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Take A Spin Down CB Memory Lane

page 4

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March/April 2011
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President - Norm Schrein

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Take A Spin Down CB Memory Lane



This Tram CB radio is vintage 1964 and had nice hot tubes glowing inside it. Notice the meters on the front of the radio. It's quite the relic!

If you've been a CBer a long time, you might remember some of the past.

By Chuck Gysi, N2DUP

If you've been a radio hobbyist for a long time like me, you might have gotten your start in citizens band radio – perhaps "back in the day."

I honestly can say I got my start in CB way back in the 1960s with a pair of superheterodyne walkie-talkies received as a Christmas gift. My sister and I would be talking to each other and every once in a while, we'd hear someone come across and say "breaker" and we wondered if we were interfering with their radios. While we were operating on crystals that transmitted on Channel 11, we could hear any CBer on any CB channel nearby because the superhet receiver let all channels pass through the receiver. That's why we heard a lot of CBers back in that day.

I renewed my interest in CB in junior high school and got a better CB walkie-talkie and later a CB base station to talk with other CBers in the community and other nearby areas. But while CB has been on 27 MHz a long time, it wasn't always there.

CB got its start way back in the late 1940s – believe it or not – on UHF. The UHF CB band never really took off, per se, and while the original CB UHF band had a number of UHF frequencies between 460 and 470 MHz, that Class B service eventually was done away with and then only Class A's eight frequency pairs remained. Today, we call that GMRS, or the General Mobile Radio Service. It took a long time for GMRS to become what it is today, and while there are plenty of people on GMRS with commercial two-way mobiles, handhelds, base stations and repeaters, it's become more of a blister-pack low-power handheld radio service in conjunction with FRS frequencies.

Along the way, our CB service blossomed, thanks to a number of situations along the way. Today, we have a number of personal radio services, including CB, FRS, GMRS, MURS, and other license-free modes such as the 49-MHz band and even 900 MHz.

Today's CB radio service was created back in 1958 when the hams lost their 11-meter band to create this new radio band for personal radio use. It took a while for this new CB service to take hold. The first radios were bulky, had tubes and didn't lend themselves to mobile use. The antennas were 9-foot whips that cracked tree branches as the hobbyists drove down streets.

CB really took off when radios become solid state and no longer needed tubes. Radios were more compact and more easily installed in vehicles. This came about in the

1970s, right before another milestone for CB's growth. In the mid-1970s, gasoline became short and was rationed. If the last digit on your license plate was an odd or even number, you could only fill your tank on similar odd or even dates. CBers used their radios to help tell others where there were gas stations without long lines of motorists waiting to fuel up. In addition, they used the CB radios to start monitoring the location of speed traps on the highways, and the legend of "smokeys" was born. Movies of the time showed people using CB radios while out driving around. It became classic for the time.

After the gas crisis of the mid-1970s, there were so many people using CB radios that the initial 23 channels became crowded. Millions of people were chatting on the air from their cars and homes that the FCC had to create an additional 17 CB channels just to help alleviate the congestion. The new channels went online and after a while, CB started to fade. CB radios made their way from under dashboards to shelves in garages as the crackly squelch got tiring for many.

CB did have a brief resurgence in the mid-1990s, but it never stuck. While CB still is used by many radio hobbyists today, it's never reached the proportions it did back in the mid-1970s. It became folklore and everyone, right up to the first lady of the White House, was on the air.

Another CB band that was created was called "Class C" and was intended to be used for radio control purposes. Operating on frequencies between the regular CB channels at the time, radio control CB provided frequencies for persons to race miniature cars, airplanes and even boats. Today, it's called the radio control service and it still is used for radio control toys.



This is a CB radio from the past that I always wanted to own, the E.F. Johnson Messenger 130A. It was made to look like a VHF mobile telephone of the time, and offered 23 CB channels. Imagine the looks you would have had using the handset on this rig driving down the road.

Here's an example of a 27-MHz radio controller used to control a radio control toy.



Here's an example of a 27-MHz radio control toy. The radio control band was formerly Class C CB.

Cont. on page 6

Take A Spin Down CB Memory Lane

One CB band that was proposed never made it. Dubbed "Class E" by the Federal Communications Commission, this new band was proposed to use the 220-MHz ham band – and FM! While it was proposed in 1973, it never took hold, primarily because of amateur radio operators who created a ruckus about losing a valuable band. Hams still wound up losing 220-222 MHz to commercial interests eventually, but again, not without a struggle.

As I think back about CB of the past, I remember the long conversations over the miles I had nightly with people I never met. However, there was a type of event that still exists to some degree these days called a "CB Coffee Break" that was somewhat of a hamfest for CBers. The CBers all would gather in a big hall and some CB vendors would be set up to conduct business, but the general rule of thumb for the event was to be social with other CBers and perhaps even put a CB station on the air to bring in other CBers. If you had QSL cards with your handle and FCC call sign printed on them, you might exchange them with others at such an event. Some coffee breaks drew hundreds of CBers from wide areas.

Today CB is a much more reserved radio service that serves its users as a necessity. Truckers need it to communicate with each other. Others use it because it works for them, perhaps because they don't want the expense of cell phones, but can use CB to talk from the car to their home, especially if they don't stray far from home.

If you'd like to remember some of the colorful language of CB, including those used in other locales and even other countries, check this web page on Wikipedia. You'll enjoy reading through all the slang terms: http://en.wikipedia.org/wiki/List_of_CB_slang

Write in

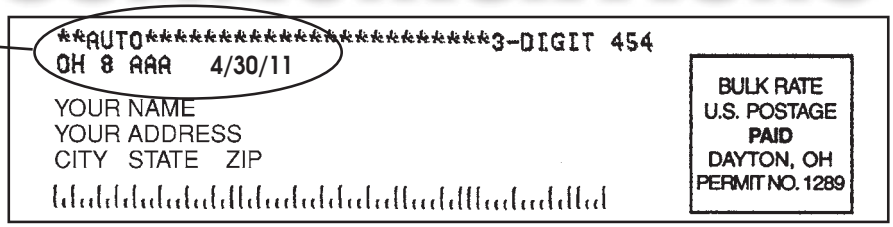
What do you remember about CB days of the past? How long ago were you on the air as a CBer and what do you remember best? Did you have a tube CB rig? You can write to me at cb-natcom@scanning1.com (be sure to put "Nat-Com" in the subject line or your e-mail may wind up in my spam bin). This e-mail address is only for the author of this column.

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Scanning Amtrak





By Jon Van Allen KF7YN

Are you a regular Amtrak commuter or planning a trip via Amtrak? There is a great deal of interesting scanning to be had from sea to shining sea on the nationwide Amtrak rail lines. Going by train is a great way to travel, slow down, chill out and smell the coffee, and pull out that scanner and look for some activity on the train and on down the line. Amtrak has an unenviable record of never turning a profit even though heavily subsidized by the federal government. It costs more to transport people and cargo than ticket sales and freight revenues bring in. This makes Amtrak more affordable than some other forms of transportation in this day and age of high fuel prices and additional fees charged by the airlines.

Narrow banding: Frequency congestion in densely populated urban areas has prompted the need for additional frequencies. In response, the FCC issued a mandate for railroads to comply with a new narrowband channel plan by 2013. It is interesting to note the Association of American Railroads (AAR) Safety & Operations Committee set a target date of July 1, 2010 for implementation. Obviously, the July target came and went. The current channel spacing plan is 15 kHz; the new narrowband plan will be 7.5 kHz which will double the number of channels within the existing VHF allocation. It is possible that some of the new channels could be heard in major urban areas before 2013.

The good news is, no special scanner is required to monitor the action! You can use most any scanner, even basic models. Some scanners have railroad frequencies pre-programmed so all you need to do is search and enjoy! Even after the narrowband frequencies are implemented, most new scanners are capable of 7.5 kHz spacing. My rail scanner is an older Radio Shack Pro-97 which is perfect for the task even though it is now obsolete for rebanded 800 MHz trunked systems. Put your old scanner to some good use!

If you are a regular Amtrak rider, program frequencies and alpha tags for your area. Amtrak crews are reported to use mostly Motorola handheld VHF radios so you'll need to be fairly close to hear the action. Dispatchers and engines use higher power mobile radios and repeaters in some areas which cover many miles across wide open and sparsely populated areas. If you have trouble hearing weak signals, I suggest you replace your stock rubber antenna with the Diamond RH77CA antenna. This highly popular antenna is used by many railroad scanning enthusiasts.

Most train enthusiasts are also photography buffs. Unfortunately in this day and age of post 9/11 paranoia, Amtrak has adopted a misguided policy that limit rail side photo opportunities. Amtrak policy frowns on taking rail side photos but photography is okay on station platforms, as long as you have a ticket. Once onboard, photos are permitted unless otherwise stated. This policy makes no sense but it is the current reality.





While using your scanner onboard, be courteous to other passengers. Amtrak's policy for "personal entertainment" devices should have earphones to avoid bothering other passengers. One question I hear often is "why listen?". Rail comms can be downright interesting and you will learn reasons for delays, slowdowns, etc. Or why your train is about to take a siding while a freight goes by. This happened once on the California Zephyr in the Utah desert, we took a siding while an APL stack train went by.

The story told to me by a friend who works for Union Pacific is that APL (American President Lines) single-handedly saved UP from bankruptcy and as a result, APL container stack trains get priority over all other trains including most military freight. These are the same containers we carry aboard ship.

I encourage reading Ed Muro's excellent article "Monitoring Pennsylvania Station" in the March/April 2010 issue and Ed's "Long Island Railroad" article in the May/June 2009 issue.

Amtrak often uses other railroads' tracks, I have not listed the host railroads but for the purpose of scanning, frequency and segment are sufficient. There are sure to be errors and omissions in this list. Please contact me at the email address below if you have corrections.

Service areas are listed in no particular order.

SUNSET LIMITED

Freq	Segment
160.440	New Orleans Station (NOUPT)
161.190	New Orleans - Huey P. Long Bridge
160.710	East Bridge Jct - West Bridge Jct
160.290	Huey P. Long Bridge – Lake Charles
160.365	Lake Charles - Beaumont TX
160.365	Beaumont - Grayburg
160.875	Grayburg - Gulf Coast Jct Beaumont Sub
160.770	Gulf Coast Jct Beaumont Sub - Houston Terminal
160.770	Houston Terminal and Station
160.665	Houston Terminal - San Antonio
160.515	San Antonio city limits
160.440	San Antonio Station services
161.550	San Antonio – Alpine
160.320	Alpine - El Paso
161.550	El Paso - West El Paso
160.230	West El Paso – Vail AZ
160.320	Vail - Dome AZ
161.550	Dome - Beaumont CA
160.740	Beaumont - Yuma Jct CA
160.815	Yuma Jct – Los Angeles
160.455	Station Services Los Angeles
160.455	Station Services

TEXAS EAGLE

160.920	Chicago 21st St - Joliet
161.280	Joliet - Springfield IL
161.280	Springfield Station
161.280	Springfield Station - Isles
160.440	Isles - Hazel Dell
161.280	Hazel Dell - Carlinville
160.560	Carlinville - Wann (Alton)
161.460	Wann - WR Tower (Granite City)
160.560	WR Tower - Q Tower (E St Louis)
160.500	Q Tower - Grand Ave (St Louis)
160.500	WR Tower - Grand Ave (Alt Route)
160.305	St Louis switching
161.475	Grand Ave (St Louis) - Poplar Bluff MO
160.875	Poplar Bluff MO - Jacksonville AR
160.740	Jacksonville AR - Little Rock - Ensign
160.515	Ensign - Texarkana - Marshall TX
161.460	Marshall - Longview - Big Sandy
161.550	Texarkana - Big Sandy TX
161.145	Big Sandy - SP Junction (Dallas)
161.280	SP Junction - Fort Worth
161.355	SP Junction - Fort Worth
161.190	Fort Worth Terminal
160.560	Fort Worth - Temple
160.470	Temple - Taylor
160.740	Taylor - San Antonio
160.515	San Antonio Terminal Stn Services
160.440	San Antonio

Continues combined with SUNSET LIMITED west of San Antonio

PACIFIC SURFLINERS

161.550	San Luis Obispo - Goleta – CP Los Posas
160.485	Pismo - Surf Dispatch Link
160.545	CP Los Posas – CP Taylor
160.815	CP Taylor - Los Angeles
160.455	Station Services Los Angeles
160.815	Los Angeles – Soto
160.650	Soto – Fullerton
160.560	Fullerton - San Diego

SAN JOAQUIN

Freq	Segment
161.100	Oakland Yardmaster
160.440	Oakland Amtrak Coach Yard
160.800	Oakland - Port Chicago
160.560	Port Chicago - Bixler
160.650	Bixler - Stockton Tower
160.650	Stockton Tower - Atwater/Fluhr
161.385	Atwater - Gregg
160.935	Gregg - Bakersfield Station
161.370	Bakersfield Yard
160.875	Sacramento - Tom Spur
161.550	Tom Spur - Stockton Tower

CAPITOL

160.815	San Jose - Santa Clara
160.740	Santa Clara - CP Coliseum (Oakland)
161.100	Oakland Yardmaster
160.440	Oakland Amtrak Coach Yard
160.800	CP Coliseum - Sacramento
160.875	Sacramento - Rocklin
160.320	Rocklin - Auburn

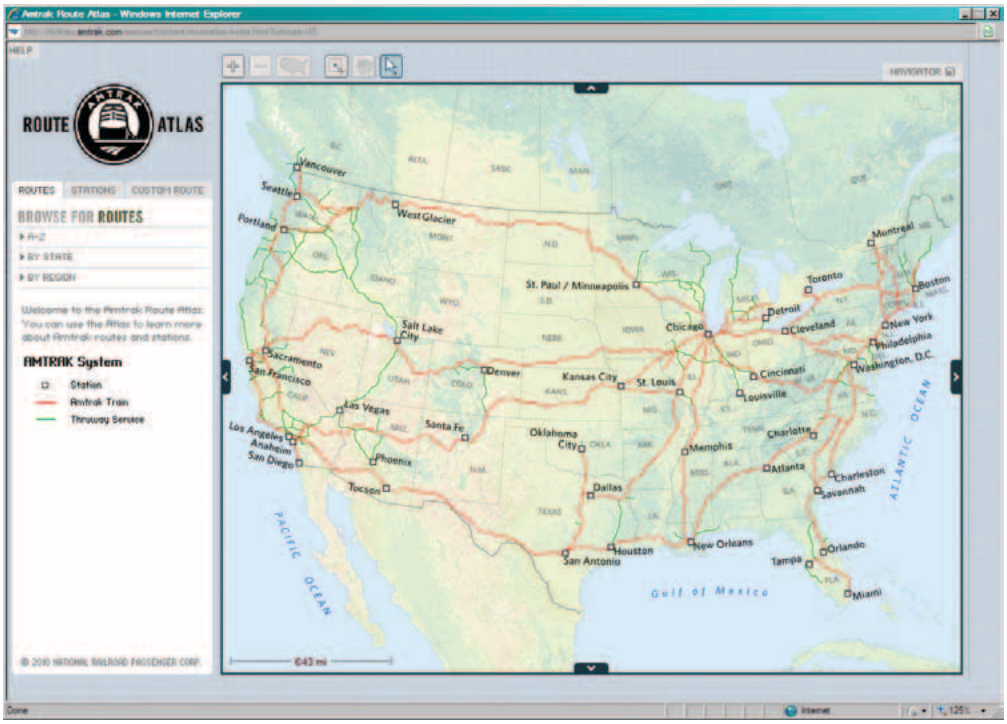
CALIFORNIA ZEPHYR

160.305	Chicago Union Station
160.740	Chicago Union Station
161.100	Chicago - Aurora
161.385	Aurora - Galesburg
160.875	Galesburg Station area
160.695	Galesburg - Halpin IA
161.100	Halpin - Creston
160.905	Creston - Mile Post 466.42
161.415	Mile Post 466.42 - Lincoln NE
160.920	Lincoln - East Heartwell
161.160	East Heartwell - West Pinneo CO
161.100	West Pinneo - East of Denver
160.695	Denver Union Station
161.550	Denver Union Station Switching
160.845	Denver Union Station General Ops
160.695	Denver - Prospect
161.490	Prospect - Mile Post 17.4
160.455	Mile Post 17.4 – East Portal Moffat Tunnel
161.565	East Portal Moffat Tunnel – Winter Park
160.920	Winter Park – Glenwood Springs
160.455	Glenwood Springs – Fruitvale (Grand Jct)
160.920	Fruitvale – Spring Glen (Helper)
160.455	Spring Glen (Helper) – Salt Lake City
161.100	Salt Lake City Station
160.740	Salt Lake City - Kennecott Smelter
160.470	Kennecott Smelter – Alazon
161.550	Alazon – Elko NV (track 1)
160.470	Alazon – Elko NV (track 2)
161.550	Elko – Weso NV (track 1)
160.470	Elko – Weso NV (track 2)
161.280	Weso – Vista (east of Sparks NV)
160.320	Vista – Rocklin CA
160.875	Rocklin – Sacramento
160.800	Sacramento – Emeryville CA

CALIFORNIA ZEPHYR Alt Route Denver – SLC

161.550	Denver Union Station Switching
160.845	Denver Union Station General Ops
160.515	Denver Station - 36th St Yard
160.695	Denver Station - 36th St Yard
160.740	Denver Station - 36th St Yard
161.145	36th St Yard - Borie WY
160.740	Borie - Green River WY
160.515	Green River - Salt Lake City
161.100	Salt Lake City Station

Continued on page 10



continued

COAST STARLIGHT

Freq	Segment
160.455	Station Services Larger stations
160.815	Los Angeles - CP Taylor
160.545	CP Taylor - CP Los Posas (Moorpark)
161.550	CP Los Posas - Goleta-San Luis Obispo
160.485	Surf - Pismo
160.875	San Luis Obispo - Salinas
160.740	Salinas - CP Lick (San Jose)
160.815	CP Lick - Santa Clara
160.740	Santa Clara - CP Colisuem (Oakland)
161.100	Oakland Yardmaster
160.440	Oakland Amtrak Coach Yard
160.800	CP Coliseum - Sacramento
160.875	Sacramento
161.310	Haggin - Dunsmuir
160.875	Alt route Sacramento - Roseville - Binney
160.785	Dunsmuir - Klamath Falls
160.785	Klamath Falls - Calimus
161.550	Calimus - Coalca OR
160.515	Coalca - Portland
161.040	Portland switching
160.350	Portland Station Services
161.250	Portland - N Vancouver WA
161.100	N Vancouver - Nisqually (Centralia)
161.415	Nisqually - Tukwilla
161.160	Tukwilla - Seattle

CASCADES Domestic Service

161.550	Eugene – Coalca OR
(see Coalca – Portland thru Tukwilla – Seattle)	
160.455	Station Services (larger stations)

CASCADES International Service

160.455	Seattle Station Services
161.160	Seattle – Mile Post 8
161.100	Mile Post 8 – Everett
161.250	Everett - White Rock BC – Vancouver
161.100	White Rock BC – Vancouver BC
161.025	Frasier River Bridge
160.695	Colebrook BC

CHICAGO - DETROIT - PONTIAC Wolverine

Freq	Segment
160.305	Union Station - 21st St
160.740	Union Station - 21st St
160.800	21st St - Porter IN
161.505	Porter IN – Kalamazoo MI
160.800	Kalamazoo – Gord
160.590	Gord – Baron (including Battle Creek)
160.800	Baron – Townline (east of Dearborn)
161.070	Townline – Vinewood
160.530	Vinewood – Milwaukee Jct (Detroit)
160.590	Milwaukee Jct (Detroit) – Pontiac
160.530	Milwaukee Jct (Detroit) – Pontiac

CHICAGO – PORT HURON Blue Water

(See Union Stn thru Kalamazoo – Gord)	
160.590	Gord – Battle Creek
160.590	Battle Creek – Port Huron
161.220	Battle Creek – Port Huron

CHICAGO – GRAND RAPIDS Pere Marquette

(See Union Stn thru 21st St - Porter IN)	
160.230	Porter IN – Grand Rapids MI
160.635	Porter IN – Grand Rapids MI

CHICAGO - CARBONDALE

(See Union Stn - 21st St)	
161.190	Chicago (21st St) - Carbondale

CHICAGO - ST LOUIS - KANSAS CITY

(See Union Stn - 21st St)	
160.920	21st St - Joliet
161.280	Joliet - Springfield IL
161.280	Springfield Station
161.280	Springfield Station - Isles
160.440	Isles - Hazel Dell
161.280	Hazel Dell - Carlinville
160.560	Carlinville - Wann (Alton)
161.460	Wann - WR Tower (Granite City)
160.560	WR Tower - Q Tower (E. St Louis)
160.500	Q Tower - Grand Ave (St Louis)
160.500	WR Tower - Grand Ave (Alt Route)

CHICAGO - ST LOUIS - KANSAS CITY (cont.)

Freq	Segment
160.305	St Louis switching
161.220	Grand Ave - River Jct (Jefferson City)
160.470	River Jct - Pleasant Hill MO
161.265	Pleasant Hill MO - Rock Creek Jct
161.010	Rock Creek Jct - Kansas City
161.010	Kansas City Terminal

CHICAGO - MILWAUKEE

(See Union Stn - 21st St above)	
160.770	Chicago-Milwaukee

CHICAGO - QUINCY

(See Union Stn - 21st St above)	
161.100	Chicago - Aurora
161.385	Aurora - Galesburg
160.875	Galesburg Station area
160.815	Galesburg - Quincy

CRESCENT

160.440	Washington Union Station
160.920	Washington Union Station
160.920	Washington – Virginia Ave
161.550	VIrginia Ave – AF (Alexandria VA)
160.410	Virginia Ave – AF (Alexandria VA)
160.950	AF (Alexandria VA) – Atlanta
160.830	AF (Alexandria VA) – Atlanta
160.245	AF (Alexandria VA) – Atlanta
160.920	Atlanta Station
160.740	Atlanta – Austell GA
160.950	Austell – Birmingham AL
161.370	Birmingham Station
160.950	Birmingham - New Orleans
160.440	New Orleans Station

NORTH CAROLINA

160.950	Selma - Charlotte
160.950	Selma - Raleigh (Boylan/Raleigh Tower)
161.100	Raleigh - Cary
160.950	Cary - Charlotte
160.830	NS Dispatcher Links
160.245	NS Dispatcher Links

CITY OF NEW ORLEANS

Freq	Segment
160.305	Chicago Union Station - Union Ave
161.100	Union Ave
161.190	Union Ave - Memphis Central Station
160.920	Memphis - Lakeview MS
161.190	Lakeview - Jackson MS
160.920	Jackson - Fernwood Jct
161.190	Fernwood Jct - New Orleans
160.440	New Orleans NOUPT

EMPIRE BUILDER

(See Chicago Union Station above)	
160.770	Chicago - Milwaukee
161.520	Milwaukee-Mississippi River at La Crosse
160.770	Mississippi River at La Crosse - Hastings
160.690	Mississippi River at La Crosse - Hastings (Alt)
161.250	Mississippi River at Hastings - N of St Croix Jct
160.770	North of St Croix Jct - Merriam Parka
160.560	Merriam Parka - St Paul Amtrak Station
161.100	St Paul switching
161.385	St Paul - Staples
161.160	St Paul - Staples
161.415	Staples - Fargo
161.100	Fargo - Minot
160.920	Minot - Nashua MT
161.100	Nashua - Dunkirk
161.250	Dunkirk - Whitefish
160.920	Whitefish - Sandpoint ID
161.250	Sandpoint - Spokane WA
160.920	Spokane switching
161.040	Spokane switching
161.250	Spokane - Latah Jct
161.100	Latah Jct - Snohomish
161.160	Snohomish - Everett
161.250	Everett - Edmonds (MP 18)
161.160	Edmonds - Seattle
161.250	Spokane - Latah Jct
161.160	Latah Jct - Pasco
161.445	Pasco Terminal
161.415	Pasco - Washougal
161.250	Washougal - Portland OR
160.455	Station Services
160.350	Portland Station Services
161.040	Portland switching

SOUTHWEST CHIEF

161.100	Chicago 21st St - Montgomery IL
161.385	Montgomery - Galesburg
160.875	Galesburg Station area
160.380	Galesburg - Argyle IA
160.560	Argyle IA - Congo MO (E Kansas City)
161.010	Congo MO - Kansas City Union Station
160.650	Kansas City area
161.085	Kansas City Union Stn - Holliday MO (West KC)
161.145	Holliday - Topeka - East Emporia KS
160.650	East Emporia - Ellinor
161.055	Ellinor - Hutchinson KS
160.455	Hutchinson - Las Animas Jct CO
161.190	Las Animas Jct - La Junta CO
160.590	La Junta CO - Lamy NM
160.410	Lamy - Isleta NM
160.590	Isleta - Dalies
160.650	Dalies - E Gallup
161.190	E Gallup - E Winslow AZ
160.935	E Winslow - W Seligman
160.650	W Seligman - Needles CA
160.935	Needles - Minneola (E of Barstow)





SOUTHWEST CHIEF

Freq	Segment
161.085	Minneola - Barstow
160.590	Barstow Yardmaster - Switching
161.085	Barstow -Lenwood
161.190	Lenwood- Riverside
160.650	Riverside - Soto/Redondo Jct
160.815	Soto - Los Angeles
452.900	AMTRAK Terminal Services
160.305	Onboard Manager Western Region
161.520	Onboard Manager La Junta - Kingman
160.455	Onboard Manager Kingman-Los Angeles
160.455	Los Angeles Station Services

FLORIDA SILVER STAR

160.920	Washington - Virginia Ave (DC)
161.550	Virginia Ave - Richmond (Acca Yard)
160.410	Virginia Ave
160.590	Richmond - Charlie Baker (Rocky Mount NC)
160.410	Richmond - Charlie Baker
160.590	Charlie Baker - Wilson
161.370	Charlie Baker - Wilson
160.590	Wilson - Selma
161.370	Wilson - Selma
160.950	Selma - Raleigh
160.830	Selma - Raleigh
160.245	Selma - Raleigh
161.100	Raleigh - Marsten
161.520	Raleigh - Marsten
161.100	Marsten - Hamlet
160.920	Marsten - Hamlet
161.100	Hamlet - Central Jct (Savannah)
160.410	Hamlet - Central Jct
160.590	Central Jct - Ogeechee River
161.370	Central Jct - Ogeechee River
160.590	Ogeechee River - Dinsmore (JAX)
160.320	Ogeechee River - Dinsmore
160.590	Jacksonville Terminal
160.845	Jacksonville Terminal
160.590	Dinsmore - St Johns - Mango
161.520	Dinsmore - St Johns - Mango
160.590	Mango - Tampa - Mango
160.230	Mango - Tampa - Mango
160.590	Mango - Auburndale
160.920	Mango - Auburndale
161.100	Auburndale - Miami
161.520	Auburndale - Miami

LAKE SHORE LIMITED

Freq	Segment
160.920	Boston - Back Bay
160.800	Back Bay - Albany
161.010	New York - Spuyten Duyvil
160.950	Spuyten Duyvil - Poughkeepsie
160.800	Poughkeepsie - Schenectady
161.070	Poughkeepsie - Schenectady
160.800	Schenectady - Syracuse
160.890	Schenectady - Syracuse
160.800	Syracuse - Depew
161.400	Syracuse - Depew
160.800	Depew - Buffalo
160.950	Depew - Buffalo
160.860	Buffalo - Erie
161.340	Buffalo - Erie
160.860	Erie - Cleveland
161.070	Cleveland - Berea
160.980	Berea - CP 285/Toledo
161.070	Toledo Terminal area
160.800	Toledo - Chicago (21st St)

MAPLE LEAF

(See New York - Spuyten Duyvil thru Syracuse - Depew)

160.800	Depew - Buffalo - Niagara Falls
160.950	Depew - Buffalo - Niagara Falls
160.935	Niagara Falls - Toronto
161.415	Niagara Falls - Toronto

NORTHEAST CORRIDOR

160.920	Boston & Springfield - New Haven
160.545	New Haven - New Rochelle
161.010	New Rochelle - New York area
160.650	New York Sunnyside Yard Switching
161.010	New York - Morrisville PA
160.425	Philadelphia 30th St Station
160.650	Philadelphia 30th St Station
160.920	Morrisville - Washington
160.440	Washington Union Station
160.920	Washington Union Station
160.920	Washington Union Station - Virginia Ave (DC)
161.550	Virginia Ave - Richmond (Acca Yard)
160.410	Virginia Ave - Richmond (Acca Yard)
160.590	Richmond (Acca Yard - Brown St Yard)
160.410	Richmond (Acca Yard - Brown St Yard)
160.230	Richmond (Brown St Yard) - Newport News
160.320	Richmond (Brown St Yard) - Newport News

DOWNEASTER

Freq	Segment
160.320	Boston North Station - Haverhill MA
160.590	Boston North Station - Portland ME
161.520	Haverhill - Portland ME
161.160	Haverhill - Portland ME
160.620	Portland Station
161.250	Portland Station

VERMONTER

Washington DC - Springfield MA See Northeast Corridor

160.800	Springfield - Palmer MA
161.205	Palmer MA - St Albans

ADIRONDACK

161.100	Schenectady - Rouses Point
161.415	Rouses Point - Brossard
160.305	Rouses Point - Brossard
161.415	Brossard - St Lambert
160.665	Brossard - St Lambert
161.415	St Lambert - Montreal
160.935	St Lambert - Montreal

ETHAN ALLEN

160.290	Whitehall NY - Rutland VT
161.010	Whitehall NY - Rutland VT
160.710	Rutland VT Yard

EMPIRE SERVICE

161.010	New York - Spuyten Duyvil
160.950	Spuyten Duyvil - Poughkeepsie
160.800	Poughkeepsie - Schenectady
161.070	Poughkeepsie - Schenectady
160.800	Schenectady - Syracuse
160.890	Schenectady - Syracuse
160.800	Syracuse - Depew
161.400	Syracuse - Depew
160.800	Depew - Buffalo - Niagara Falls
160.950	Depew - Buffalo - Niagara Falls

PENNSYLVANIAN

161.010	New York - Morrisville PA (Delaware River)
160.920	Morrisville - Philadelphia 30th St
160.425	Philadelphia 30th St Station
160.650	Philadelphia 30th St Station
160.920	Philadelphia - Overbrook
160.635	Overbrook - Harrisburg
160.980	Harrisburg - 5 miles west of Harrisburg
160.800	5 miles west of Harrisburg - Pittsburgh

CAPITOL LIMITED

Freq	Segment
160.440	Washington Union Station
160.920	Washington Union Station
160.230	Washington - Weverton MD
160.320	Washington - Weverton MD
160.230	Weverton MD - Pittsburgh
161.520	Weverton MD - Pittsburgh
160.800	Pittsburgh - Rochester PA
161.070	Rochester - Berea (CP 194)
160.980	Berea - CP 285 (Toledo)
161.070	Toledo Terminal NS (NYC)
160.305	Toledo Terminal
160.695	Toledo - Chicago (21st St)
160.800	Toledo - Chicago (21st St)

CARDINAL

161.010	New York Penn Stn - Morrisville PA
160.425	Philadelphia 30th St Station
160.650	Philadelphia 30th St Station
160.920	Morrisville - Washington
160.440	Washington Union Station
160.920	Washington Union Station
160.920	Washington - Virginia Ave
161.550	Virginia Ave - AF (Alexandria VA)
160.410	Virginia Ave - AF (Alexandria VA)
160.950	AF - Orange VA
160.830	AF - Orange VA
160.245	AF - Orange VA
160.455	Orange - Clifton Forge
160.230	Clifton Forge - Cincinnati
160.320	Clifton Forge - Montgomery WV
160.410	Montgomery - Cinncinati
160.230	Cincinnati - Indianapolis
161.100	Cincinnati - Hamilton
160.320	Hamilton - Indianapolis
160.800	Indianapolis - Crawfordsville
160.560	Indianapolis - Crawfordsville
161.370	Crawfordsville - Munster IN
160.590	Munster - Thornton Jct
160.530	Munster - Thornton Jct
160.410	Thornton Jct - Chicago 81st St
160.500	Chicago 81st St - 74th St
160.440	74th St - CP 518
160.800	CP 518 - 21st St

Thanks to On Track On Line for updated info.

As always, I welcome your comments and questions. My home email is kf7yn@yahoo.com

Until next time, happy scanning!

Find Scanning Action No Matter Where You Live

Here are some tips on programming frequencies and search ranges.

By Chuck Gysi, N2DUP

In all my travels around the United States, Canada and even other countries in the hemisphere, I have come to realize that there is something to listen to on the scanner, no matter where you are – if you are looking in the right places. It doesn't matter whether you are in the middle of a big city, on a mountaintop or on an island – you can find something of interest on your scanner.

Here are some thoughts on where to start looking on your scanner when you find yourself in a locale far removed from home with a handheld or mobile scanner. It's about to become vacation time for many – even sooner for those who take spring breaks – and with some of the suggestions here, you'll be locked on to active frequencies before you know it during lulls in your travel.

Obviously, public safety is the best place to search for activity on your scanner, no matter where you are located. Every square inch of this nation is protected by public servants who administer law, fight flames and perform rescue functions. Even the smallest communities have these public services that you can hear on your scanner, even if it's much less often than a big city.

Here are some suggestions on where to tune. If your scanner has a service search function for public safety, use it. It knows the frequencies to search out and will stop when it hears nearby local activity. If you don't have a service search or don't know how to use it and can figure out how to search between two frequencies on your scanner, you may want to try searching some segments of the VHF and UHF bands.



Monitoring aircraft is the easiest scanning target and you are guaranteed to hear airplanes in flight on your scanner no matter where you are located. Search the 118-137 MHz band for private and commercial airplanes such as this 747 from Delta.

First of all, it's not recommended to search the VHF low bands of 30-50 MHz any more for police/fire/EMS calls because so many agencies have migrated from that band to much higher frequencies such as 800 MHz. Only a few rural areas still are on VHF low band. However, you do want to check the VHF public safety segments from 150.750-151.475, 153.740-156.210 and 158.730-159.465 MHz. On UHF, check the 453-454 and 460-460.625 MHz segments.

If you are in a larger metropolitan area, you may need to check higher frequencies for public safety communications. In the nation's top 20 metropolitan areas, spectrum from 470-512 MHz is used in 6-MHz chunks for public safety and business users. For instance, the Philadelphia area is on 500-506 and 506-512 MHz (although you only need to search 500-503 and 506-509 MHz because the rest of the band is for repeater mobile inputs only). In addition, you may need to check the 800-MHz band for public safety, such as the now-used and rebanded 851-860 MHz portion and perhaps the 866-869 MHz portion in areas that haven't rebanded to the new public safety band. Lastly, you also may find some businesses in the 935-940 MHz band in much larger metropolitan areas.

If you want to zero in on public safety radio systems when you travel, you should check the listings at www.radioreference.com and those posted by the Bearcat Radio Club at http://www.bearcat1.com/QuickFrequencySearch/

Cont. on page 14

Uniden

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Find Scanning Action continued

Another good chunk of spectrum to search no matter where you are in the country is business frequencies. You'll hear school buses, veterinarians, factories, tow trucks, security teams and much more. If it's educational or business related, you'll find activity on business frequencies. Here's a list of band ranges you should check out for business activity wherever you are:

UHF repeaters, base stations and mobiles: 461-465, 451-453

UHF low-power handhelds: 467.750-467.925, 466-470

VHF base stations, mobile and handhelds: 151.505-151.955, 154.515-154.600

I think I find business frequencies in use just about everywhere I have been in the country. It would be odd not to find something on those frequencies.

When it comes to business frequencies, several channels are set aside for use anywhere in the country and the users don't have to coordinate their use of the channel. That also means they accept any interference they may receive from other users on the same frequencies, but the likelihood of that happening usually is remote. Here are the "itinerant" user frequencies that you should always have in your scanner. You may hear security details, circuses setting up, department store personnel, race teams and more. Look at these primary itinerant frequencies to monitor:

UHF repeaters, base stations and handheld radios: 464.500, 464.550, 451.800

UHF handhelds and mobile radios: 469.500, 469.550, 456.800

VHF base stations, mobile and handheld radios: 151.625, 151.505, 158.400

While there are some new narrowband itinerant business frequencies, they are so rarely used at present, it's not worth checking them.



A police officer uses her two-way radio at the scene of an incident. Check public safety frequencies no matter where you are to discover police communications nearby.

One group of frequencies also worth monitoring no matter where your travels take you are the FRS/GMRS channels on UHF and the newer MURS channels on VHF. These frequencies are used by department stores such as Walmart, personal users, restaurants, security details, factories and more. You just never know who you will find using these inexpensive blister-pack radios everywhere in the country. Here's where you need to search:

FRS and GMRS: 462.550-462.725, 467.550-467.725

MURS: 151.820, 151.880, 151.940, 154.570, 154.600

There is one last band that I would recommend you monitor no matter where you are, even if you are in the most remote area of our country. The aircraft band always has frequencies in use because the signals from airplanes tens of thousands of feet in the air travel for hundreds of miles. You should be able to hear planes high in the air communicating to control towers and company dispatchers almost everywhere.

To hear planes, you're best to search from 118-137 MHz. If you have a scanner capable of searching the military air band, check out 225-380 MHz to hear military flights en route over your head.



A two-way radio is at arm's length reach by a private security guard. Find security details on business, itinerant and MURS radio channels listed in this article.

Armed with these frequencies and search bands, you shouldn't ever walk around with a scanner that isn't picking up radio communications. It's almost sure fire that if you program in some of these channels and ranges, you'll hear radio communications on a regular basis no matter where your travels take you.

Write in

What interesting frequencies have you found while traveling? Do you scan certain frequencies no matter where you are? 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). This e-mail address is only for the author of this column.

The HomePatrol-1 is a great scanner, but...



The HomePatrol-1 Receiving CB Channels

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If you want to be able to program your radio on your own, then we can help you with that as well. We have the largest amount of frequency resources on the internet. Yes, the ***LARGEST***. More than any other web-site, ***ANYWHERE***. We have frequencies, talk group ID's, radio codes & signals Scancat .RSD files and much more. There are literally millions of frequencies from across the USA, Canada, UK, Australia and many more.

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Scanning The New York State Fair



By Jim Sutton, N2OPS

As you pull into your parking spot you quickly realize that you are entering the equivalent of a major city with its own smoothly functioning infrastructure. You are one of around a million people that will visit the New York State Fair in Syracuse, New York.

It takes efficient communications to keep the New York State Fair safe and running smoothly. For the scanner listener it is an added bonus to a great day. Not only will we examine what there is to hear at the New York State Fair, but we will offer tips for listening at other state fairs across the country.

NEW YORK STATE POLICE

Law enforcement communications will be the primary listening at the state fair. New York State Police provide law enforcement for the state fair. They use 800 MHz conventional repeaters. Each year they choose from the following five repeater frequencies:

Channel	Frequency	CTCSS
1	853.9375	127.3
2	853.9500	146.2
3	853.9625	167.9
4	853.9750	192.8
5	853.9875	156.7

New York State Police use statewide car to car 154.665 / 110.9 for perimeter operations.

At other state fairs law enforcement may be provided by county, regional or local agencies.

THE highlight of our annual trip to the New York State Fair is the New York State Police Exhibit. The show put on by the New York State Police Special Operations Response Team is truly spectacular!

RURAL METRO EMS

Rural Metro ambulance handles EMS at the New York State Fair. EMS communications are on 155.295 repeating on 150.935 CTCSS 146.2.

EMS will usually be on foot or bicycle as the crows make ambulances and fly cars impractical.

There may be instances where local volunteer ambulance personnel may provide some or all EMS services at a state fair.

FIRE DEPARTMENT

The Solvay Fire Department has a station at the northwest corner of the fairgrounds. They have a fireground frequency of 45.32 with a CTCSS of 82.5.

Onondaga County was moving to a UHF P25 trunked system in 2010. Basically there will be little state fair activity on the primary frequencies of any agency.

Continued on page 18



NYSF State Police Car



NYSF State Park Police Car



NYSF Rural Metrol Ambulances



NYSF State Police Boat and Motorcycle

Scanning The New York State Fair continued

AMAUSEMENTS AND CONCESSIONS

Commercial interests at the New York State Fair communicate on a potpourri of VHF high band and UHF frequencies.

VHF ITINERANT/MURS

These VHF frequencies promise to be alive with activity. Virtually every kind of activity can be heard. At the New York State Fair the action on these frequencies is non-stop.

VHF Dot/MURS Frequencies	Designator
151.505	Itinerant
151.625	Red Dot - Itinerant
151.820	MURS 1
151.880	MURS 2
151.940	MURS 3
151.955	Purple Dot
154.570	MURS 4/Blue Dot
154.600	MURS 5/Green Dot
158.400	Itinerant

UHF ITINERANT/FRS/GMRS

The following UHF frequencies promise to be alive with activity. Virtually every kind of activity can be heard often in many languages. The GMRS and FRS frequencies will be hopping with activity. It is especially interesting to hear family members debate about what to do next. At the New York State Fair the action on these frequencies is non-stop as well.

DO YOUR HOMEWORK BEFORE YOUR VISIT

1. Check the various scanning forums and other scanning websites. Even if they don't list specific state fair frequencies they usually list special events and TAC frequencies and talkgroups for the area. Rarely will regular frequencies and talkgroups be used at a state fair. They are a separate world with their own operations.

2. Ask for help on the forums. Scanner listeners are usually eager to help. Another source of help is local amateur radio clubs that cover the state fair you want to visit. Many ham radio operators add state fair frequencies to their handheld radios.

3. Check out the commercial interests on the FCC website. Be advised very few of the businesses are licensed. You may well luck out and find some frequencies.

continued

UHF Dot/GMRS/ FRS Frequencies	Designator
462.5500	GMRS 1
462.5625	FRS 1/GMRS splinter
462.5750	GMRS 2 White Dot
462.5875	FRS 2/GMRS splinter
462.6000	GMRS 3
462.6125	FRS 3/GMRS splinter
462.6250	GMRS 4 Black Dot
462.6375	FRS 4/GMRS splinter
462.6500	GMRS 5
462.6625	FRS 5/GMRS splinter
462.6750	GMRS 6 Orange Dot
462.6875	FRS 6/GMRS splinter
462.7000	GMRS 7
462.7125	FRS 7/GMRS splinter
462,7250	GMRS 8
464.5000	Brown Dot - Itinerant
464.5500	Yellow Dot - Itinerant
467.5625	FRS 8
467.5875	FRS 9
467.6125	FRS 10
467.6375	FRS 11
467.6625	FRS 12
467.6875	FRS 13
467.7125	FRS 14
467.7625	J
467.8125	K
467.8500	Silver Star
467.8750	Gold Star
467.9000	Red Star
467.9250	Blue Star



NYSF Rail Road Museum

4. Photos from the state fair can help you identify who provides law enforcement, EMS, fire and other emergency services. Enter the state fair in Google or another search engine and study the photos. A little detective work can yield some good insights into who is communicating and what band they are on.

5. Note the rubber antennas on the handheld radios. A 6 inch antenna the size of your little finger will be for VHF high band 148-174 MHz. A slender 6 inch or stubby antenna will usually be for UHF 450-512 MHz.

In some cases the slender antenna can be for 800 MHz which can be either part of a trunked system or conventional channels. In rare instances a large longer antenna around 8 inches will be for low band 30-50 MHz.

DURING YOUR VISIT

With all possible frequencies and talkgroups in your scanner be ready to take notes. A full length scanner antenna will greatly increase your range over the typical duck antenna. This is especially vital as nearly everything you listen to will be from hand held units.

AFTER YOUR VISIT

Share your findings with other scanner listeners by posting your confirmed and



NYSF Trooper Directing Traffic

Term	Definition
Dot	Symbol on the radio and/or carton to indicate the frequency
FRS	Family Radio Service 0.5 watts
GMRS	General Mobile Radio Service licensed to families
Itinerant	Frequencies for businesses that move about in their operation
MURS	Multiple Use Radio Service 1.0 watts for commercial and family use
Splinter	GMRS frequencies shared with FRS 5.0 watts
Star	Symbol on the radio and/or carton to indicate the frequency

Continued on page 20



Duck Antennas

Scanning The New York State Fair

continued

unidentified frequencies on any local or state forums. Ask for additions or corrections. Be sure to include CTCSS/DCS tones, talkgroups, codes and any terms used on the air. Be sure to indicate if what you are listing is a guess.

Then watch your list grow year after year. You can make a difference for next year's scanner listeners.

SCANNER MANNERS

Headphones are a must at the state fair. The ambient noise will make it nearly impossible to hear from the scanner's speaker or even a lapel mic.

There is no good to be accomplished from attracting attention to your listening. Some states and localities have listening laws that could put you in hot water.

Be safe and courteous by using headphones or an earphone. Those in your group with no interest in scanner listening will appreciate your choice.

Keep your eyes open for other scanner listeners. Don't be afraid to strike up a conversation and compare notes. If local ham radio operators have a setup be sure to check them out for frequency information. There may even be a simplex frequency used by hams at the state fair.

If your state is like New York with mobile scanner laws, be sure to pack your handheld scanner away in the trunk.



NYSF State Police Show

NYSF State Police





NYSF State Police Radio

NEW YORK STATE FAIR MASTER FREQUENCY LIST

Special thanks to Leonard Redhead KC2CNY, for his labors in compiling the best state fair frequency list to be found anywhere. We are grateful for his sharing his list for this story.

Be sure to check Leonard's site prior to your visit to the New York State Fair.

FCC Frequency Lookup
http://fjallfoss.fcc.gov/General_Menu_Reports/engineering_search.cfm?accessible=NO
New York State Fair Official Website
http://www.nysfair.org/
New York State Fair Frequencies
http://www.scanningcny.com/nys_fair.html
State Fair Dates
http://fairdates.com/

The New York State Fair offers many opportunities for family fun at little or no additional cost to the admission fee.

Your scanner will greatly enhance your experience hearing the action live as it happens.

Until next time may your signals be strong, your static be few. ●

Dobbins Joint Air Reserve Base


US Navy



C-130

A recent trip took me over a large stretch of Interstate 75. Some sixteen miles north of Atlanta, Georgia I drove by the Atlanta suburb of Marietta where we find our topic for this issue's column Dobbins Joint Air Reserve Base (JARB).

By: Mark Meece

In 1940 during the eighth year of his Presidency, Franklin Delano Roosevelt chose as chief of the newly created Civilian Aeronautics Administration (CAA), General Lucius D. Clay of the Army Air Corps. This new organization was heavily involved in the construction of some 450 to 500 airfields for preparation for war should the United States become involved in the escalations of hostilities. The Civilian Aeronautics Administration proposed to build a modern paved airfield in Cobb County on land provided by the local government. Area leaders saw potential in the project that could also provide factories for defense manufacturing and aiding the local labor force and economy. Cobb County administration officially presented the airport project on October 24 which included purchase options for three possible sites. Months later on January 24, 1941 the Atlanta City Council endorsed the project by passing a resolution on it. At that time the primary airport for Atlanta was Candler Field, now better known as Hartsfield-Jackson Atlanta International Airport. The new airfield in Cobb County would also act as a reliever airport to Candler Field.

The county issued bonds to purchase 563 acres of land about three and half miles southeast of Marietta, along the western edge of newly built U.S. Highway 41. $400,000 was apportioned by the CAA for the construction of two 4,000 foot runways. When the W.L. Florence Company won with a low bid of $290,000, a third runway was added to the project. On July 14, 1941 work began on constructing the new airfield. In August, Georgia Air Services and Gulf Oil Corporation reach an agreement to lease the airport upon completion for annual fee of $12,000. In that era the most revered aviator was America's World War I flying ace Eddie Rickenbacker. After that war he had gone to become the leader of Eastern Airlines. It was decided to name the new air facility Rickenbacker Field in honor of Eddie and he gave his consent in September 1941. Also during September, the United State Navy asked for permission to use the new airport for flight training of naval aviators. Since March of 1941 the Navy had been using the nearby Naval Aviation Reserve Base Atlanta, which is now DeKalb-Peachtree Airport. The airfield was dedicated in October 1941 despite still being under construction.

Construction of the facility quickly accelerated after the Japanese attack on Pearl Harbor while the founder and president of Bell Aircraft Company, Lawrence Dale Bell, was conducting a survey of the site for a possible government-financed aircraft factory. This time period also saw the Department of the Navy proposal to take over the new facility as an auxiliary naval air station and sought due process of land-condemnation. The Department of War decided not to contest the move and look elsewhere to build a factory. This went completely against the wishes of the local government whom appealed directly to Frank Knox, Secretary of the Navy to change their plans. In short, the appeal was heeded and the Navy yielded its claim on the facility leaving control to the Army Air Forces. Days later on January 23, 1942 local leaders received the news they were waiting for. It was announced by Bell Aircraft Company and the Department of War that an aircraft factory would be built near Marietta employing a workforce of close to 40,000. Several weeks later the War Department made the

Continued on page 22

Dobbins continued

announcement that the airfield would be renamed from Rickenbacker Field to Marietta Army Airfield. On June 6, 1943 Marietta Army Field was officially activated as personnel from the 58th Bombardment Operational Training Wing were housed in tents. 42 officers and 356 men were stationed on site by the end of June. As Marietta Army Airfield began operations, the primary mission was acceptance testing of B-29 Super fortress heavy bombers for the U.S. Army Air Forces, modifying B-29s, and the operation of an Army Air Depot. It was not until November 1943 that barracks for personnel stationed at the base were completed. When January 1, 1944 arrived, the population had risen to 73 officers and 1,263 enlisted personnel stationed at the base.

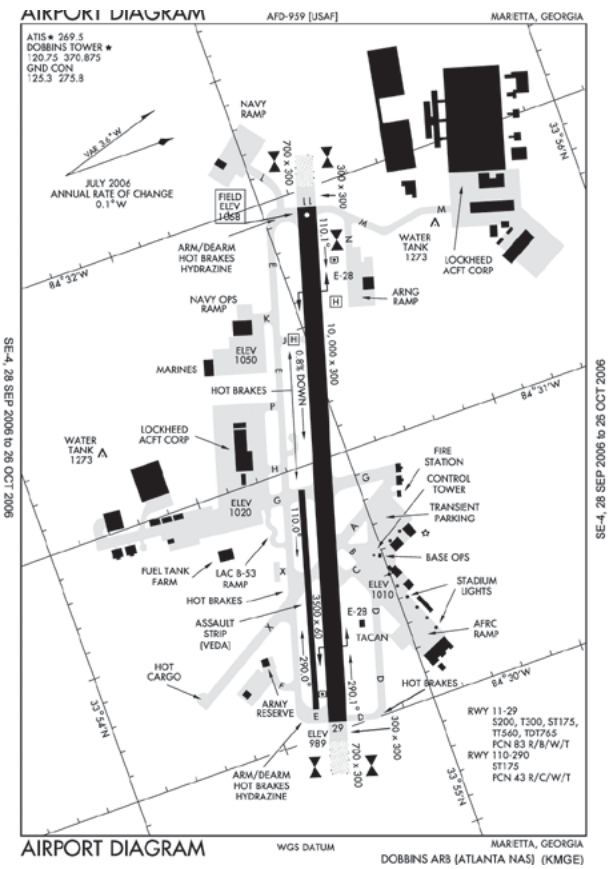
The Bell Aircraft Company's manufacturing facility located adjacent to the airfield was completed in the spring ready to begin making the B-29 Super fortress. The Department of War's "Defense Plant Corporation" financed the construction of the factory and was designated "Plant #6". The first B-29 was completed on schedule soon followed by the first test flight on November 4, 1943. B-29 production at the factory steadily increased throughout 1944 that by the fall of that year the output of aircraft exceeded the requirements of the Department of War. Bell Aircraft was able to produce 357 B-29As by January 1945, after which production switched to the B-29B. By the time the plant closed down in January 1946, 311 B-29Bs had been produced Bell Aircraft saw a workforce of 28,263 at its height.

As World War II came to a close, Marietta Army Airfield remained in operation and became the home to the Georgia Air National Guard and Air Force Reserve units. On August 20, 1946, the 128th Fighter Squadron was the first post-war ANG to activate at Marietta flying the P-47 Thunderbolt. After the formation of the United States Air Force in 1948, the base was re-designated Marietta Air Force Base. It was renamed in 1950 in honor of Marietta native Captain Charles M. Dobbins. Captain Dobbins as a transport pilot was killed on July 11, 1943 near Sicily.

For five years the Bell Aircraft Plant #6 remained closed and unused when in 1951 the Lockheed Aircraft Corporation reopened the plant to modify B-29s for the Korean War. They would later build B-47 Stratojets for Boeing and add a modification program for the B-47. To meet the work for these modified B-47s an additional 10,000 × 300 ft was added. In more recent years aircraft including C-130 Hercules, C-141 Starlifter, and C-5 Galaxy have been built by Lockheed Marietta at the facility.

As the decade of the 50s came to a close, the Atlanta Naval Air Station moved to the southwest portion of the base where they remained until the base closed in September 2009 in accordance with the 2005 BRAC. The State of Georgia purchased the portion formerly used by NAS Atlanta and consolidated the operations of the Georgia Army National Guard, renaming it as the General Lucius D. Clay National Guard Center. Today the GA Army National Guard operates their fleet of UH-60 Blackhawk helicopters from the base.





Dobbins continued

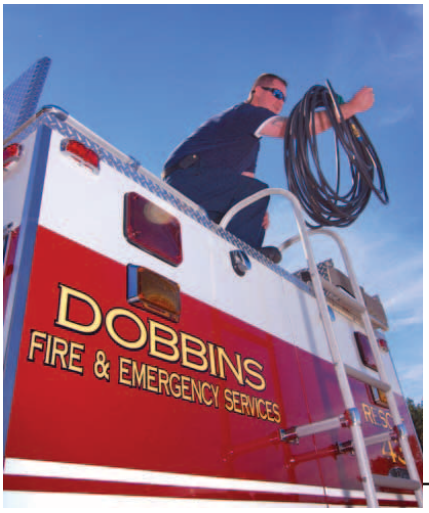
Lockheed completed a merger in 1995 with Martin Marietta to become Lockheed-Martin where they operate Plant #6 still producing C-130 Hercules, F-22 Raptor and the Joint Strike Fighter aircraft.

In the past few decades Dobbins has survived several rounds on the Department of Defense Base Realignment and Closure list. Today Dobbins JARB sees a lot of activity on its two runways. The main runway 11/29 is a 10,000 x 300 ft paved runway, while runway 110-290 is a 3,500x60 which runs parallel to 11/29 is referred to as an "Assault Strip".

The host wing at Dobbins JARB is the 94th Airlift Wing which is organized under the Air Force Reserve Command, Twenty-Second Air Force. Among other duties the 94th AW is responsible on maintaining the airfield which is also used by NAS Atlanta and Lockheed-Martin/Air Force Plant #6. Training of active duty and reserve aircrews for the C-130H is the primary mission of the 94th AW. In TABLE 1 we list the various units and their aircraft stationed at Dobbins JARB.

TABLE 1

USAF
94th AW
700th AS C-130H
GA NG
1/171 ARN
Companies A-E UH-60
Company H C-23



In TABLE 2 you will find a listing of confirmed frequencies confirmed in use at Dobbins JARB.

TABLE 2

Dobbins Joint Air Reserve Base (KMGE)

AERONAUTICAL OPERATIONS

120.22500	Ground Controlled Approach
120.75000	Dobbins Tower
121.00000	Atlanta Approach/Departure
134.12500	Ground Controlled Approach
165.01250	Maintenance
268.70000	Atlanta Approach/Departure
275.80000	Ground Control
346.80000	Ground Controlled Approach
370.87500	Dobbins Tower

SUPPORT OPERATIONS

143.450/142.155		USAF MARS
165.11250	97.4 PL	Base Operations
165.13750		Maintenance
165.16250		Maintenance
165.26250	97.4 PL	USAF Police
173.58750		Ramp Vehicles/Fire/Crash

Dobbins is also listed as a part of the Federal Protective Service Georgia trunked radio system. Dobbins is listed as Site 4 on this system. In TABLE 3 we list all the known information for Dobbins' use of this system. Since they are using digital voice, you will need a digital scanner in order to listen.

TABLE 3

SYSTEM: Federal Protective Service GA

TYPE: Motorola Type II Smartnet

SYSID: 750D

VOICE: Analog and APCO-25 Common Air Interface

FREQUENCIES:

406.76250c 406.96250a 407.56250a
407.86250 408.96250c
c=control channel
a=alt control channel

CUSTOM TABLE:

Base	Spacing	Offset
406.3000	12.5	380

DOBBINS TALKGROUPS:

48032	D	Crash Net
48048	D	Ground Control
48080	D	Fire Dispatch
48096	D	Fireground
48128	D	Fire Private
48192	D	Fire Tactical
48208	D	Police Ch 2
48384	D	Base Operations
48400	D	700th Airlift Squadron
48416	D	94th Maintenance Group - Ch. 1
48432	D	94th Maintenance Group - Ch. 2
48752	D	Police - "Victor"

D=Digital



Lockheed Martin-Marietta operate an analog trunked radio system for their operations at the base we list it in TABLE 4.

TABLE 4

SYSTEM: Lockheed Martin-Marietta
TYPE: Motorola Type II Smartnet
SYSID: 5736
VOICE: Analog

FREQUENCIES:

935.73750 936.67500 937.18750
937.67500 937.68750 937.70000
937.71250c 937.72500c
937.73750c 937.75000c
c = control channel

TALKGROUPS:

624	Building Services
912	Dobbins Fire/Rescue
944	Dobbins Ground Control (Simulcast)
1136	Lockheed "E" Units
1584	Engineering
1808	WAR EAGLE
1840	F-22 Raptor group Ch 2
1872	F-22 Raptor group Ch 1
2064	Lockheed Security
2320	Lockheed "3##" units

In 2010 Dobbins JARB hosted The Wings Over Atlanta air show which featured the Navy Blue Angels and Canadian Snowbirds, also included was an Open House of the base. It appears they have scaled back this event to every other year as I do not see it on the schedule for 2011. However, in TABLE 5 we have a list of frequencies heard at the 2010 show.

TABLE 5

120.75000	Airboss/Dobbins Tower
123.1500	Air show discrete
139.8125	USN Blue Angels
272.1000	Canadian Snowbirds
275.3500	USN Blue Angels Solos
284.2500	USN Blue Angels Diamond
305.9000	Fat Albert
346.5000	USN Blue Angels Check List
396.8750	ISR CH. 1 (Parachutists and Ground Control)

The entire Atlanta metro area is a busy scanning environment, if you find yourself in the area, plug these in and please let us know if you find anything new. Lastly a shout out to the members of the group ScanAtlanta who helped fill in some of the information above, thanks ya'll! ●

THE FINAL FRONTIER - What becomes of our gear when we are gone?

By Ed Muro - K2EPM

It is hard to believe but I have been writing articles about the radio hobby on a regular basis for about 17 years now. My guess is I have authored over several hundred articles on the subject. What is even more frightening is how long I have been reading articles about the radio hobby, which would go back to my earliest days as an avid CBer and SWLer around 1974. My first scanner was a Christmas gift from my parents in 1976. If I have written several hundred articles on the subject then I must have read several thousand articles and books over the years.

Over the years I have written and read articles that cover a lot of different subjects within the hobby from product reviews, to programming trunked systems, antenna theory, buying used scanners, running hamfests, DXpeditions, mobile radio installations, Medium Wave DXing, etc. I don't think there is an area of the hobby that I haven't written or read about.

Yet, with all of this exposure to the written word of the radio hobby the one subject I have never come across in a radio article is death. If you are like most, you may be a bit squeamish when it comes to the subject of death. Most likely, it is something you would rather not think about. Chuck Gallozzi once said: "To think of and prepare for death is not surrender, but victory over fear." At this point you must be thinking: "Has ole K2EPM lost his mind?" No, but over the years I have lost a lot of friends and relatives, not only in this hobby but in all walks of life and I have often wondered what has happened to their radio equipment?

Too many times I have seen someone pass away and then the vultures come out and offer to "help" the widow of the SK (Silent Key: Ham speak for a ham that has passed away) dispose of their loved one's radio gear. All too often I hear these jokers state: "I am going over to help John's wife sell his radio equipment and get the most she can for it." Yea....while lining your pockets or telling her that her deceased hubby's Icom 706 is worth 40-bucks on the used market.

Me, I plan on being here another 40-50 years but I recently took four of my friends and instructed them that my wishes were that my wife is to give all of my radio gear to my son.

What will become of your radio gear when you are gone? Will it be passed down to future generations, donated to a charitable cause or sold on eBay or at a hamfest....or worse yet wind up in the trash. I will make a few suggestions but by no means is the purpose of this article to tell you what should be done with your gear when you die; my purpose is to bring to you an awareness of death.

Look, for those of us who are die hard radio buffs our radio "stuff" is a big part of what makes us who we are. Our collection of equipment and stuff may not only hold our history in the radio hobby but some of it may be generational. It would be a shame to see your life long collection of QSL cards end up at the local land-fill or your Zenith Transoceanic sold at a garage sale for seven bucks.

As people think about the end of life, there are a wide variety of concerns to address and its going to be hard enough to discuss where your life insurance policies are and how the property taxes get paid, the last thing that may come to mind is who is going to get the scanner or qsl card collection. The best way to avoid having stuff end up in the trash or sold on eBay is to discuss with your family what your wishes are and to put them on paper. If you live alone, then maybe spell out your wishes on paper and leave it with a trusted friend in the hobby. If you really have strong feeling towards your gear, include it in your will.

Some times due to a desire for "closure" a loved one will rush to dispose of your gear; this is when they are most vulnerable to being swindled. So, if you have no one specific you want to leave your gear to my first advice is to instruct your loved one not to do anything with your gear for 6 to 12 months. Trust me, there's no such thing as closure. Three years later I am still dealing with the emotions left behind after my father's passing but at least with the passage of time one can think more clearly and research what a particular item might be worth.

So what do you want to happen to your collection when you are gone? If you have specific pieces of gear you want to go to specific relatives or friends spell it out on paper; if the item has some historic meaning include that too. I have a particular multi-meter in my collection that belonged to my grandfather. If my

continued

son knows this he might be more inclined to keep it instead of selling it on eBay for ten dollars.

What if you have no one that would utilize your gear when you pass? In that case I would suggest either donating it to someone or a group who can use it or sell it and either have the proceeds given to your family or donated to a good cause.

DONATIONS:

Clubs:

Do you belong to a local radio club? Does the club have a club station that would be able to use the equipment? Are there some kids or financially struggling people in the club who would put the equipment to good use and care for it? Could the equipment be sold and the proceeds donated to the club?

School:

Is there a local school or college that has a club station who could use the equipment?

The Ham Radio Club of Junior High School 22 in NYC has been helping get ham radios in schools around the country since 1980.The Radio Club of Junior High 22-NYC is associated with the FCC-granted Amateur Radio call WB2JKJ and is New York City's largest Ham Radio Club. Additionally, this organization is the Nation's only full time non-profit organization that is striving to have Amateur Radio introduced into school curriculum throughout the nation. Their EDUCOM program fosters this theme through the "Education through Communications"concept... Through Amateur Radio contacts, the students have found an appealing and rewarding way to understand math, social studies, varying world cultures, history, written communications, and other traditional study areas. The club is a recognized 501 (c) (3) charity and donations are tax deductible. For more information on donating equipment to this club call (516) 674-4072 or check them out on the web at: www.wb2jkj.org.

Museum:

Is there a local radio museum that would benefit from the collection? If there is an item of significant historical significance maybe the ARRL would be interested in it.

Selling your equipment:

Your family could sell your equipment. But, this is where I feel they are most vulnerable if they don't have any idea what your equipment is worth, what it meant to you, and if it has any historical significance. There are many ways to go about selling your equipment. The two easiest ways would be to have a trusted ham friend sell it at a hamfest or have your family sell it on eBay. I feel they will probably get their biggest bang for the buck on eBay or eHam.

QSL Cards:

Old QSL Cards are an important part of Ham Radio History that need to be preserved. The legacy of "Old Time" Ham Radio Operators can be found in the QSL Cards they left behind. A QSL card is used to acknowledge the reception of a radio station. QSL cards are also part of ham radio to confirm that two stations were in contact. Bob Green, W8JYZ, has been helping preserve QSL cards for years, you can contact Bob via his website at: http://oldqslcards.com/

Look no one likes to talk about or think about death, especially our own but why not help your loved ones out and leave some instructions on what you want done with your gear and give them some idea of the value of each piece of equipment. Maybe your Bearcat 60XLT is only worth 20-bucks but I wouldn't want to see your wife selling a Spartan Blue Bird for 20-bucks. ●

Be sure to check for the latest frequencies on the Nat-Com web page www.nat-com.org

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By T.J. "Skip" Arey, N2EI

TIS For Scannists



We've all seen the signs as we travel major highways or at entry points to airports, national parks and other points of interest along the road. "TUNE RADIO TO "XXX" AM FOR TRAFFIC INFORMATION." The sign may be accompanied by flashing lights to indicate the importance of the information available. When we see this, we dutifully switch our car receiver from whatever we are listening to and monitor the often scratchy warbling audio of a looped message about things along the way that may force us to rethink our current travel route.

Traveler's Information Stations (sometimes called Highway Advisory Stations) occupy a unique place in general radio operations. Understanding a bit about their design characteristics and practical applications will give the scanner user another tool for interesting listening.

TIS NUTS AND BOLTS

TIS transmitters are licensed by the FCC. Only governmental agencies, park districts or similar authorities can apply for a TIS system license.

TIS systems are usually limited to a maximum power of 10 watts, using a vertical antenna. The antenna height above ground is limited to 15 meters (49.2 feet). Another type of TIS system common in tunnels and on access roads to airports or other areas of interest uses a radiating cable (often called "Leaky Coax") as the antenna system. This type of transmitter can run 50 watts. Some larger airports utilize both radiating cable and vertical antenna transmitters to give full area coverage and provide backup service.

In areas where evacuations are a real possibility, (hurricanes, tornados, industrial sites, nuclear plants, etc.), the FCC can grant power waivers in anticipation of such emergencies. In these locations, it is possible for a TIS transmitter to operate at normal legal power levels but crank up to 100 watts when an emergency is declared. By the way, many TIS transmitters operate on solar-power or have battery back-up power systems that allow them to continue to broadcast information during power outages. This is also useful to know in an emergency situation.

Traditionally TIS transmitters were limited to operation on 530 kHz and 1610 kHz AM. This puts their signals at the very top and bottom of the AM Broadcast band at the time the TIS system was put into place in 1977. Since that time, the AM Broadcast band has been extended to 1710 kHz. TIS systems can now be found on almost any frequency on the AM band.

JUST THE TIS FACTS. MA'AM

TIS stations are currently very strictly limited in the information they are allowed to broadcast. The FCC's regulations state clearly that a TIS can only transmit "noncommercial voice information pertaining to traffic and road conditions, traffic hazard and travel advisories, directions, availability of lodging, rest stops and service stations, and descriptions of local points of interest. " This rule is currently interpreted so strictly that the FCC has issued violations to TIS stations for retransmitting NOAA Weather broadcasts. The stations also regularly transmit a full identification with station location and call sign, making for easy confirmation for the radio hobbyist.

PROPAGATION BEYONDS THE LIMITS

Most radio hobbyists are aware that AM broadcast band signals can change their characteristics due to time of day and atmospheric conditions. It is not unusual for signals to travel longer distances than their intended coverage area. This is the reason commercial AM broadcasts stations are often required, by the terms of their license, to reduce their power level and/or change their antenna pattern at local sunset. TIS stations take no such steps as the sun goes down. Next time you are near an AM receiver after local sunset, try tuning 530 and 1610 kHz. It is likely you will not only hear your nearest TIS stations, you may hear others creeping in under the stronger locals. If the receiver is a portable, you may try turning it to change the orientation of the internal antenna. By doing this, you may be able to null the stronger local signals and better hear the weaker, more distant signals. AM broadcast radio hobbyists routinely use larger accessory loop antennas to facilitate nulling out local stations to catch "DX" signals.

Given the general low power and limited coverage area of most TIS systems, the transmitters and antennas are often located very close to the highways and byways they serve. Keep a sharp eye out when the signals are strongest and you may just be able to spot the transmitter site or at least the antenna structure. It's

a great travel game to help get kids interested in the radio hobby.

TIS AUDIO QUALITY

Okay, so what gives with the generally poor audio on these TIS stations? Well, actually, this is part of the design specifications as well. The TIS transmitter's audio signal is required to be run through an audio low-pass filter that rolls off frequencies above 3 kHz. This engineering decision coupled with poor quality recording (some systems still use audio tape) often makes the signal sound muddy.

JUST FOR SCANNISTS

So what do TIS transmissions have to offer the scanner hobbyist? Quite a bit, actually. Let's start by looking at what your local systems can tell you.

I like to keep an ear on the TIS systems in my immediate area at least daily. The reason I do this is mainly that TIS systems often announce current or upcoming traffic pattern changes brought about by road construction, specifically on nearby toll roads and interstate highways. I also live near a major river and my local TIS systems also talk about scheduled bridge openings. All this data serves to inform my scanning. I can concentrate my listening to emphasize Department of Transportation road work crews. If detours are involved, I can pay more attention to traffic control frequencies through the effected area. In the case of bridge openings, the Bridge Police frequencies are normally fairly quiet, but you can be sure they will be much more active during any opening. I also switch in my bank of marine and coast guard frequencies to see what activity might occur related to any opening.

In the summer months, we have a number of charity long distance bicycling events in our area. The local TIS systems alert me to any traffic diversions related to these events. Since these events are regularly supported by area amateur radio services, I'll bring my bank of local ham repeaters into service to monitor their efforts.

When I travel, I usually program the scanner in my car to reflect listening along my route. Just as with home based monitoring, I often find that keeping an occasional ear on the TIS signals along the route will guide me to the most interesting and useful listing along my route.

Now let's turn this whole thing on its head. How can your scanner monitoring inform your TIS listening? That's easy. If your scanner locks on accident activity along a nearby major road, it might not be a bad idea to give a listen to any local TIS frequency you know of. You are likely to be able to use any up to date traffic advisory information to further direct your monitoring activities.

FINDING TIS STATIONS

Of course, the simplest thing you can do is listen to your radio and make note of what you hear. As I mentioned, these stations are required to make frequent, full information, identification including Call sign and location. Easy enough, but the FCC has made it even simpler. The Commission has a database search tool built off their general search engine set up to allow specific searches for TIS stations at: <http://www.fcc.gov/mb/audio/bickel/tis.html>. You can use this search engine to discover information about TIS stations local to you or you can use it to find stations along any travel route.

HOBBY FUN

AM Broadcast Band monitoring is a very active aspect of the radio hobby. While the main concentration is on long distance reception of commercial radio stations, the techniques used for AM Broadcast DX apply to TIS monitoring. The two main clubs currently active in this area of monitoring are The National Radio Club <http://www.nrcdxas.org> and the International Radio Club of America <http://www.ircaonline.org/index1.html>. Both of these clubs encourage logging of TIS systems.

Can you get confirmation (QSL) reports for TIS Stations? Sure you can, but you have to remember that the various authorities involved are not in the business of catering to hobbyists needs. That said, a politely written letter, to the authority listed in the FCC database above, containing a stamped self addressed envelope (SASE) and perhaps a preprinted confirmation card requiring only a signature from the authority should do the trick. The above mentioned clubs provide a lot of guidance in how to proceed in this area.

THE FUTURE OF TIS

In addition to traditional AM Broadcast Band TIS systems, the FCC is beginning to authorize TIS stations in the FM broadcast band. These stations are covered under the new Low Power FM service. As the LPFM rules evolve, it is likely that you will be seeing signs along the road requesting that you tune your car radio to a signal in the FM band instead of the AM band.

And now for the big news! The FCC has recently announced a Notice of Proposed Rulemaking to make significant changes in TIS operations. The extreme limits of what can be broadcast may be expanded to include those previously prohibited NOAA Weather Radio retransmissions, AMBER Alerts, terror threat alert levels, civil defense announcements and other practical emergency information. By the time this article goes to print, the comment period for the NPRM will have past and some of these changes may be put in place. Site and power levels may also be modified by these new rules and it is further proposed that the name of the service be changed from TIS as the "Local Government Radio Service". All the more reason to keep an ear out for your nearby (or even distant) TIS systems to learn the latest.

Hobby Radio Stop

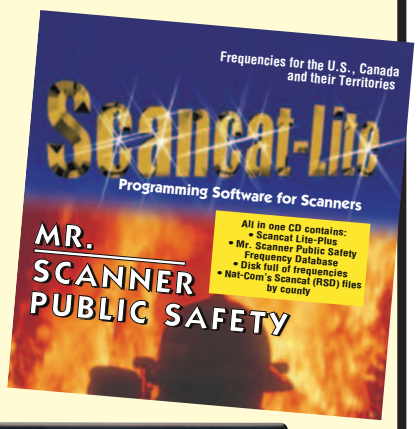


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Scanning for Self Defense And Disaster Preparedness

By Ernest H. Abell, KC6DFA

I am a retired U. S. Army Field Radio Repairman, an Amateur Radio Operator, since 1987, and a Scanner and Radio DX listener most of my life. I have developed a methodology of listening that will, I think, enhance everyone's listening pleasure and usability of what they hear. I know the FCC has rules about using what you hear for personnel gain. I know what you do with what you hear can be used for your safety as well as others. Just listening is great fun and informative, yet in the case of emergency, you must have experience in listening and making use of what you hear to be beneficial and guide you and others away from danger. I hope this article will fill a major gap in the Amateur Radio and Scanning Hobby.

There are an incredible number of web pages and books dedicated to buying, modifying, and what an author thinks the BEST Scanner or the BEST antenna is and that is all well and fine. But I have not found any real useful information on how to use the scanner to create a picture of what is happening at a certain time and place; and to me that is what scanning is all about.

I am going to show an individual or group of interested scanner enthusiasts how to set up, run, and maintain a command post that will rival a multi million dollar government emergency services organization for very little cash outlay and in a very short time. I do not have much in the way of expendable cash to put into my hobby, therefore I make up for a cash shortfall by being creative and resourceful.

To begin with you do not have to have a scanner radio today to enjoy this hobby, as you can get live feeds on your computer, and enjoy scanning just the same. Although in an emergency I doubt that a computer with Internet capability will suffice and provide reliable operation. Police scanners are found at garage sales, thrift stores and through friends. Used computers are abundant and work for Internet feeds, and mapping software. I have is set up everything to be powered from my car, as 120 volt inverters are very inexpensive today. Thomas Map books are found with the CD included for $1.00 to $2.00, at garage sales and thrift stores. You can also purchase them on-line. Google maps allows you to have collaborators contributing what they hear and marking it on the same map. This is fantastic, especially when a major grass or forest fire is happening. You and your collaborators can build and edit a very comprehensive situation map very quickly.

I have found that map software is basically the same. They all provide a method of marking various things on the map, storing addresses, changing colors, making notes, and saving it where it can be found very quickly. I have marked every fire station in the county of Sacramento, California. I noted the battalion, and station number and made a note as to the type and number of the various equipment assigned to each. I marked up the physical Thomas map book with the same information, so I can go mobile, or send some one somewhere and they can see the map and make

Continued on page 31

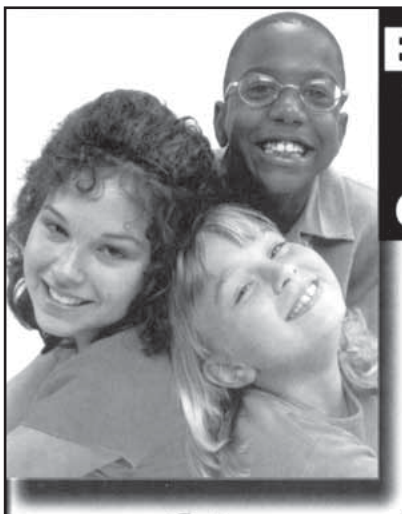


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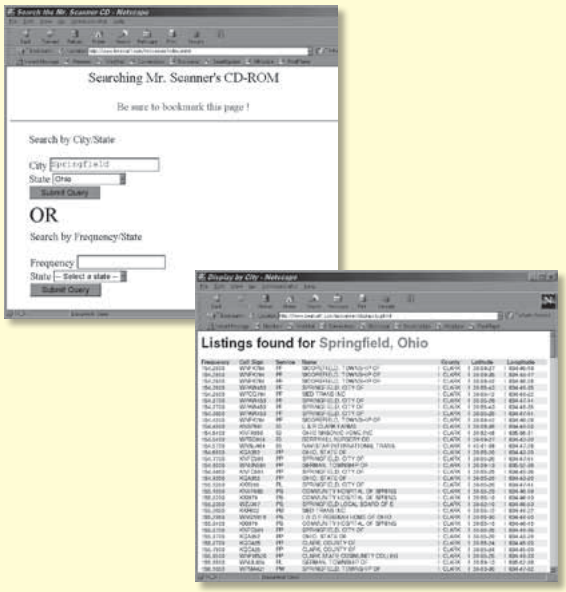
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- On the next screen (first time) pick register for CD, (subsequent times) pick search
- When the form comes up fill it out with the exception of the credit card information. Be sure to include an e-mail address so we can send your user name and password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

Generally within the next 24 hours your user name and password will be e-mailed back to you and you will be ready to search for frequencies.

Scanning for Self Defense And Disaster Preparedness continued

decisions on their route to stay away from a fire or police incident. Staying away from an incident is very critical, I do not want to find myself in the middle of a shootout as you see on local TV news almost nightly. That is just plain good self defense. I know I will not do any good at the scene of a fire. This is the benefit of mapping out your scanning hobby. I acquired all fire station/police information, address, battalion number, equipment assigned from the Internet. I use a little yellow house with a red roof to mark the location of a fire station, a checkered flag for sheriff and highway patrol. I use a blue truck icon for a truck or chemical spill incident. There is an icon that looks like a fire that I can use for the location of a fire. There are many icons you can use for various types of situations. You can use several at almost the same point for specialized situations, just standardize the use and edit when the situation ends or moves. Time/date everything in the note area so you can keep track of current items.

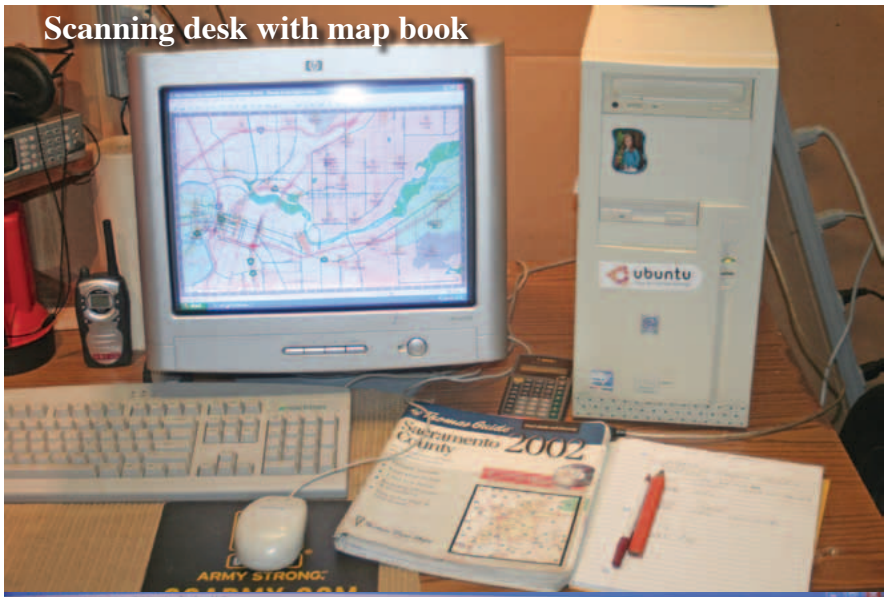
Go ahead, look at what ever map software you choose and get started learning how to mark your map. While you are at it set up your scanner and start listening and marking at the same time. Don't forget, you can get an app for your cell phone that will make it a police scanner. The more sources of information the better job you will do with your map. Learn how to collaborate using Google maps to expand your coverage to include the entire state, or even the entire nation.

Also I would advise you to record your listening, with tape, digital recorders and or your computer. Insuring you get the proper address, number of battalions, the amount and type of equipment. You can cover the activities happening while you sleep by recording with a voice activated recorder.

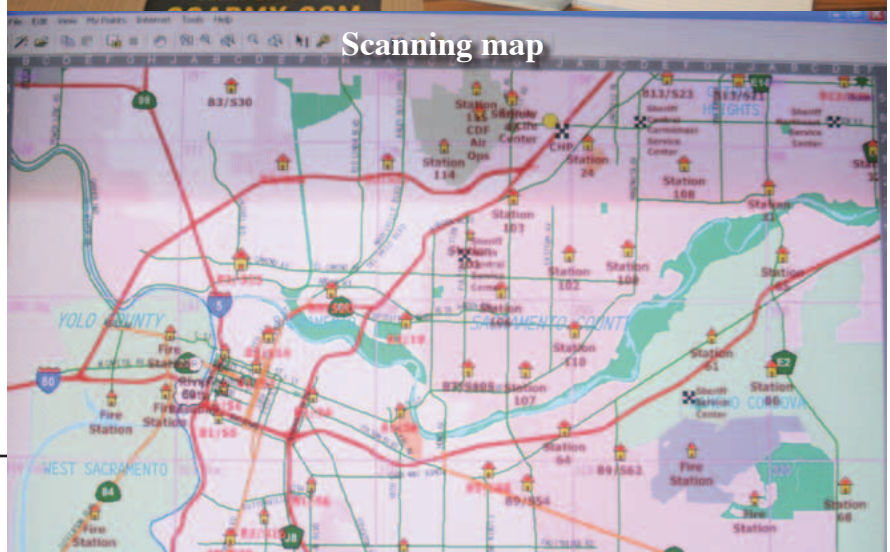
It isn't as complicated as it sounds, and the more you do it the easier it becomes. You will become knowledgeable in fire department operating procedures, medical response procedures and police procedures, which will in the long run, make the map even more indispensable. Yes, all this just by listening to what is happening around you. I scan CB radio, ham radio, police/fire, aircraft, FRS/GMRS, public radio, marine and so on. The information gathered from all these sources properly marked on a map is a picture worth painting.

Now one major point must be covered, Please use this information and procedures to stay away from the incidents you are recording on your map. If you must show up at a fire or other police situation, do the right thing, the right way. Get your ham radio license, and join your local fire/police volunteer service group. Attend their training, and keep your equipment up to their standards. Have in your possession their badges and other required safety equipment. Only go to the situations assigned to you by them.

I hope this is a catalyst for a major reawakening in the Amateur Radio, scanner/radio hobby, and possibly encourage young adults to take the time to get their amateur license and volunteer or even become fire/rescue and or police officers.



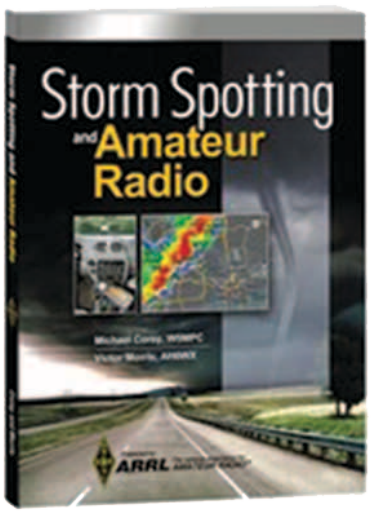
Scanning desk with map book



Scanning map

Storm Spotting And Amateur Radio

By T.J. "Skip" Arey, N2EI



Let me start out with what might sound like a criticism but it is in no way meant to be such. Corey & Morris' book in misnamed. The tile should be "Storm Spotting for ALL Radio Hobbyists".

While the book is written from the perspective of a training resource for hams who volunteer to work with Storm Spotting networks such as the SKYWARN® program of the National Weather Service (NWS), the resources within its pages are invaluable to anyone who wants or needs to know about radio activity related to bad weather in his or her region.

Any Scanner Hobbyist (or any person who regularly watches The Weather Channel) understands that severe weather can be fast moving and unpredictable. Local area weather observations go back to the very beginnings of the National Weather Service in the 1860s. Radio hobbyists, from as early as the 1920s used their equipment and communication skill to provide support to NWS efforts to monitor and manage storm situations. This book begins with a brief history of these efforts and how things grew into the modern day SKYWARN® System consisting of thousands of volunteers around the country.

Of course, there is the ever present and all important chapter of Safety. All too many popular reality television shows glamorize the business of Storm Chasing. People involved in monitoring storm activity and providing essential support to Public Safety agencies need to be fully aware of the risks involved in following foul weather in order to remain part of the solution and not end up becoming part of the problem.

Chapter Three provides the "Meat and Potatoes" information about the equipment needed to participate in Storm Spotting. A careful reading of this chapter will give any scanner monitor the information needed to follow along in the action and activity. The reader will discover that there is a lot more to following sever weather on your scanner than just plugging in your regional NWS frequencies.

There is an extensive chapter on training including information on classes and learning opportunities that a scannist might find valuable.

Any book on monitoring and managing severe weather situations would not be complete without a section on basic meteorology. This book covers this subject along with a further, break out, chapter specifically covering Hurricanes.

The final chapter covers the activation processes for storm spotting networks. This section also provides a scanner enthusiast with a wealth of information. It shows how the NWS, SKYWARN®, Amateur Radio Emergency Service (ARES) and Radio Amateur Civil Emergency Service (RACES) integrate with local and regional Emergency Management and other Public Safety agencies.

The book has no less than nine appendices chock full of even more useful information for any scanner owner interested in following foul weather situations in their area.

Nasty weather can crop up anywhere at any time. Knowing everything you can about such events through your scanner cannot only be entertaining, it can be life saving. Storm Spotting and Amateur Radio is an essential guide for serious weather radio monitoring.

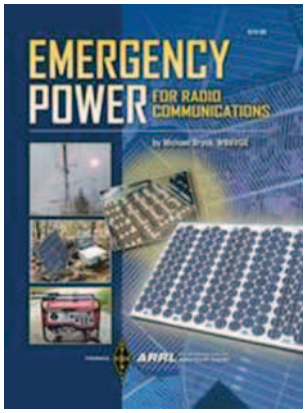
Storm Spotting And Amateur Radio
by Michael Corey W5MPC and Victor Morris AH6WX
$22.95

Emergency Power for Radio Communications

By T.J. "Skip" Arey, N2EI

With the focus on disaster management brought about by recent world events and weather, good information on emergency power operations needs to be in the hands of every radio hobbyist who wants to be ready when things get rough. Several folks have written on this subject over the years, but The American Radio Relay League turned the topic over to the true master of the art, Mike Bryce WB8VGE. Mike is a member of the QRP Hall of Fame and his articles on low power and emergency power operations have appeared in most of the major radio publications. He was the editor of the QRP column for 73 Magazine for over 12 years. Mike has been experimenting with solar electric power for decades and his personal solar power system has the capacity to power his entire household, not just his radios. Mike writes in an easy going style that makes even the more difficult engineering aspects of taking your radio shack "off the grid" seem fun and easy.

Mike breaks down the subjects of power acquisition, management, storage and usage across a series of practical examples. Solar, fossil fuel, even wind and water are all covered and the pluses and minuses of each are fully discussed. Where most of us casual emergency power people go astray is in the area of power management. We also tend to lack a complete understanding of battery systems and other forms of power storage. Mike walks the reader though the problems he or she may face in bringing their personal system together so that your back up power is as dependable (perhaps more so) than the juice leaking out of those plugs in the walls of your house.



Of special interest to scanner users is the chapter covering Battery Systems. There is a lot of poor information about battery use, charging and management out on the internet and floating around hobbyist gatherings. Mike Bryce set everything straight with good science and engineering practice. You will learn the practical differences between Lithium Ion, Nickel Cadmium, Nickel Metal Hydride and Lead Acid batteries. Mike shows you the best use for each type.

The books appendices include the best explanation of how to use the new Anderson Powerpole® Connectors I have ever read (including those I have written myself), as well as a number of emergency power related projects from past issues of QST Magazine.

This is a very important book for any radio hobbyist interested in maintaining some level of electrical power capability during times of distress. I can say without fear of contradiction… Read it before you need it!

Emergency Power for Radio Communications
By Michael Bryce WB8VGE
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Radio Free Europe Changed the Direction of History

By Dorothy Rieke

Unusual as it may seem, those of us who live in a democracy experiencing freedom daily feel a responsibility to recommend this kind of government to those who had never experienced freedom. Perhaps this attitude held by certain influential people motivated them to inform others of the truth of world events by radio.

The Cold War, which never led to actual fighting, will long be remembered because of the intense rivalry existing from the end of World War II until the late 1980's between the free world and Communist nations. The United States and its democratic allies, the Western bloc, were in competition with the Union of Soviet Socialist Republics and its Communist allies, the Eastern bloc.

The Cold War can be described as a time of mutual distrust, suspicion, and misunderstandings among world powers. At times, a third World War was feared to be imminent. Luckily, the Cold War, one of ideals and beliefs, was fought on political grounds rather than by the military.

It was during this time of intense fear and suspicion that Radio Free Europe was created. The National Committee for a Free Europe, an anti-Communist group founded in 1949, was composed of a former ambassador, Joseph Grew; Central Intelligence Agency director, Allen Dulles; READER'S DIGEST owner, Dewitt Wallace; cofounder of Public Opinion Quarterly, Dewitt Clinton Poole; and an investment banker, Frank Altschul.

This National Committee for a Free Europe, based in Munich, Germany, focused on gathering and analyzing news as well as disseminating information from exiles or refugees or American contacts. Supporting refugees and valuing their opinions as well as their creativity was important. However, this organization's main focus was Radio Free Europe, which voiced coherent, objective accounts of news in the world and represented "free" press especially for those people living behind the Iron Curtain.

Radio Free Europe was operated by a staff backed by journalists for language services and a network for gathering information from interviews with those who had escaped from behind the Iron Curtain. In addition, this organization collected information from Communist publications and radio services that was helpful for CIA activities.

Radio Free Europe was also known for its "balloon operation" in 1951-1956. This unique way of reaching those behind the Iron Curtain was the use of balloons which were stuffed with anti-Communist pamphlets and leaflets. Floated into Eastern Europe, this information offered encouragement and support to those suffering oppression and tyranny. Also, these missiles contained criticisms of government regimes led by leaders who ignored freedom, information about dissident movements, and human rights information. This material also exhibited the solidarity of Americans with the oppressed groups. These actions, in addition to broadcasts, influenced people and even changed the direction of history.

RadioFreeEurope
RadioLiberty

Two years after Radio Free Europe was established, another group Radio Liberty joined RFE. Radio Liberty, once known as Radio Liberation formed by the American Committee for the Liberation of the people of Russia, began its broadcasts in 1953. A year later, RL also based in Munich, Germany, was broadcasting six to seven hours daily in as many as eleven languages.

Most organizations, if active, encounter problems. In 1956, Radio Free Europe was accused of taking part in the Hungarian revolution because it was thought that listeners obtained a false hope that Americans would intervene with military assistance during a revolt. Even though RFE was found not guilty of this charge, precautions were urged for accuracy in broadcasts and maintaining journalists' independence.

Other accusations were that broadcasts may have caused the Soviet crackdown on Hungary on November 3rd and 4th, 1956. It is possible that some experiences told on RFE may have caused a lack of belief in the current Hungarian leader, Imre Nagy.

It wasn't unusual for broadcasts to Eastern Europe to be "jammed" in attempts to stop citizens from listening. Of course, some secretly listened despite the jamming attempts.

In attempts to discredit the organization, agents from Communist countries also infiltrated RFE's headquarters to gather information on activities. At one time, an active agent from Communist Poland's security service infiltrated RFE, working in the media and analysis service in Munich. After five years, he returned to Poland participating in programs aimed at embarrassing the United States government and Radio Free Europe. Then, too, at one time, the Czechoslovak Intelligence Service sent an agent to poison the salt shakers in RFE's cafeteria.

It is true that such an organization with a "freedom outlook" would meet with opposition. In Munich on February 21, 1981, RFE and RL's headquarters were bombed causing two million dollars in damage. No lives were lost, but several employees were injured. It is thought that the Romanian president was responsible for this terrorist activity.

In the Soviet Union while Mikhail Gorbachev was in control, he worked against jamming radio broadcasts. In fact, those against Communism could be interviewed without fear of imprisonment or worse.

However, by 1990, Radio Liberty was the most popular station in the Soviet Union. These broadcasts actually allowed leaders Gorbachev and Boris Yeltsin to communicate with the Soviet people.





Above: Radio Free Europe in Prague

Left: Radio Free Europe Radio Liberty Building

RfE and RL definitely played roles in the Velvet Revolution, bringing an end to the Communist rule in Czechoslovakia. Because people believed a young man had been killed, they joined demonstrations that eventually brought down the Communist government. The young man was not killed, though.

In 1995, headquarters were moved from Munich to Prague in the Czech republic. Because the Clinton administration reduced funding to this organization, radios were placed with the United States Information Agency.

In 1993, broadcasts were ended in Hungary. Later in 1997, broadcasts ended in Poland. Still later, this agency ended broadcasts in Estonia, Latvia, the Czech Republic, Slovakia, Croatia, Bulgaria, and Romania. However, services were continued through broadcasts to the former Yugoslavia, Iran, Iraq, Afghanistan, and the Northern Caucasus. All in all, broadcasts continue in 28 languages going to twenty-one countries including many hotspots.

Even though, this organization has faced "jamming," shut downs of local broadcasting efforts as well as shut downs of its activities, it continues to successfully to reach those who know nothing about the benefits of freedom. It is the most reliable of all domestic news services in many countries.

During past days, RFE and RL journalists have risked their lives to bring truths to the public. In fact, these organizations now merged, represent the most reliable source of news for citizens in certain countries. ●

WALKIE-TALKIES MEET MANY NEEDS

By Dorothy Rieke

Years ago children experimented with communication when they covered one end of two empty tin cans with wax paper and connected the cans with string. They could communicate with each other from each end where the string was attached to the waxed paper.

Today, quick communication is easier with walkie-talkies. Walkie-talkies are hand- held devices allowing two or more to communicate using radio waves.

Most public workers generally refer to walkie- talkies as "radios." Then, too, in marine or aircraft operations where a fixed radio is impractical, walkie-talkies are called two-way radios.

Walkie-talkies have six parts, the transmitter, receiver, crystal, speaker, microphone, and power source. Receivers pick up massages, transmitters send messages, crystals sets frequency or channel, and the speaker takes signals picked up by receivers amplifying so they can be heard. Microphone, spoken into, converts voice into electric signals. Power sources are usually batteries which may or may not be rechargeable.

Some walkie -talkies are equipped with switches so frequencies can be changed. Sharing the same frequency would mean hearing others' messages. Some walkie-talkies are used as pagers; some have cell phones built within them.

This handheld portable, two-way radio transceiver, developed during World War II, provided communication for ground troops and pilots in the air over enemy territory, Military personnel planned battlefield strategy, reacted to events, and devised ways to approach problems.

Today, these walkie-talkies are invaluable to police, firemen, soldiers, amateur radio operators, sports enthusiasts and workers such as snow plow drivers, custodians, clerks, repairmen, and others. They go on hikes, bicycle trails, to the malls, and many other places where people need to communicate. Even though most walkie-talkies transmit with power of less than one-tenth watt, they send and receive messages for distances up to a mile. Some with more power are able to send messages longer distances such as two to four miles.

If the walkie-talkie signal skips or is reflected off the ionosphere, it can travel hundreds of miles. It is well to keep in mind that the operation of this handy device may be also affected by obstructions.

There seems to be some confusion over who actually invented this means of communication. Several individuals such as Dan Noble, Henry Magnuski, Marion Bond, Lloyd Morris, Bill Vogel, and others employed on the Galvin Manufacturing Company's (later Motorola) engineering teams are given credit for inventing the walkie-talkie in 1940.

Donald Hings from the same group patented his portable signaling radio system first called a "packset" in 1942. When asked what could be done with his unusual invention, Hings answered, "Walk and talk." This might have been the origin of the term, "walkie-talkie."

Another man, Alfred Gross, also working on walkie-talkie technology, has been credited by some as inventing this communication device. Gross became interested in communication at an early age after he visited a ship's radio room. In 1938, he patented his idea for a walkie-talkie. He also invented the pager and CB radio.

After Gross developed and tested a small portable high-frequency radio with two-way communication, his invention interested the members of the United States office of Strategic Services or the Central Intelligence Agency. In response, he developed the Jean-Eleanor system which was a two -way air-to-ground system. This system was used in some of the covert actions behind enemy lines during World War II.

The original walkie-talkies were held in the hand. However, the hand- held models had reduced performance and were dependent on vacuum tubes and high voltage dry cell batteries.

Once these devices proved to be useful, those involved in public safety, the military, and in commercial work adopted and utilized them in all kinds of ways.

Characteristics include a half-duplex channel on which one radio transmits at a time with a "push-to-talk" feature that begins transmission. These are similar to telephone handsets only larger with an antenna projecting from the top.

The walkie-talkie has one feature unlike a telephone. A telephone is heard by one person at each end of the connection; the walkie-talkie with its built in speaker can be heard by groups of people in the same area. These hand-held transceivers are used for communication between individuals or to vehicle mounted or base stations.

Many of Motorola's "Handie Talkies," portable, handheld ham radios, became surplus after World War II, so some were loaned or donated to ham radio groups for Civil Defense activities.

The walkie-talkies, used by the public, are often part of trunked radio systems which allocate radio channels for more efficient use. These

continued

work with a base station acting as a repeater and controller. Most individual handsets and mobiles are equipped with a mode that bypasses the station.

Walkie-talkies have the advantage of being small. Some are smaller than a deck of cards. Of course, the VHF and HF models are larger to allow space for larger antennas and battery packs.

Some models have squelch capabilities such as analog squelch, digital squelch, voice scrambling, and trunking capabilities. Some units include DTMF keypads for remote operation of certain devices, and some have capability for hands-free operation. Others have external microphones and speakers attached.

Walkie-talkies have been adapted for every use. Commercial equipment walkie-talkies are often encased in metal. The few frequencies are programmed with a computer or another programming device. Most businesses abide by a specific frequency allocation. In addition, today's walkie-talkies are smaller, lightweight, and capable of accessing any channel within the specified band.

Many children's models are on the market at a price of five dollars or even less. Those models have a unique feature, a code key. This button allows for transmission a "Morse Code" message to another person with a walkie- talkie on the some frequency. Usually, a crib sheet, attached to the radio, displays the Morse Code making it easy to depress the PTT button and tap out the message.

Few operators use The Morse Code unless it is amateur radio groups. If it is used, it is generally simplified.

Today, walkie-talkie technology has improved with range, size, and the development of headsets and mouthpieces. In addition, more sturdy varieties are available for emergency and security services. Also, the development of scrambling technology is useful for those who want messages kept confidential. Walkie-talkies cater to military, industry, public workers, and others. They do a good job of it!

CLOSING COMMENTS



By: Norm Schrein, KA8PGJ

A few weeks ago I was sitting in my darkened family room trying to decide if I needed to go out and start up my generator. You see, our power was out because a sub-station shorted out due to massive ice build up in a storm we were having. Both my wife and I figured out that our power would be out for some period of time, so we invested in a generator prior to the storm. When the sub station went down the sky lit up like the 4th of July along with a varoom sound of the different pieces of electrical equipment in the station going down. Fortunately I knew much more information than most of my neighbors who were also in the dark. I had a scanner. I heard the fire, police and street departments all dispatched to the scene. Fire was obviously there because of the fire, police to control traffic and the street department was there to adjust cones and make temporary lanes for the traffic to pass by the downed sub-station. My first thought was that this was a massive power outage, and it was. My other thought was that the power company would do their best to get those high numbers of customers back on line by diverting power around the station. Had it been a line down in our yard or a transformer or fuse blown our outage might have been a lot longer. Fortunately for us, we only had to wait about an hour before the lights were back on again and I did not need to go out and start up the generator.

It is in times such as power outages, and other natural or man made disasters that scanners can prove to be most useful. Yet that fact seems to be missed by those who make and retail these units. The major part of brick and mortar stores that sell scanners have very little idea as to what the thing even is, much less the potential is for having a scanner with the correct frequencies available for emergency situations. The average family should include a scanner with their other emergency items, such as flashlights, candles, blankets, weather radios, battery powered radios & TVs. But the average family, because they are not properly informed about the usefulness of a scanner, can be pretty much in the dark. In the situation I described that happened to me, my neighbors were in the dark with no idea as to what happened and no idea as to when power might be restored for them. Fortunately our power was back in an hour. Others were not as lucky and had power out for several days, forcing them into shelters or extended stays with family and friends. I managed to record a video during the power outage and will place it on the videos section of our website.

So, it seems to me that a scanner is more than just a novel toy to listen to routine police and fire calls. A scanner can help people negotiate their way through emergencies by empowering them with information.

LAST PAGE OUT



A new season of hamfests begins in Mansfield (Ohio), where hamfest dealer Steve Zahos, KR4S manages to keep in contact on his amateur radio while manning his booth at the same time.

photo by Norm Schrein

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