frequencies and in the clear.

Please log on to learn more about the Antique Wireless Association Electronic Communication Museum. Then plan a visit and see radio history unfold before your eyes. This is a must see for anyone who is serious about our hobby.

<http://www.antiquewireless.org/museum/museum.htm>.

May your signals be strong, your static be few.



Disaster Comm Photo 5



Early Police Radio Transmitter Photo 6



Mobile Mounted VHF/UHF Phones Photo 7

A Primer On The Coming FCC Auction

By Adama D. Brown

Thanks to a number of recent news articles, most people should be aware of the upcoming auction of radio “spectrum” being held by the FCC in January. What everyone might not know is why this is going to be very important for anyone who uses a mobile device in the United States, and what the exact mechanics are.

What’s actually being auctioned? The answer is, licenses on the right to use certain radio frequencies. Specifically, a big block between 698 and 806 MHz, typically called the 700 MHz range for obvious reasons. This is a range that was formerly used for analog TV channels numbered 52 through 69. When over-the-air TV switches over to digital broadcasts in early 2009, these sections will no longer be needed, so the FCC is offering them for other use. Most of the interest centers on the potential for high-speed wireless Internet service, and to a lesser extent mobile phone service.

Why are these licenses so desirable? Simply put, it has to do with radio mechanics. As radio frequencies go down, they get more range and ability to penetrate obstructions like buildings and tree foliage for the same amount of energy put into the signal. The 700 MHz band is considered to be a nearly ideal combination of available bandwidth -- about 10 megabits total for a single 5 MHz “block” -- and range, which can be up to a hundred miles. A two-way connection would

limit the range, but it’s still not inconceivable that there could be mobile connections at up to 30 miles, and fixed installs even farther out. This is compared to current cellular systems which tend to max out at between 5 and 15 miles, depending on conditions.

The most desirable set of licenses is the C group. This represents two blocks, each 11 MHz wide, which can be bought separately. Each of these blocks has a nationwide license -- a company which buys one can deploy wireless coverage using it anywhere in the United States. To give an idea how valuable this is, Google has said it may be committing an opening bid of \$4.6 billion dollars in order to try and capture these licenses. This is also the swath that Verizon wants to own.

The same nationwide licensing applies to the D group, which is two blocks of 5 MHz each. However, whatever companies buy the two D blocks will be required to help build and maintain a national public safety network as well. Due to this, and the smaller amount of space, the D blocks are less desired than the C group, and thus are considered to be the best chance of seeing a relatively unknown company get a national license.

Last but not least are the A, B, and E groups. Each of these is comprised of two blocks of 5 MHz, for a grand total of 30 MHz. However, they’re broken up into about a thousand regional licenses, meaning that

they’ll be more affordable for small carriers, local players, or others who aren’t cash-rich to potentially grab. In theory, a company could also buy enough of these regional licenses to build a national or semi-national network as well. In theory, there’s enough radio spectrum up for grabs to build ten new nationwide networks, or four national networks and a dozen regionals. More likely, though, a significant amount of the available spectrum will be bought out by existing players to supplement their current offerings.

The last question is, who’s bidding? Well, nobody knows for sure until it happens, but Verizon is a safe bet, and Google may be as well. It’s likely that Sprint and some of the other mobile phone carriers will also at least test out the waters. Equally interested are some startup companies with big funding; satellite TV companies which may want the bandwidth for “triple play” services; and even possibly some real surprises like wired telecommunication companies looking to expand.

One thing to be sure of is that whoever comes out a winner in the auction, don’t expect them to just sit on their winnings. The terms of the sale require that companies build out networks using their purchases, with a minimum 35-40% coverage of the company’s licensed area after four years, and 70-75% after ten years.

Over the Road

Robert Richardson and his companion Thomas at a truck stop in Ohio.



By: Norm Schrein, KA8PGJ

Robert Richardson of Fort Wayne, Indiana has spent the bigger part of his life traveling America's highways and bi-ways. The 62 year old driver has been behind the wheel of a big rig truck since he was 18 years old.

The high-tech equipment in trucks has changed over the years. He still has a Cobra 29 CB radio, but does not use it as much as he used to. Now satellite radio, a cell phone and his satellite two-way communications are part of what fill the cab. "After being behind the wheel for 40 years, you get kind of tired listening to it", he said. When there is a traffic jam or something else involving traffic going on, though, he will switch it on to channel 19 to get the latest information.

He said that part of the problem is the trucks themselves. "They come from the factory with a CB antenna already installed. The problem is that mine is only good for maybe a quarter of a mile or so. I really need to install a better antenna", he said.

Bob does not travel alone. Thomas, a 10 month old miniature schnauzer spends all his time on the road as well. "He goes everywhere I do", Bob said.

Bob is also a second generation driver and the one thing he notices is that there is not the courtesy among drivers that there used to be. "The new generation of drivers think that the job is easy work and easy money. It isn't" he lamented. Traffic gets worse every year. There are more and more

drivers and so many of them are described as "lousy" by Bob and that includes many over-the-road drivers as well. "If you are traveling the East/West Route on Interstate 80 you will eventually get caught there in a snow storm. They just shut down the road and all you can do is sit", he said.

Some of the things drivers encounter are the men from the various Department of Transportation agencies (DOT) and the state police. "I average about 1 ticket a year", he said. Most of the rules put into effect for truckers have nothing to do with safety and everything to do with generating revenue.

Bob recalled a time when he went through several weight scales across four states -- Ohio, Kentucky, Tennessee and Georgia. It was only when he hit the last scale in Georgia, after passing through two other Georgia scales that he all of a sudden was overweight and was given a seventeen dollar ticket. According to Bob, Arkansas is the toughest state on truckers followed closely by California.

Bob also feels that 90 per-cent of the drivers on the Interstate highways have no business being there. In fact he thinks that states should place an endorsement on

their licenses indicating that the driver has passed some sort of test on interstate highway traffic.

I ran across Bob at a small truck stop in Franklin, Ohio. He was awaiting a satellite message on his computer which would let him know where his next load would be picked up. As I left Bob, he and Thomas were returning to his 2005 Kenworth T2000 truck to get further instructions.

How much longer do you think you will keep driving I asked him as I left. "As long as my health keeps up, I will keep driving although maybe I may try to get a shorter route", he said.

Although Bob has traveled the entire US he spends a lot of his time going to Florida and Texas. He wants to retire to Florida sometime. But for now, he is just passing through.

Nat-Com BOLO Report

It is time for the Nat-Com BOLO Report. Remember that the individuals portrayed here are for the most part very dangerous. If you have information concerning any of the cases we present, you should take no action yourself, but instead immediately contact the nearest FBI Office or local law enforcement agency. For any possible sighting outside the United States, contact the nearest United States Embassy or Consulate.

Justin Franchi Solondz. Solondz is wanted by the FBI for conspiracy to commit arson; arson of a government building; arson of property used in interstate commerce; use and carrying of a destructive device during and in relation to a crime of violence and making unregistered destructive devices.



Justin Franchi Solondz is wanted on multiple charges related to his alleged role in a domestic terrorism cell. On May 21, 2001, the University of Washington, Center for Urban Horticulture, in Seattle, Washington, was destroyed by fire during the early morning hours.

At the same time, in Clatskanie, Oregon, several buildings and vehicles were also destroyed by fire. Fire investigators determined that both fires were the result of arson by use of timed improvised incendiary devices. Shortly thereafter, a communication was released stating that both fires were committed by members of the Earth Liberation Front (ELF). The combined loss from these two arsons totaled over five million dollars.

On October 15, 2001, an arson and attempted animal release took place at the Litchfield Wild Horse and Burro Corral in Susanville, California. Investigators found multiple improvised incendiary devices at the crime scene. This arson was claimed to have been committed by the Animal Liberation Front (ALF). The damages from this arson were estimated to be eighty five thousand dollars.

On April 6, 2006, and May 17, 2006, federal grand juries in Sacramento, California and Seattle, Washington (respectively) indicted Solondz on the charges mentioned earlier.

The FBI is offering a reward of up to \$50,000.00 for information leading to the arrest of Justin Franchi Solondz. He is described as a white male with brown hair and hazel eyes. He has been using October 3, 1979 as his date of birth and was born in New Jersey. Solondz is 5' 9" to 5' 11" inches tall and weighs 150 pounds. He has worked as a part time carpentry worker. Solondz may be traveling in Canada, Europe or Asia. He may have facial hair.

Solondz should be considered armed and dangerous as well as an escape risk.

Robert William Fisher is on the FBI's Ten Most wanted fugitive list. He is wanted for unlawful flight to avoid prosecution, three counts of first degree murder and arson of an occupied structure.



The FBI is offering a reward of up to \$100,000 for information leading directly to the arrest of Fisher. He is wanted for allegedly killing his wife and two young children then blowing up the house in which they all lived in Scottsdale, Arizona in April of 2001.

Fisher is physically fit and is an avid outdoorsman, hunter and fisherman. He has a noticeable gold crown on his upper left first bicuspid tooth. He may walk with an exaggerated erect posture and his chest pushed out due to a lower back injury. Fisher is known to chew tobacco heavily. He has ties to New Mexico and Florida. Fisher is believed to be in possession of several weapons, including a high powered rifle. He has worked in the past as a surgical catheter technician, respiratory therapist and a fireman.

Nat-Com BOLO Report

Robert William Fisher was born on April 13, 1961 in Brooklyn New York. He is 6: 0" tall, weighting in at 190 pounds with a medium build. He has brown hair, blue eyes and a light complexion. He should be considered armed and extremely dangerous.

Jamel Ahmed Mohammed Ali Al-Badawi is wanted by the FBI as one of their most wanted terrorists. He is wanted for murder and conspiracy to murder United States nationals and United States military personnel; conspiracy to use and using weapons of mass destruction; damaging and destroying government properties and defense facilities and providing material support to a terrorist organization.

Jamel Ahmed Mohammed Ali Al-Badawi is wanted in connection with the October 12, 2000, bombing of the USS Cole in Aden, Yemen. This attack resulted in the deaths of 17 American sailors. Al-Badawi was being held by Yemeni authorities in connection with the attack when he escaped from prison in April of 2003. Al-Badawi was recaptured in March of 2004, but again escaped Yemeni custody on February, 2006.

He is described as male, with black hair and black eyes with olive complexion. He is a citizen of Yemen. He is approximately 5' 5" tall and weighs 175 pounds. He is medium build and speaks Arabic.

Al-Badawi should be considered armed and extremely dangerous.

The FBI is seeking information on Adan G. El Shukrijumah. He is wanted in connection with possible terrorists threats against the United States.



A reward of up to \$5 million is being offered by the Rewards for Justice Program, United States Department of State for information leading directly to the capture of Adam G. El Shukrijumah.

El Shukrijumah was born on August 4, 1975 in Saudi Arabia. He is 5' 3" to 5' 6" tall with average build. He has black hair and black eyes. He occasionally wears a beard. He has a pronounced nose and is asthmatic. El Shukrijumah speaks English and carries a Guyanese passport, but may attempt to enter the United States with a Saudi, Canadian or Trinidadian passport. El Shukrijumah should be considered armed and dangerous.



Semion Mogilevich, Igor L'Vovich Fisherman, and Anatoli Tsoura are all wanted for their alleged participation

in a multi-million dollar scheme to defraud investors in the stock of YBM Magnex International, Inc. (YBM), a public company incorporated in Canada, but headquartered in Newtown, Bucks County, Pennsylvania. Investors lost more

than 150 million dollars through the alleged scheme that included inflating stock values, preparing bogus financial books and records, lying to Securities and Exchange Commission officials, and offering bribes to accountants. The scheme to defraud collapsed on May 13, 1998, when federal search warrants were executed in Pennsylvania and trading of the YBM stock was suspended by the Ontario Securities Exchange. A federal indictment, issued for the men on April 24, 2003, in the Eastern District of Pennsylvania, Philadelphia, Pennsylvania, charges them all with 45 counts of racketeering, securities fraud, wire fraud, mail fraud, and money laundering.

The indictment alleges that between 1993 and September of 1998, Semion Mogilevich headed and controlled the Mogilevich Enterprise, an association which consisted of the aforementioned individuals and a network of companies in over twenty different countries which orchestrated a sophisticated scheme to defraud investors in YBM stock. The scheme was allegedly funded and authorized by Mogilevich. This complex network of corporations was set up to create the illusion that YBM was engaged in a profitable international business, primarily the industrial magnet market. Igor Fisherman served as the Chief Operating Officer of YBM on behalf of Mogilevich, who was YBM's major shareholder. Anatoli Tsoura was the Vice President of Finance for YBM's main subsidiary.

Continued on page 32

Nat-Com BOLO Report

Mogilevich was born on June 30, 1946 in Kiev, Ukraine. He is 5' 6" to 5' 7" tall and weighs 290 pounds. He has potmarks on his face. He may wear facial hair to include a moustache. He is known to be a heavy smoker. Mogilevich has his primary residence in Moscow, Russia, but also has ties to the United States and England. He utilizes a Russian passport. Mogilevich should be considered armed and dangerous as well as an escape risk.

Andrew J. Brantz is wanted by the FBI for unlawful flight to avoid prosecution, probation revocation for attempted child molestation and dangerous crimes against children.



Andrew J. Brantz, a convicted sex offender, is wanted for child molestation in Arizona. In January of 1986, Brantz was convicted of molesting a family member, who was under the age of 15. Brantz was charged with one count of attempted sexual molestation, and one count of dangerous crimes against children. The incidents, which took place over a period of 5 years, occurred when the female victim was alone with Brantz. The molestation involved Brantz fondling the victim inside her clothing.

After serving 6 months of his 5-year prison term in jail, Brantz subsequently received life-time probation for the above-mentioned

crime. After his release from prison in 1986, Brantz allegedly molested another family member under the age of 15. He allegedly fondled the female victim underneath her clothing, and the incidents were reported to authorities in 1991.

A state warrant was issued on May 26, 1992, by the Superior Court of the state of Arizona, County of Maricopa, after Brantz violated his probation. On February 3, 1999, Brantz was charged federally with unlawful flight to avoid prosecution by the United States District Court, District of Arizona, and a federal warrant was issued for his arrest. Additionally, on October 6, 2006, an absconder warrant was issued for Brantz by the Superior Court of Arizona, County of Maricopa. Brantz was last seen in 1992 when he left his Arizona residence without notifying his probation officer.

Brantz is described as a white male with brown hair and green eyes. He was born on February 20, 1954 in California. He stands 5' 6" tall and weighs 180 pounds. Brantz has worked in the past as a heavy equipment operator and scrap metal worker.

Brantz was a heavy smoker and usually smoked the cheapest brand of cigarettes available. He rarely drank alcohol, and one of his favorite snack foods was peanuts, which he consumed quite frequently. Brantz used to collect cans and return them to the grocery stores for money. Additionally, he enjoyed riding dirt bikes. Brantz rarely sought medical attention and was missing half of his teeth. He always wore large

eyeglasses. In the past, Brantz was known for working "under the table" for cash and not applying for benefits. When he worked as a heavy equipment operator, he usually operated a crane and most likely worked in a scrap yard. Furthermore, Brantz may be living in the northwest United States, California, or Arizona. He also has ties to Wyoming and Oregon.

Lawrence Tyrus Browning is wanted by the FBI for transportation of stolen goods; conspiracy to commit offense or to defraud the United States and failure to appear.



Lawrence Tyrus Browning is wanted for allegedly stealing automotive parts from areas in Marion and Carbondale, Illinois. After which, he allegedly transported these car parts to the state of Mississippi and sold them via the Internet.

On March 4, 2003, Lawrence Browning was indicted federally in the United States District Court, Southern District of Illinois, for transportation of stolen goods and conspiracy to commit offense or to defraud the United States. Browning was scheduled to appear in court for a change in plea hearing on August 4, 2003. He failed to appear and his bond was revoked. A federal warrant for Browning's arrest was issued on

Continued on page 34

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Scanners. Paul Godshall of Perkasie, Pennsylvania wants his name and address published so other local readers can get in contact with him concerning the police 800 MHz digital trunking system in Montgomery County as well as monitoring the county sheriff, fire and ambulances, etc. Also he would like other readers to contact him concerning monitoring the Bucks County police digital trunked radio system as well as fire, ambulances, etc. Contact Paul Godshall at 301 Route 152; Perkasie, PA 18944.

Scanners. POLICE CODES On The Go! Here's a brand new site dedicated to police code terminology accessible from any cell phone or mobile device. Instantly find the code's being transmitted using the 10 code, 11 code and main Codes. <http://policecodes.mobi>

Scanners. Radio Shack NOAA weather alert radio. The item has seven channels with specific area message encoding. The item can be set for up to ten specific areas. The radio has a lighted display that tells you how many hours and minutes are left on an alert. Radio will alert for watches, warning, and civic statements (i.e. thunderstorm watch / warnings, floods, tornados, hurricanes, blizzards, high winds, amber alerts etc.) The radio runs off standard electric, and has battery back up. Comes with a telescoping indoor antenna. Also has a connection for an outdoor antenna. Radio is used but in EXCELLENT CONDITION. It has no scratches, marks, or scuffs of any kind. If you have doubts, email me, and I will send you a pic! Asking \$10.00, I paid \$50.00. You can call me at (513)-737-2139 and ask for Dan, or you can e-mail me: dschwartz65@aol.com.

Nat-Com BOLO Report

August 4, 2003, by the United States District Court, Southern District of Illinois, for failure to appear. Additionally, Browning has several outstanding warrants for crimes he allegedly committed in Virginia and Mississippi.

Browning is described as a white male with brown hair and hazel eyes. He was born on June 13, 1972 in Arkansas. Browning stands 6' 1" tall and weighs 210 pounds. He has scars on his right arm and right thigh.

Browning has ties to the following states: Illinois, Arkansas, Arizona, and Mississippi. His hobbies include playing ice hockey and being an avid fan. Additionally, Browning is allegedly accomplished in document alteration and the production of fraudulent identification, including driver's licenses and passports. He may also be in possession of a 9mm handgun with an ankle holster, extra magazines, a stun gun, and a conversion kit to make a rifle fully automatic.

Lawrence Tyrus Browning should be considered armed and dangerous and also should be considered an escape risk.

The FBI is looking for Darin John Richardson. He is wanted for unlawful flight to avoid prosecution, attempted murder of a law enforcement officer and possession of a firearm during the commission of a crime.

Darin John Richardson is wanted for his alleged involvement in the shooting of a Cobb County Police Officer in Austell, Georgia. On the

afternoon of August 20, 2005, the Officer was shot multiple times with a handgun. An arrest warrant was issued on the same day by the Cobb County Magistrate Court charging Richardson with aggravated assault with a weapon. On October 13, 2005, a complaint was filed in the Northern District of Georgia, Atlanta, Georgia, charging Richardson with unlawful flight to avoid prosecution, and an arrest warrant for him was issued on the same day.

Richardson is described as a black male with brown eyes and black hair. He was born in New York, but has used various birth dates, including September 1 1984; September 11, 1978 and 1984 and March 30th 1978. He stands 6' 3" tall and weighs 160 pounds.

Richardson should be considered armed and dangerous as well as an escape risk.

Eva Marina Malczewski is wanted by the FBI for Failure to Appear. She is a white female with blonde hair and was born in Warsaw Poland on October 7, 1977. She stands 5' 4" tall and weighs 105 pounds. She has full lips and crooked front teeth. She speaks fluent Polish. Her last known address in the United States was in Arlington, Texas. She has worked in the past as a bank teller.

On September 19, 1997, Eva Maria Malczewski was arrested on a



complaint based on allegations that she had embezzled a large sum of money from a bank in Arlington, Texas, where she had worked as a teller. The money was stolen between February 10 and June 6, 1997. Malczewski was indicted on sixteen counts of bank embezzlement on October 15, 1997.

While investigating this theft, it was learned that Malczewski had previously worked as a teller in another bank in Grand Prairie, Texas. Malczewski was suspected of stealing a large sum of money from that bank in February of 1997. On February 13, 1998, Malczewski was indicted on two counts of bank embezzlement regarding funds stolen from this bank.

On May 28, 1998, Malczewski was found guilty of bank embezzlement. She was scheduled to be sentenced on November 30, 1998, but failed to appear in court. A warrant was then issued in the Northern District of Texas, Fort Worth, Texas, for her arrest.

Leo Frederick Burt is wanted by the FBI for sabotage; destruction of government property and conspiracy.

Leo Frederick Burt is wanted for allegedly participating in the bombing of Sterling Hall, on the campus of the University of Wisconsin, on August 24, 1970. The blast from the explosion,



Nat-Com BOLO Report

combined with the fire, resulted in the death of a 33-year-old researcher. Additionally, there were several injuries reported and estimated \$6 million damage to the building and its contents. Reportedly, explosives had been placed in a stolen panel truck, located three blocks from the building, just several days before the blast. Also, a light-colored, late-model vehicle (Corvaair) was seen leaving the vicinity of the bombing, and Burt was identified as being in the car.

On September 2, 1970, Leo Burt was indicted federally in Madison, Wisconsin. He was charged with sabotage, destruction of government property, and conspiracy.

Burt is described as a white male with brown (may now be gray) hair and hazel eyes. He was born in Darby, Pennsylvania on either April 18, 1948 or April 15, 1950. He is 5' 11" to 6" 0" tall and weighs 185 pounds. He has worked in the past as a laborer and watchman.

Burt may wear a moustache and beard and has worn his hair long in the back. He may also wear glasses. Burt has ties to New York City, New York; Boston, Massachusetts; and Peterborough, Ontario, Canada.

The FBI is offering a \$50,000 reward for information leading to the arrest of Leo Frederick Burt. Burt should be considered armed and dangerous.

Failure to Appear (Drug Conspiracy) is the charge against Dionne Garcia. Garcia was born on March 16, 1977 in Illinois, stands 5' 2" tall and weighs 141 pounds. She

has brown hair and hazel eyes. She also has tattoos on her neck, right arm, right shoulder and right ankle.

Garcia is known to change her hair color and length. She may be traveling with her boyfriend, Juan Duran (also a fugitive), and her four children, who are considered missing.

Between February 2001 and January 2003, the FBI, along with numerous other local, state and federal agencies, conducted an extensive investigation targeting the alleged manufacture and distribution of PCP and other controlled substances by the Ambrose Street Gang in Chicago. After being charged with drug conspiracy, Dionne Garcia was arrested December 18, 2001, and placed on home monitoring and curfew pending future court appearances. She failed to appear for a court date on September 13, 2002, and has been a fugitive since. Garcia and Juan Duran are the sole remaining fugitives from the investigation, which yielded 51 indictments.

An arrest warrant was issued on August 30, 2002, by the United States District Court, Northern District of Illinois, Eastern Division, after Garcia failed to appear for a court appearance.

The FBI is offering a reward of up to \$5,000 for information leading directly to the arrest of Dionne Garcia. She should be considered armed and dangerous as well as an escape risk.



Edward Eugene Harper is wanted by the FBI for unlawful flight to avoid prosecution, conspiracy to commit sexual battery, fondling and sexual battery. Harper has used the following aliases: Edward E. Harper, Ed E. Harper, Ed Harper, Eddie Eugene Trimue, Eddie Harper, Eddie Eugene Harper, Edward Eugene Trimue, Ed Harmon and Edward Trimue.



Edward Eugene Harper is wanted for allegedly having sexual relations with a child under the age of fourteen in Hernando, Mississippi. On April 27, 1994, a state arrest warrant was issued by the Circuit Court of DeSoto County, Mississippi, after Harper was charged with conspiracy to commit sexual battery, child fondling and sexual battery. Harper was arrested and released on bond. On October 31, 1994, Harper's bond was revoked after he failed to appear for a court hearing. Harper was charged federally with unlawful flight to avoid prosecution and a federal warrant was issued for his arrest on February 5, 1999, by the United States District Court, Northern District of Mississippi.

Harper is described as 5' 10" tall weighing 165 pounds with grey/brown hair and hazel eyes. He was born on March 1, 1946 in New Mexico. Harper has worked in the past as a semi-truck driver, mechanic, forklift driver and ranch handler.

Continued on page 36

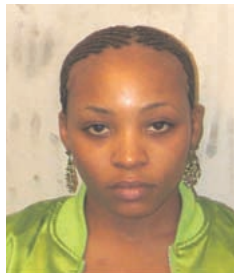
Nat-Com BOLO Report

Harper considers himself to be a member of the Freeman Sovereign Citizen Group. He has family ties in Arkansas. Harper is believed to have been doing ranching work in Montana and Wyoming.

Harper should be considered dangerous.

The FBI's Violent Criminal Apprehension Program has issued a ViCAP Alert regarding Latoya Lashell Lusk, a missing person.

On Sunday March 25, 2007, at approximately 4:30 A.M., Latoya Lashell Lusk was last seen leaving her place of employment in



Memphis, Tennessee. Lusk worked as an exotic dancer. At the time of her disappearance, Lusk was driving a silver 2007 Dodge Caliber; however, this vehicle has since been recovered. Lusk has had no contact with family or friends since her disappearance and her disappearance is considered suspicious.

Lusk is described as a 22 year old black female standing 5' 0" tall

and weighing 110 pounds. She had black hair and has used red and blonde hair pieces in the past. She has brown eyes. Additionally she has a tattoo of "Laugh Now, Cry Later" with two masks around the quote on her upper back. Also there are two other tattoos one with the name of "Toya" on her lower back and "princess" with a picture of a woman on her left leg.

Any agency or person with information on Latoya Lashell Lusk is asked to contact Sgt. Joe Stark at 901-545-5307 of the Memphis Police Department or FBI-ViCAP Crime Analyst Nathan Graham at 703-632-4309.

Kristin Denise Smart was last seen at approximately 2:00 a.m., May 25, 1996, as she was walking back to her dorm room on the California Polytechnic campus, San Luis Obispo, California from an off-campus party. Kristin was accompanied by a fellow student who stated that he left her a block from her Muir Hall dorm to



go to his dorm. Kristin did not return to her room and has not contacted family or friends since that time. She did not have any identification, money, or extra clothing when she disappeared.

If you have seen Ms. Smart, or have any information as to her present whereabouts, contact the Los Angeles Field Office of the FBI at (805) 934-2444. You may also contact the San Luis Obispo County Sheriff's Department at (805) 781-4550.

Kristin is described as a white female with dark blonde hair and brown eyes. She is 6' 1" tall and weighs 145 pounds. She was born on February 20, 1977.

Smart was last seen wearing a grey half T-shirt, black surfing shorts, and red "Puma" athletic shoes. Her hair is straight and shoulder length.

A reward of \$75,000 is being offered for information that helps locate Kristin. Anyone who has seen Kristin Denise Smart or has any information as to her present whereabouts is strongly urged to contact their local FBI office.

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(see ad on page 7)

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CLOSING COMMENTS

Radio buddies, mentors and friends

I know that I have written about mentors previously. A mentor is usually someone who has shown you the way either in life or in a hobby. Also a mentor is someone who is older and wiser and certainly had much experience. So, the mentors I have spoken of before were involved in electronics or law enforcement or firefighting. But they all had one thing in common – at least to me – they influenced my life when it came to one of the afore mentioned fields.

Kurt Farmer mentored me as well, but here he was more than a contemporary. We were radio buddies. However, you will find that you can learn from your radio buddies, just like I learned from Kurt.

Kurt was a radio engineer (Went to the University of Cincinnati) and was the chief engineer for several radio stations in Cincinnati, Hamilton, Dayton and beyond. He was also a ham radio operator (K8DIV). He enjoyed working the many amateur repeaters in our area as well as 10 and 6 meters. In fact he even put together a 6 meter to two meter remote link back. In that way, someone with just a two meter hand-held radio could work another ham hundreds of miles away via 6 meters. It would not be unusual to listen to 147.420 MHz and hear a ham in Florida calling CQ and being quickly answered by Kurt.

I met Kurt years ago when he and one of his business associates ran a small two way radio company here in Kettering. I would not meet him again until the late 1980's when he came to Fox, where I also worked, to build SCA receivers. Now a SCA



Kurt Farmer (1947 - 2007)

receiver, something of which I had no knowledge of prior, receives the sub channels on a commercial FM radio station. There are all sorts of broadcasts occurring on these SCA frequencies that I never knew were there, such as background music, stock tickers and reading services for the blind. Those Fox receivers were designed to pick up those frequencies and were used primarily by the blind reading services.

While at Fox, he and I worked on getting a two meter repeater up and running for the local hams. Once we both left Fox, the repeater then came with us and we both used it off and on until late last year, when we gave up the frequency to another ham club that had more time to take care of the system. Of course since Kurt was involved, it meant that the repeater was also linked to another HF band, this time 10 meters.

My latest endeavors with Kurt involved the engineering on the Informational Radio station we put together on 1610 Kc in the Dayton area. Kurt did much of the antenna design and layout. In fact it was his saying of "bury more copper" that made the station talk so well for the mere 10 watts it was operating. Also, since he knew many of the broadcast personalities, we were able to get "professional" sounding messages to air on the system.



By: Norm Schrein, KA8 PGJ

It was not unusual for me to hear from Kurt every weekday morning. Usually he had a report on someone hearing the station here or there, but many times it was with ideas, either for the radio station, or scanners, or just about anything electronic. Kurt certainly was an idea man.

Many of those ideas he put to good use when he developed his own company, Stor-Com, which made telephone and intercom systems for large and small businesses. The list of companies would range from McDonald's golden arches to a small mom and pop store. To Kurt it did not matter, if there was an electronic problem to be solved, he would be on it.

Sadly, Kurt passed away in August. So, while he was one of my radio buddies, he also became a mentor. He was someone with a lot of knowledge about radio and electronics and he was more than happy to share what he knew with anyone willing to listen.

I listened, but probably not as much as I should have. I learned a lot from Kurt and every now and then when I come up with an electronic problem, I will say to myself, "I need to check with Kurt on that one". Of course I can't do that anymore. I am going to miss Kurt not only because he was a radio buddy and mentor, but also because he took the time to be a friend.

LAST PAGE OUT

*Guarding the beach.
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