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NATIONAL COMMUNICATIONS

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Dover Air Force Base

page 4









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Table of Contents

Features & Columns

COVER STORY
Dover Air Force Base 4

National Communication News

So Why are We Changing? 9

Missing Local Calls on Your Busy

Programmable Scanner? 11

Updated Narrowband Railroad Frequencies 14

10 Day Desert Radio Camp 18

BOOK REVIEW
Fr Moran to Kathmandu..... 23

Midland Offer a Variety of Rigs 24

Sports Broadcasts 'Survive and Thrive' 26

Closing Comments..... 28

Last Page Out 30

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

Advertisers

Cobra 2
Communication Electronics 13
GRE America..... 16
Hobby Radio Stop 21, 22
National Communications Frequencies 19
National Communications Subscription Form..... 8
Radio Shack 32
React 10
Scancat..... 21, 29
St. Jude Children's Hospital 10
Uniden 31
Universal Radio 7

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By: Mark Meece

Dover Air Force Base

Every military installation has the tendency to evoke emotions from those who served there, those who live near and those just passing by. Perhaps no other base in the United States Department of Defense evokes stronger emotions than that of Dover Air Force Base.

A HISTORY OF CHANGE

Dover Air Force base is situated in the center of the Delmarva Peninsula (Delaware, Maryland, Virginia) two miles south of Dover, the capitol of Delaware. Construction started in March 1941, the facility was originally called Municipal Airport, Dover Airdrome and it opened later that year in December of 1941. On December 7, 1941 Japanese forces attacked the naval base at Pearl Harbor in Hawaii, weeks after the attack the facility was converted to an Army Air Corp airfield. Over the next few years the base would go through a flurry of name changes. On April 8, 1943 it was renamed to Dover Army Airbase, two months later on June 6, 1944 to Dover Sub-base when it was considered a sub-base of Camp Springs Army Airfield, Maryland. The following year on February 2, 1944 it was changed to Dover Army Airfield. When the United States Air Force was established a few years after the end of hostilities of World War II, it was finally renamed to Dover Air Force Base on January 13, 1948.

With the military having a need for a training airfield, the base first opened for operations on December 17, 1941, then construction commenced on runways and hangars. The airfield's first assignment was to the First Air Force. The 112th Observation Squadron of the Ohio National Guard based at National Airport in Toledo, Ohio was the first unit to arrive at Dover on December 20, 1941. The 112th OS would fly anti-submarine patrols off of the Delaware Coast. A few months later in early 1942 three bomber squadrons flying the Mitchell B-25 arrived with the 45th Bombardment Group. The 45th BG was charged with patrolling the Atlantic Coast and assuming the anti-submarine mission.

On June 6, 1943 the anti-submarine mission came to an end. Almost immediately a huge upgrading project



was begun and construction crews worked to lengthen the main runway to 7,000 feet. It was during this construction phase that Dover became a sub-base of Camp Springs Army Airfield and this continued into June of 1944.

In September 1994 Dover returned to full operational status, and heralded the arrival of seven P-47 Thunderbolt squadrons for training before being deployed to the European Theater. The original operation training unit assigned to Dover was the 83rd Fighter Group which was re-designated to the 125th Base Unit on April 10, 1944. On September 15, 1944 it was re-designated further to the 125th Army Air Force Base Unit.

As World War II came to a close and United States Forces began a draw down, Dover Army Airfield was temporarily inactivated on September 1, 1946. The 4404th Base Standby Squadron remained at Dover as a housekeeping unit providing maintenance and upkeep of the base.

With the beginnings of the Korean War on June 25, 1950 and the expansion of the United States Air Force. Dover Air Force Base was brought back to active status on August 1, 1950. P-51 Mustangs marked the arrival of the 148th Fighter Interceptor Squadron from the Pennsylvania Air National Guard on February 1951. By this time many problems began to spring up with the base's infrastructure which was hastily built some ten years earlier. Thus began a massive modernization of the base. Control of the base was handed over to the Military Air Transport Service (MATS) on April 1, 1952 and the host unit became the 1607th Air Transport Wing. Construction continued throughout the 1950s. In 1958 a fully operational hospital was completed, and by 1961 base housing expanded to support 1,200 families. In further Air Force restructuring the Military Air Transport Service was re-designated to the Military Airlift Command (MAC). The 1607th ATW was deactivated and replaced with the newly created 436th Military Airlift Wing (MAW) and the 436th MAW assumed the main mission at Dover.

Moving into the new decade of the seventies the 436th MAW replaced their older C-141 Starlifters and C-133 Cargo masters with the new C-5 Galaxy. In 1973 after trading in the last of its C-141s to Charleston Air Force Base, South Carolina, Dover became the first base with an all C-5 equipped wing.

In 1992, the Military Airlift Command was dissolved and Dover Air Force Base was placed under the command of the newly established Air Mobility Command (AMC). The 436th Military Airlift Wing and its associated wing the 512th MAW were renamed as the 436th Airlift Wing, with the 436th AW known as "Eagle Wing" and 512th AW known as "Liberty Wing". The 436th AW falls under the Eighteenth Air Force headquartered at Scott Air Force Base, while the 512th falls under the command of the Twenty Second Air Force headquartered at Dobbins Air Reserve Base in Georgia. Both wings became major participants in Operation Enduring Freedom and Operation Iraqi Freedom after the 9/11 Attacks. The first C-5 to land in Iraq at Baghdad International Airport in 2003 was from Dover's 3rd Airlift Squadron and Dover's unit continue to support the operations in those theaters.

Continued on page 6



DOVER AFB TODAY

Today Dover Air Force Base has modernized into the largest and busiest air terminal in the Department of Defense with two runways (14/32 and 1/19). Getting back to the emotions we discussed in the beginning of this article, The Charles C. Carson Center for Mortuary Affairs is the largest military mortuary in the Department of Defense. In addition to processing military personnel killed in both war and peacetime it has seen use from several historical events for the past 30 years. In 1978 it was used for the victims of the Jonestown Tragedy, The Space Shuttle Challenger disaster in 1986 and the Space Shuttle Columbia disaster in 2003, and military personnel killed in the 9/11 attacks.

Since 2007 the 436th AW flies both the C-5 Galaxy and C-17 Globe master III, some of the largest aircraft in the Air Force inventory. The 512th AW flies and maintains the C-5 Galaxy shared with the 436th AW. Details on these units can be found in TABLE 1.

In addition to aeronautical operations frequencies used at Dover Air Force Base (KDOV), the base uses a Project 25 digital trunk system all of this information can be found in the accompanying TABLE 2 and TABLE 3 respectively.

Continued on page 8

TABLE 1

Dover AFB Active Units

UNIT	NAME	AIRCRAFT	TAIL COLOR
436th AW	EAGLE Wing		
3rd AS	Third But First	C-17A	Yellow
9th AS	Pelicans	C-5B, C-5M	Yellow
512th AW	LIBERTY Win		
326th AS	Flying Bunnies	C-17A	Yellow
709th AS		C-5B, C-5M	Yellow

TABLE 2

Dover Air Force Base (KDOV)

Aeronautical Operations:

118.875	Dover Ground
125.550	Clearance Delivery
125.900	VFR Only Approach
126.350	Dover Tower
132.425	Dover Approach/Departure
134.100	436th Command Post
135.050	ATIS
135.150	Dover Approach
142.200	Ground Controlled Approach
225.400	Dover Ground
257.875	Dover Approach/Departure
273.500	ATIS
279.625	Dover Tower
282.325	VFR Only Approach
289.400	Clearance Delivery
323.000	Dover Departure
342.000	METRO
349.400	AMC Command Post
372.700	Dispatcher

TABLE 3

SYSTEM: Dover Air Force Base
TYPE: P-25 Standard
VOICE: APCO-25 Common Air Interface Exclusive
SYSID: 16A

FREQUENCIES:

381.42500a 381.73750c 381.95000a
385.62500a 386.06250 386.16250
386.35000 386.72500

c= control channel
a-alternate control channel

TALKGROUPS:

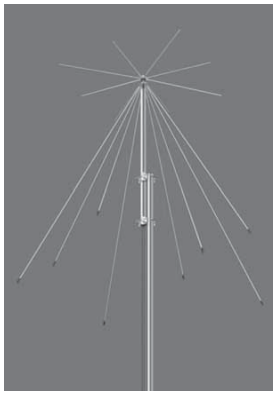
DEC	MODE	USE
1	D	Fire/EMS
2	D	Gate Security
8	D	Avionics
10	D	Flight Line
11	D	Ramp control
13	D	Public works
14	D	Base Operations
16	D	Dover Tower
17	D	Fireground
32101	D	Security 1
32102	D	Security 2
32351	D	"Wild"
32404	D	Security 4



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AH8000 *Order #1945* **$269.95**

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UG-349/AU *Order #4571* **$4.95**

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UG-83 *Order #1384* **$4.95**

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DS150S *Order #3587* **$94.95**

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R20



The **Icom R20** covers an incredible 150 kHz to 3304.999 MHz (less cellular) with 1250 alphanumeric memories, bandscope and SSB/CW. It has: two VFOs, dual watch, voice scan control, NB, large two line LCD and CTCSS/DTCS/DTMF. A built-in IC **audio recorder** can record up to 4 hours of reception! With charger, Li-ion battery, belt clip and strap. **Call for price.**

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RH77CA *Order #2368* **$21.95**

The **Diamond SRH77CA** is similar, but terminates to an SMA.

SRH77CA *Order #0491* **$19.95**



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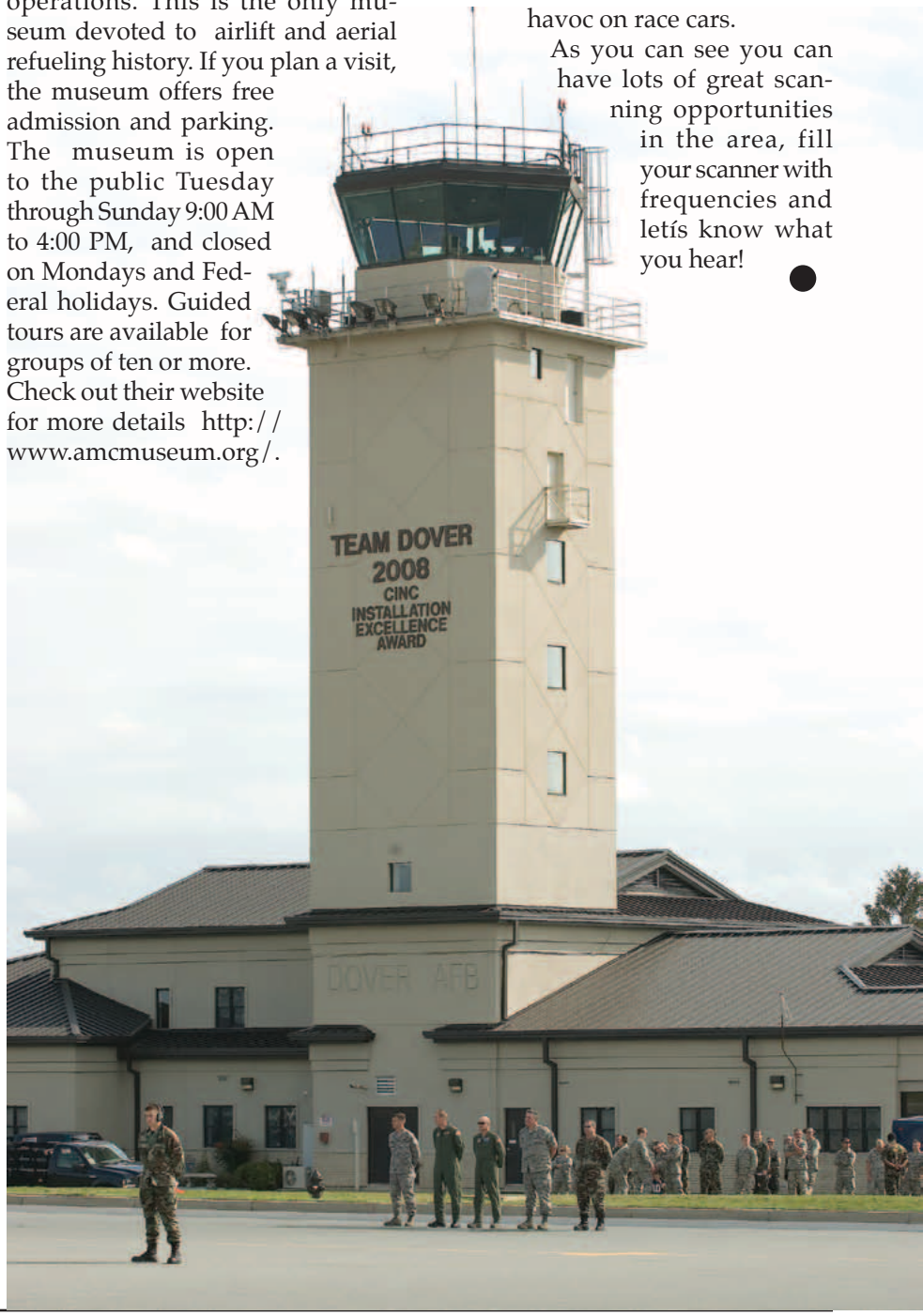
COVER STORY cont.

AIR MOBILITY COMMAND MUSEUM

Dover Air Force Base is also home to the Air Mobility Command Museum, the museum is unique in that it offers visitors and inside look at the aircraft used for airlift operations. This is the only museum devoted to airlift and aerial refueling history. If you plan a visit, the museum offers free admission and parking. The museum is open to the public Tuesday through Sunday 9:00 AM to 4:00 PM, and closed on Mondays and Federal holidays. Guided tours are available for groups of ten or more. Check out their website for more details http://www.amcmuseum.org/.

Also nearby to Dover Air Force Base is Dover International Speedway, more affectionately known by racers and fans alike as "The Monster Mile". A nickname well deserved from the ability of its concrete surface to eat tires and wreak havoc on race cars.

As you can see you can have lots of great scanning opportunities in the area, fill your scanner with frequencies and letís know what you hear!



National Communication News

So why are we changing?

It is time to answer a few questions and concerns about the new on-line version of National Communications.

Q Why is the magazine going to an on-line only version?

A It is a simple matter of economics. When we first started this publication, scanners and CB radios were being sold in great numbers. That is not the case today. This has been slowly happening over the last few years. We have been able to keep the magazine in print with fewer subscriptions every year, but we have reached the point now that we can not only write the magazine and print and mail it as well. We simply had a choice to either stop producing the magazine all together or coming up with a way to keep our readers up-to-date while not going broke in the process.

Q Other than not receiving a printed copy will anything else change?

A Yes, lots of things will change and I think for the better. First of all now when one of our authors cites a web site, You-tube video or anything that can be linked to from the Internet, that link will be contained within the article and the reader can go directly to that site. We will continue to have our on-line frequency databases and will make some products available to our readers at a greatly reduced price. Almost immediately you can look at a discount on the Mr. Scanner CD ROMs and we are looking into the possibility of offering a great discount on some scanner programming software. However, one of the biggest changes you will notice is that every issue of National Communications, National Scanning Report or the Bearcat Radio Club Newsletter will be on-line. You can simply pick an article title and be taken to the issue that contains the article. Want to see the article on NASCAR or monitoring football games? How about an article on the Secret Service or cordless telephones? Find the article, click on the link and you will be taken to the magazine with that article. There are hundreds of issues and thousands of articles to choose from.

Q Will the cost go up?

A Yes and no. It kind of depends on what subscription you have. If you currently have the $25.00 or $35.00 Nat-Com subscriptions, then nothing will change. The $21.00 on-line version will go up to $25.00.

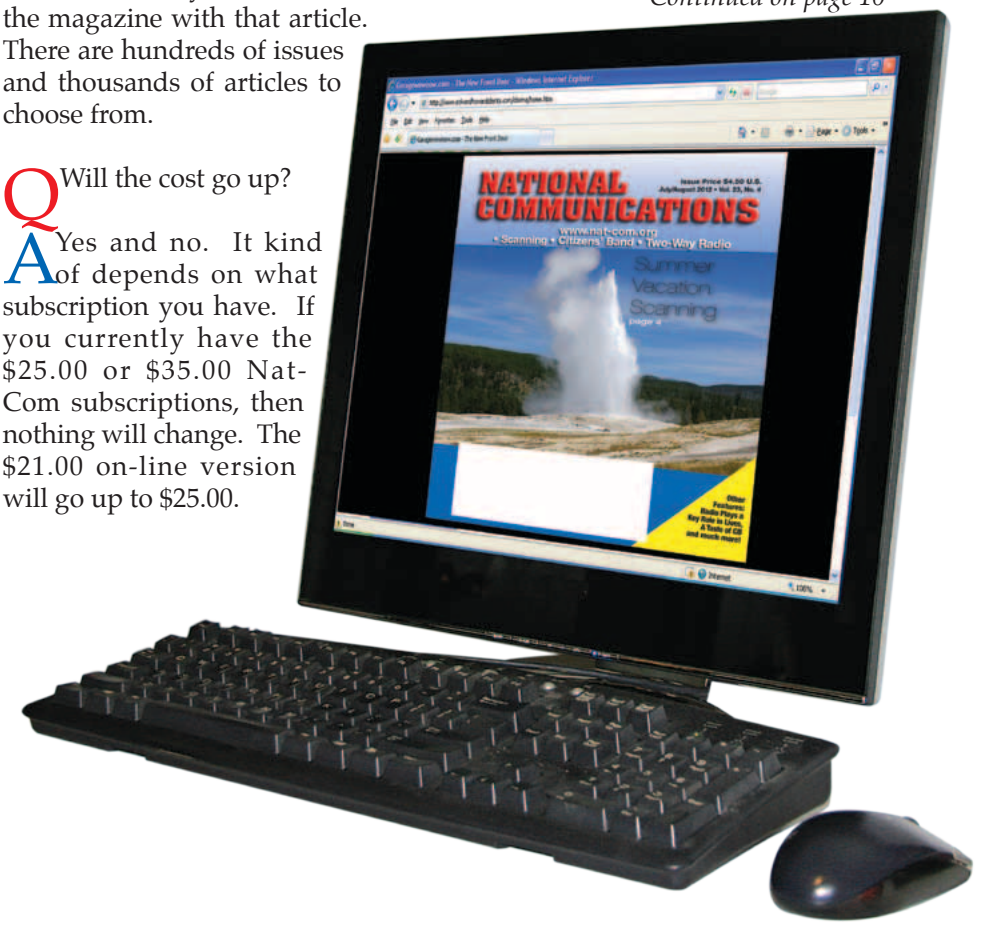
Q Will there be as many pages in the magazine as in the past?

A For years we have been publishing a magazine to fit within 40 pages. Since it is on-line, the page count is not a real concern. We will have a minimum of 40 pages, but there could be more from issue to issue.

Q Are we keeping all of our writers?

A Yes. Nothing is changing there. In fact we may be able to accommodate others as well.

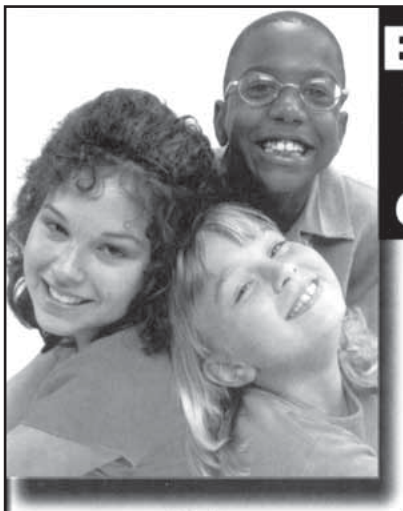
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National Communication News

Q What do I do if I don't have a computer?

A The obvious answer is to get one. But there are many ways to still see the magazine without owning a computer. First of all check with your friends or family members who have computers. They could print out a copy of the magazine for you. There is also the library. Most libraries have computers to use free of charge for their patrons.

Q I am not sure if I would like to read the magazine from a computer. Is there any way to get a hard copy?

A Yes, of course. Every issue that we have posted on-line can be printed. So that means that you can print out an entire issue or just a specific article.

Q Do you feel that at some point you may go back to printing and mailing the magazine?

A I don't rule anything out. If the economics change and the demand for a printed copy is still there, it could happen.

I hope that the change to the on-line format will increase our audience. The magazine and all back issues will be available 24/7 to all of our readers. I also look forward to picking up readers that we may not have had otherwise. Folks who own all those Kindle and other E-Readers. I may have to even buy one of them for myself.

None of us like change when it requires us to make some sort of change on our part. But change is not all bad either. Our technology is changing and we can choose to change or stay. During the last century look how much change took place in just one industry -- aviation. At the beginning of the 20th century our air travel was limited to hot air balloons. Now we can hop on a jet and go to just about anywhere in the world in a matter of hours. Sometime in the 21st century we may be able to jump on a vehicle and head out of this world.

Electronics is one of those areas where change is constant. Look at our radios and how much they have changed. Gone are the tubes and big power supplies. Ham radio operators can have a radio that will fit into their shirt pocket and use it to talk to someone on the opposite side of the globe. In fact you can do that with your cell phone which is also a radio. So, our change in the format of the magazine is reflecting the changes that are naturally occurring in this industry and others.

Feel free to adapt. You may just enjoy the change.

Missing Local Calls on Your Busy Programmable Scanner?

By Chuck Gysi, N2DUP

Use an old crystal scanner for the most important channels

Do you have a high-end scanner with hundreds of channels that you have fully loaded up? Does that scanner scan through all the channels, locking in on busy channel after channel? This may be especially true if you live in a metropolitan area with high radio usage.

But when it comes right down to it, you want to hear especially those conversations that are near and dear to your community or precinct. A robbery on the far side of the city is interesting, but not a threat to your immediate safety. Likewise, a fire up the street is important for you to know.

So how do you ensure you don't miss those communications you really want to hear when your scanner is stopping on channel after channel with broadcasts unrelated to your immediate interest, albeit interesting?

What I'm about to describe won't be of any help to you if you live in an area that uses digital, trunked or 800 MHz systems for local emergency services. However, it will work if your local emergency services of interest use the VHF or UHF bands with analog channels. It's a trick I have used many times in the past with great success.

Crystalled up

My scanners are always fully loaded to the max with as many channels as I can program in them. I'm always running out of room. I hate the priority feature, though, as that momentary cutting off to the priority channel is annoying with the blip in the conversation as it switches back and forth. And sometimes it's something I want to hear – and not the priority channel.

So what do you do? I have used a variety of older scanners to ensure I don't miss the local communications I desire to hear. And it comes at a dirt-cheap price. I buy old crystal scanners and set them up on the channels I want to hear. What are crystal scanners? Before current programmable scanners came about, you had to purchase crystals, which were small plug-in components for specific frequencies you wanted to monitor. Thus, if you have an 8- or 10-channel crystal scanner, you would install up to 8 or 10 crystals that are tuned to the exact frequency you want to monitor. Back in the day, crystals sold for up to $5 or more each, so purchasing 10 crystals would run up to $50 or more for the scanner – and that's on top of the cost of the scanner itself.

Today, a lot of these old crystal scanners are sitting unused on bookshelves, in basements or garages and ready for a new life. Every once in a while, you'll see an old crystal scanner for sale at garage sales. Another good source for crystal scanners are hamfests, which are flea markets run by amateur radio clubs. I have purchased a number of crystal scanners in the past at hamfests, sometimes



Here are old Regency and Electra Bearcat scanners that use crystals. One offers eight channels while the other has 10 channels. Photo by Chuck Gysi, N2DUP/scancomm.net

Continued on page 12

Missing Local Calls on Your Busy Programmable Scanner?

continued

just because of the frequencies of the crystals inside the scanner.

If you find a crystal scanner, check the crystals inside the scanner's box (there usually is a special access door to the crystals). The frequency typically is stamped on the top of the crystal or it's printed on the side of the crystal. Today, old crystals can be found on the Internet, including eBay, for costs as low as $2 each. If you just need two or three crystals for your local police, fire and EMS channels, that's not a bad cost to incur. Of course, new crystals can be ordered from crystal manufacturers, but that cost can get prohibitive if you need more than a couple.

I don't think I've paid more than $5 for a crystal scanner in recent years. If there are no crystals in the scanner, I usually won't pay more than a buck or two for the radio. The crystals often have more value than the scanner itself, especially for resale value. I personally have amassed a collection of crystals over the years since I owned my first crystal scanner way back in the early 1970s.

10.7 vs 10.8

One thing to note though is that old Bearcat scanners take a different type of crystal, so the crystals in an old Bearcat scanner usually can't be used in any other type of scanner. This is because Electra, which made the original line of Bearcat scanners, made the receiver in their scanners with a 10.8 MHz intermediate frequency. All the other crystal scanners made have an IF of 10.7 MHz, so the crystals aren't interchangeable.

In action

With your newly acquired crystal scanner scanning across the primary emergency channels you want to keep an ear on, your newer programmable scanner is sucking in every signal in a large radius – but you won't miss important calls when your crystal scanner stops on those desired channels. For the cost of no more than $5 to $10, a crystal scanner can help you make sure you don't miss local calls of important interest when your fully loaded programmable scanner is rolling along from one conversation to another. It's worth trying if you can get your hands on an old crystal scanner.



This shows a tiny crystal that is plugged in for each frequency monitored in a crystal scanner. Photo by Chuck Gysi, N2DUP/scancomm.net

Also, keep in mind that old crystal scanners are designed for wide-band channels and while all VHF high band and UHF channels are expected to be narrowband by Jan. 1 of the new year, the crystal scanner still will receive narrowband communications on its old technology. You just may have to turn up the volume to hear the conversations adequately.

Here's one other possible use for crystal scanners: Do you have an area of your home where you want to hear the primary local channels but you don't want to have your latest whiz-bang programmable scanner in that location? Perhaps you'd enjoy being able to hear local comms while you are in your basement or garage? The environment in those areas may not be best for a more expensive programmable scanner, but for a cheap old crystal scanner, you have nothing to lose. If you come up with a few crystal scanners, scatter them around your house and keep up on important calls at a minimal price.

Write in

Do you use crystal scanners at your monitoring post? Have you had trouble finding certain crystals cheaply? What's your favorite crystal scanner? You can write to me at 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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Updated Narrowband Railroad Frequencies

By Jon Van Allen, KF7YN

Like most other two-way communications, Railroad communications are in the process of switching to new narrowband frequencies. In order to continue to monitor the railroads, you will need to have a scanner capable of the proper frequency steps, for railroads the spacing will be 6.25 kHz. Also be sure to set your mode to FM Narrow (FMN), otherwise the audio from your scanner will sound weak.

The original frequency assignments are based on a 25 KHz channel with 15 KHz spacing between assigned frequencies. The new narrowband channels are scheduled by the FCC to become mandatory in 2013 and are based on a 12.5 KHz channel with 7.5 KHz spacing between assigned frequencies. Most current models of two-way radios meet this standard and the technology allows for communications to remain in analog mode as they are today.

The FCC has also mandated that a channel spacing of 6.25 KHz be implemented possibly as early as 2018, and that by 2011 all new radios manufactured be capable of this standard. In order to meet the 6.25 KHz mandate, radios manufactured in 2011 and after are required to be capable of digital communications. The FCC and the AAR are suggesting that the railroads forgo the 2013 mandate and implement the 6.25 KHz channel spacing. It has been reported that some railroads are now experimenting with digital as they decide on a plan for the changes.

Current Motorola digital radios built to the governmental P25 APCO standard will only operate on the 7.5 KHz spacing, while Kenwood and ICOM have jointly developed a new digital standard called NXDN that supports the 6.25 KHz spacing mandated by the FCC. P25 digital and NXDN formats are not compatible, so it remains to be seen how this all plays out. Nearly all current analog scanner receivers can program the new narrowband channels in analog mode but may experience bleed-over between adjacent channels. Analog scanners will not be able to decode the NXDN digital format. Current digital scanners can decode P25 digital transmissions, but no current scanner can decode NXDN.

Yard and other secondary service channels may be the first to switch to digital before any road channels, but it is widely believed the conversion to digital is still years away due to the huge cost involved in replacing all hand-held, mobile and base station radios on every railroad in the United States.

The VHF frequencies listed below are those currently in use. Narrowband frequencies are just now starting to come into use. Once the transition to narrowband operation is complete, all railroad frequencies will be assigned from a common pool of narrow-band frequencies as shown.





Updated Narrowband Railroad Frequencies continued

Notice the Association of American Railroad (AAR) numbers before and after narrow banding. AAR007 switches to AAR107, AAR108 switches to AAR108, etc.

Frequency	AAR	Tag	Description	Mode
160.2150	AAR007	Railroad Ops		FMN
160.2225	AAR107	Railroad Ops		FMN Narrowband
160.2300	AAR008	Railroad Ops		FMN
160.2375	AAR108	Railroad Ops	Narrowband	FMN
160.2450	AAR009	Railroad Ops		FMN
160.2525	AAR109	Railroad Ops	Narrowband	FMN
160.2600	AAR 010	Railroad Ops		FMN
160.2675	AAR 110	Railroad Ops	Narrowband	FMN
160.2750	AAR 011	Railroad Ops		FMN
160.2825	AAR 111	Railroad Ops	Narrowband	FMN
160.2900	AAR 012	Railroad Ops		FMN
160.2975	AAR 112	Railroad Ops	Narrowband	FMN
160.3050	AAR 013	Railroad Ops		FMN
160.3125	AAR 113	Railroad Ops	Narrowband	FMN
160.3200	AAR 014	Railroad Ops		FMN
160.3275	AAR 114	Railroad Ops	Narrowband	FMN
160.3350	AAR 015	Railroad Ops		FMN
160.3425	AAR 115	Railroad Ops	Narrowband	FMN
160.3500	AAR 016	Railroad Ops		FMN
160.3575	AAR 116	Railroad Ops	Narrowband	FMN
160.3650	AAR 017	Railroad Ops		FMN
160.3725	AAR 117	Railroad Ops	Narrowband	FMN
160.3800	AAR 018	Railroad Ops		FMN
160.3875	AAR 118	Railroad Ops	Narrowband	FMN
160.3950	AAR 019	Railroad Ops		FMN
160.4025	AAR 119	Railroad Ops	Narrowband	FMN
160.4100	AAR 020	Railroad Ops		FMN
160.4175	AAR 120	Railroad Ops	Narrowband	FMN
160.4250	AAR 021	Railroad Ops		FMN
160.4325	AAR 121	Railroad Ops	Narrowband	FMN
160.4400	AAR 022	Railroad Ops		FMN
160.4475	AAR 122	Railroad Ops	Narrowband	FMN
160.4550	AAR 023	Railroad Ops		FMN
160.4625	AAR 123	Railroad Ops	Narrowband	FMN
160.4700	AAR 024	Railroad Ops		FMN
160.4775	AAR 124	Railroad Ops	Narrowband	FMN
160.4850	AAR 025	Railroad Ops		FMN
160.4925	AAR 125	Railroad Ops	Narrowband	FMN
160.5000	AAR 026	Railroad Ops		FMN
160.5075	AAR 126	Railroad Ops	Narrowband	FMN
160.5150	AAR 027	Railroad Ops		FMN
160.5225	AAR 127	Railroad Ops	Narrowband	FMN
160.5300	AAR 028	Railroad Ops		FMN
160.5375	AAR 128	Railroad Ops	Narrowband	FMN
160.5450	AAR 029	Railroad Ops		FMN
160.5525	AAR 129	Railroad Ops	Narrowband	FMN
160.5600	AAR 030	Railroad Ops		FMN
160.5675	AAR 130	Railroad Ops	Narrowband	FMN
160.5750	AAR 031	Railroad Ops		FMN
160.5825	AAR 131	Railroad Ops	Narrowband	FMN
160.5900	AAR 032	Railroad Ops		FMN
160.5975	AAR 132	Railroad Ops	Narrowband	FMN
160.6050	AAR 033	Railroad Ops		FMN
160.6125	AAR 133	Railroad Ops	Narrowband	FMN
160.6200	AAR 034	Railroad Ops		FMN
160.6275	AAR 134	Railroad Ops	Narrowband	FMN
160.6350	AAR 035	Railroad Ops		FMN
160.6425	AAR 135	Railroad Ops	Narrowband	FMN
160.6500	AAR 036	Railroad Ops		FMN
160.6575	AAR 136	Railroad Ops	Narrowband	FMN
160.6650	AAR 037	Railroad Ops		FMN
160.6725	AAR 137	Railroad Ops	Narrowband	FMN
160.6800	AAR 038	Railroad Ops		FMN
160.6875	AAR 138	Railroad Ops	Narrowband	FMN
160.6950	AAR 039	Railroad Ops		FMN
160.7025	AAR 139	Railroad Ops	Narrowband	FMN
160.7100	AAR 040	Railroad Ops		FMN
160.7175	AAR 140	Railroad Ops	Narrowband	FMN
160.7250	AAR 041	Railroad Ops		FMN
160.7325	AAR 141	Railroad Ops	Narrowband	FMN
160.7400	AAR 042	Railroad Ops		FMN
160.7475	AAR 142	Railroad Ops	Narrowband	FMN
160.7550	AAR 043	Railroad Ops		FMN
160.7625	AAR 143	Railroad Ops	Narrowband	FMN
160.7700	AAR 044	Railroad Ops		FMN
160.7775	AAR 144	Railroad Ops	Narrowband	FMN
160.7850	AAR 045	Railroad Ops		FMN
160.7925	AAR 145	Railroad Ops	Narrowband	FMN
160.8000	AAR 046	Railroad Ops		FMN
160.8075	AAR 146	Railroad Ops	Narrowband	FMN
160.8150	AAR 047	Railroad Ops		FMN
160.8225	AAR 147	Railroad Ops	Narrowband	FMN
160.8300	AAR 048	Railroad Ops		FMN
160.8375	AAR 148	Railroad Ops	Narrowband	FMN
160.8450	AAR 049	Railroad Ops		FMN
160.8525	AAR 149	Railroad Ops	Narrowband	FMN
160.8600	AAR 050	Railroad Ops		FMN
160.8675	AAR 150	Railroad Ops	Narrowband	FMN
160.8750	AAR 051	Railroad Ops		FMN
160.8825	AAR 151	Railroad Ops	Narrowband	FMN
160.8900	AAR 052	Railroad Ops		FMN
160.8975	AAR 152	Railroad Ops	Narrowband	FMN
160.9050	AAR 053	Railroad Ops		FMN
160.9125	AAR 153	Railroad Ops	Narrowband	FMN
160.9200	AAR 054	Railroad Ops		FMN
160.9275	AAR 154	Railroad Ops	Narrowband	FMN
160.9350	AAR 055	Railroad Ops		FMN
160.9425	AAR 155	Railroad Ops	Narrowband	FMN
160.9500	AAR 056	Railroad Ops		FMN
160.9575	AAR 156	Railroad Ops	Narrowband	FMN
160.9650	AAR 057	Railroad Ops		FMN
160.9725	AAR 157	Railroad Ops	Narrowband	FMN
160.9800	AAR 058	Railroad Ops		FMN
160.9875	AAR 158	Railroad Ops	Narrowband	FMN
160.9950	AAR 059	Railroad Ops		FMN
161.0025	AAR 159	Railroad Ops	Narrowband	FMN
161.0100	AAR 060	Railroad Ops		FMN
161.0175	AAR 160	Railroad Ops	Narrowband	FMN
161.0250	AAR 061	Railroad Ops		FMN
161.0325	AAR 161	Railroad Ops	Narrowband	FMN
161.0400	AAR 062	Railroad Ops		FMN
161.0475	AAR 162	Railroad Ops	Narrowband	FMN
161.0550	AAR 063	Railroad Ops		FMN
161.0625	AAR 163	Railroad Ops	Narrowband	FMN
161.0700	AAR 064	Railroad Ops		FMN
161.0775	AAR 164	Railroad Ops	Narrowband	FMN
161.0850	AAR 065	Railroad Ops		FMN
161.0925	AAR 165	Railroad Ops	Narrowband	FMN
161.1000	AAR 066	Railroad Ops		FMN
161.1075	AAR 166	Railroad Ops	Narrowband	FMN
161.1150	AAR 067	Railroad Ops		FMN
161.1225	AAR 167	Railroad Ops	Narrowband	FMN
161.1300	AAR 068	Railroad Ops		FMN
161.1375	AAR 168	Railroad Ops	Narrowband	FMN
161.1450	AAR 069	Railroad Ops		FMN
161.1525	AAR 169	Railroad Ops	Narrowband	FMN
161.1600	AAR 070	Railroad Ops		FMN
161.1675	AAR 170	Railroad Ops	Narrowband	FMN
161.1750	AAR 071	Railroad Ops		FMN
161.1825	AAR 171	Railroad Ops	Narrowband	FMN
161.1900	AAR 072	Railroad Ops		FMN
161.1975	AAR 172	Railroad Ops	Narrowband	FMN
161.2050	AAR 073	Railroad Ops		FMN
161.2125	AAR 173	Railroad Ops	Narrowband	FMN
161.2200	AAR 074	Railroad Ops		FMN
161.2275	AAR 174	Railroad Ops	Narrowband	FMN
161.2350	AAR 075	Railroad Ops		FMN
161.2425	AAR 175	Railroad Ops	Narrowband	FMN
161.2500	AAR 076	Railroad Ops		FMN
161.2575	AAR 176	Railroad Ops	Narrowband	FMN
161.2650	AAR 077	Railroad Ops		FMN
161.2725	AAR 177	Railroad Ops	Narrowband	FMN
161.2800	AAR 078	Railroad Ops		FMN
161.2875	AAR 178	Railroad Ops	Narrowband	FMN
161.2950	AAR 079	Railroad Ops		FMN
161.3025	AAR 179	Railroad Ops	Narrowband	FMN
161.3100	AAR 080	Railroad Ops		FMN
161.3175	AAR 180	Railroad Ops	Narrowband	FMN
161.3250	AAR 081	Railroad Ops		FMN
161.3325	AAR 181	Railroad Ops	Narrowband	FMN
161.3400	AAR 082	Railroad Ops		FMN
161.3475	AAR 182	Railroad Ops	Narrowband	FMN
161.3550	AAR 083	Railroad Ops		FMN
161.3625	AAR 183	Railroad Ops	Narrowband	FMN
161.3700	AAR 084	Railroad Ops		FMN
161.3775	AAR 184	Railroad Ops	Narrowband	FMN
161.3850	AAR 085	Railroad Ops		FMN
161.3925	AAR 185	Railroad Ops	Narrowband	FMN
161.4000	AAR 086	Railroad Ops		FMN
161.4075	AAR 186	Railroad Ops	Narrowband	FMN
161.4150	AAR 087	Railroad Ops		FMN
161.4225	AAR 187	Railroad Ops	Narrowband	FMN
161.4300	AAR 088	Railroad Ops		FMN
161.4375	AAR 188	Railroad Ops	Narrowband	FMN
161.4450	AAR 089	Railroad Ops		FMN
161.4525	AAR 189	Railroad Ops	Narrowband	FMN
161.4600	AAR 090	Railroad Ops		FMN
161.4675	AAR 190	Railroad Ops	Narrowband	FMN
161.4750	AAR 091	Railroad Ops		FMN
161.4825	AAR 191	Railroad Ops	Narrowband	FMN
161.4900	AAR 092	Railroad Ops		FMN
161.4975	AAR 192	Railroad Ops	Narrowband	FMN
161.5050	AAR 093	Railroad Ops		FMN
161.5125	AAR 193	Railroad Ops	Narrowband	FMN
161.5200	AAR 094	Railroad Ops		FMN
161.5275	AAR 194	Railroad Ops	Narrowband	FMN
161.5350	AAR 095	Railroad Ops		FMN
161.5425	AAR 195	Railroad Ops	Narrowband	FMN
161.5500	AAR 096	Railroad Ops		FMN
161.5575	AAR 196	Railroad Ops	Narrowband	FMN
161.5650	AAR 097	Railroad Ops		FMN
161.6100		Railroad Ops		(shared with Marine) FMN

Continued on page 17

GRECOM

PSR-800 EZ Scan

Digital P25 Scanning Receiver

Scanning just got easier!

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Mobile use of this device maybe unlawful, or require a permit, in some areas. Check with local authorities for regulations in your area Product may vary from depiction.

Updated Narrowband Railroad Frequencies continued

UHF Frequencies

The following frequencies may be used for repeaters in terminal areas, but they are mostly used for half-duplex or simplex linking, remote control and telemetry.

Your questions and comments are always welcome via email: kf7yn@yahoo.com

Be sure to put Nat Com in the subject line.

Until next time, happy scanning!

Frequency	Description	Mode
452.32500	Railroad Ops	FMN
452.37500	Railroad Ops	FMN
452.42500	Railroad Ops	FMN
452.47500	Railroad Ops	FMN
452.53750	EOTD/FRED 2 End of Train Telemetry (secondary)	FMN
452.77500	Railroad Ops	FMN
452.82500	Railroad Ops	FMN
452.83750	Railroad Ops (low power)	FMN
452.85000	Railroad Ops	FMN
452.86250	Railroad Ops (low power)	FMN
452.87500	Railroad Ops	FMN
452.88750	Railroad Ops (low power)	FMN
452.90000	Railroad Ops	FMN
452.90625	Railroad Ops	FMN
452.91250	Railroad Telemetry	FMN
452.91875	Railroad Ops	FMN
452.92500	Locomotive Remote Control/Remote Indicator	FMN
452.93125	Locomotive Remote Control/Remote Indicator	FMN
452.93750	EOTD/FRED 1 End of Train Telemetry	FMN
452.94375	Locomotive Remote Control/Remote Indicator	FMN
452.95000	Locomotive Remote Control/Remote Indicator	FMN
452.95625	Locomotive Remote Control/Remote Indicator	FMN
452.96250	Telemetry/Remote Control/Remote Indicator	FMN
452.96875	Locomotive Remote Control/Remote Indicator	FMN









Want to see the January/ February, 2013 issue of National Communications, but you don't have a user name & password yet. Register for a user name & password at: http://www.bearcat1.com/register/bettyreg.html or call us at 937-299-7226.

10 Day Desert Radio Camp



Radio seminars are always a daily big draw.

By Gordon West, WB6NOA

Every January, Quartzsite, Arizona becomes the destination for thousands of RVers and day visitors to take in the week-long sports, vacation and RV show (www.QuartzsiteRVshow.com).

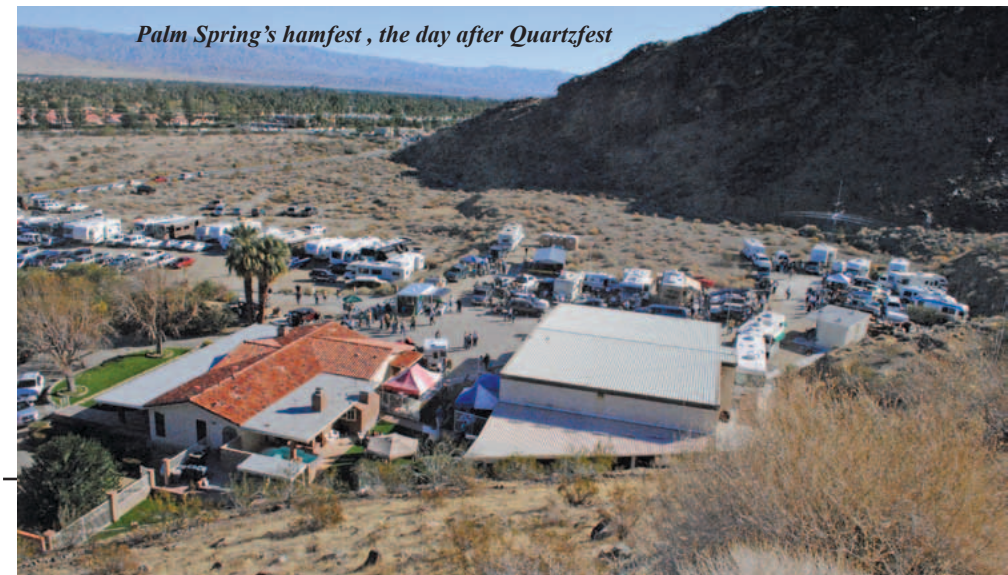
The town of Quartzsite concurrently hosts rocks and minerals exhibitions on each side of interstate 10. If you are into ROCKS this is one stop shopping for geodes and deals you can't believe. And for us, avid radio operators who may know only the quartz that go into a radio oscillator crystal, ham operators, shortwave listeners, and scanner buffs come together 5 miles south, for boondocking on the Bureau of Land Management (free for 14 days) desert floor.

The radio gathering is called Quartzfest (www.quartzfest.org), now expanded to 10 days, to include enough time for radio seminars, rock hounding, ladies programs, shopping in town, and some serious radio training seminars.

"Quartzfest is not a club. There are no dues, no budget, no officers, and our event IS recognized by the American Radio Relay League," comments Steve Weed, K04QT, our Quartzfest organizer.

"Quartzfest 2013 is VERY organized for our twin fire ring radio seminars!" adds Steve.

- Mobile antenna mounting
- RV/home noise elimination
- Using your manual antenna tuner
- Shortwave DXing on high frequency
- Nighttime long wave dxing for beacons
- WiFi range extension
- Ham and Commercial radio exams
- Geocaching and T-Hunting
- Solar panels and regulators
- Digital interfaces
- ARRL representatives
- Analog and digital scanner techniques
- Working with Anderson connectors
- Working ham satellites
- ICS course certification



Palm Spring's hamfest , the day after Quartzfest

10 Day Desert Radio Camp

continued



Quartfest , pick any spot , and its YOURS!

"In addition to our fire ring seminars, we have plenty of activities to enjoy on the desert floor," adds Steve.

Metal detecting for gold

- Stargazing with telescopes
- Boondocking for beginners
- Radio gear yard sale
- Antenna walkabout
- Rock hounding and caravanning to quarries

Every day the ladies have programs and the guys get into the action as well!

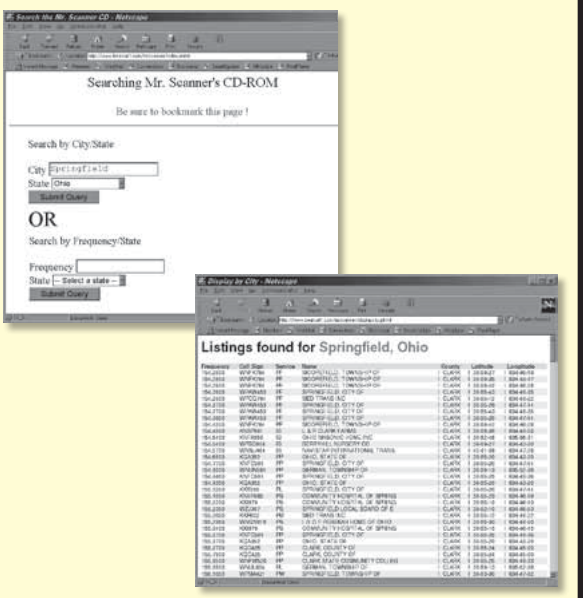
- Cast iron cooking class
- Genealogy
- Beading classes
- Quilting projects
- Recipe exchange



Lots of big antennas seen on small RVs!

Continued on page 20

Nat-Com Subscribers Have Access To Over 4 Million Frequencies



All you need is a computer and internet access. Just follow these simple steps.

- Log on to www.bearcat1.com/free.htm
- Scroll down to the picture of either the Mr.Scanner Public Safety or Mr. Scanner CD Roms
- Click on the "Search the CD Rom" link next to the photo
- 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.

10 Day Desert Radio Camp continued

You don't need to own an RV to take part in all of Quartzfest. Many radio operators rent campers and RVs in Phoenix or Yuma or Blythe, for a week of camping adventure. Water trucks and mobile waste trucks make frequent rounds and stops at our very widespread campgrounds.

The fire ring seminar sites are pretty centrally located for everyone. We even have small portable PA systems to insure everyone will hear the presenters loud and clear. Be sure to bring your own beach chairs!

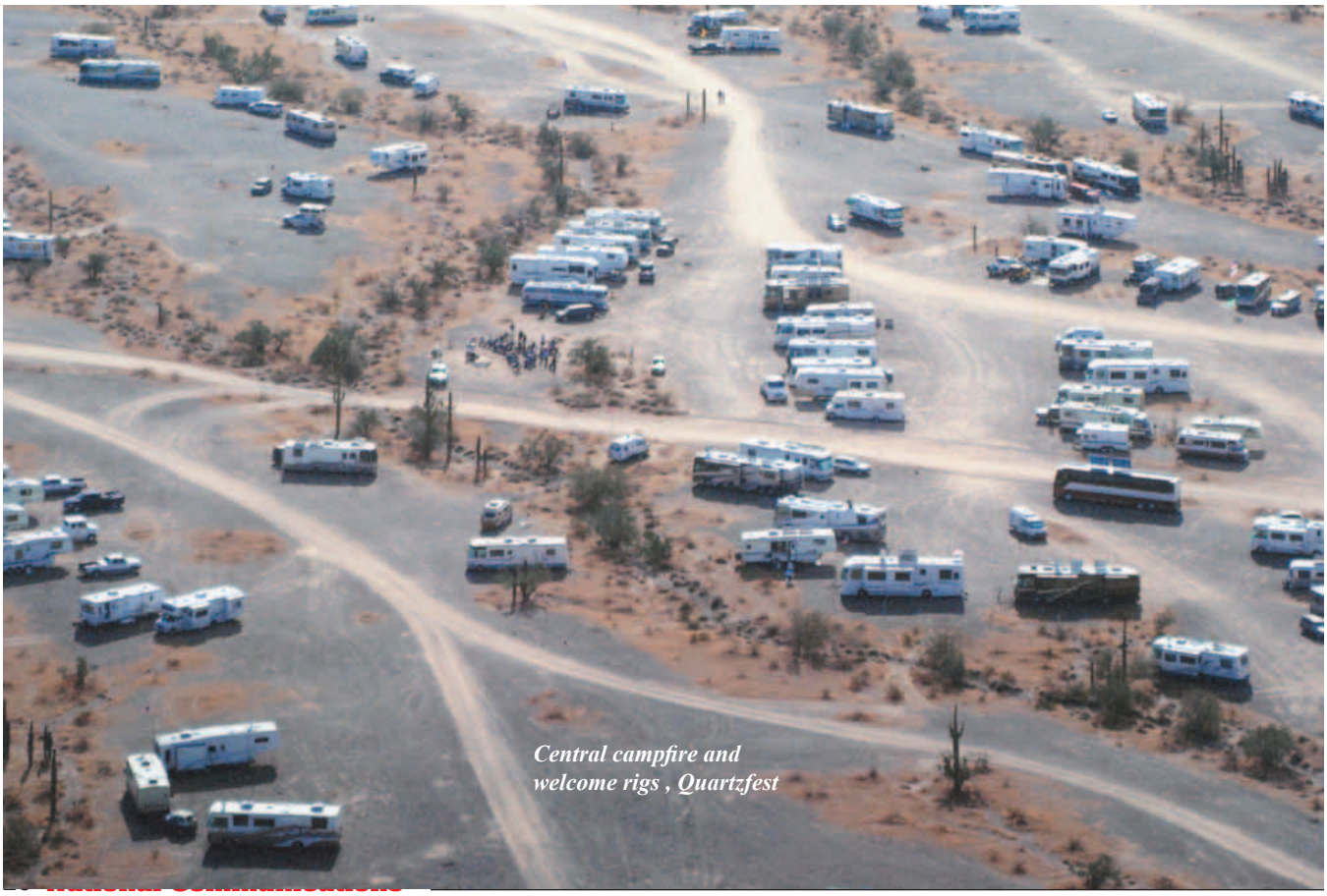
This year the event lasts 10 days, beginning Wednesday, January 16th and lasts through Friday, a week and half later, January 25th. Late on closing Friday, many of us head west to the Saturday, January 26th, Palm Springs hamfest, hosted by the Desert R.A.T.S. (http://desertrats.x.am). Unlike Quartzfest which is absolutely NON-commercial, the Palm Springs event brings in over 30 commercial exhibitors for this one-day Saturday show.

For another adventure, on Sunday, after the Saturday hamfest breaks up, many of us take the tram ride up to the mountaintop for a ride and view you will never forget!

When planning for Quartzfest, you can plan on good cell phone coverage, despite our remote location. So is local WiFi, thanks to ham operators who share their satellite service. Bring your own water, prepare to stow and bring out your own trash, and use sun and wind power for electricity. But, be assured that if you run low on ANYTHING, the morning 7 AM net on 146.550 has hundreds of hams tuned in, ready to help a newcomer.

There are three seminars each morning, and two more each afternoon. With two seminar locations, you get ten seminars a day! Each afternoon we all get together for an "All Hands" gathering where we can find handouts from many manufacturers from maps to hats.

"Go to www.quartzfest.org to see some of the great presentations we offered the last few years. Then check out our monthly newsletters for THIS upcoming year's Quartzfest. If you don't happen to have an RV, rent one. If you enjoy tent camping, there are spots for you. If its time to exercise that RV for boondocking on the desert floor, we are extending our heartiest invitation to join us! Hope to see you there!" says Steve, K04QT.



Central campfire and welcome rigs , Quartzfest

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- **Rename talkgroup IDs**
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- **Receive a trunking system that has no IDs**

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- A large scanner manufacturer charges big $$ to program a radio for you. We can program your radio for your local area quickly and efficiently and at the lowest cost anywhere.

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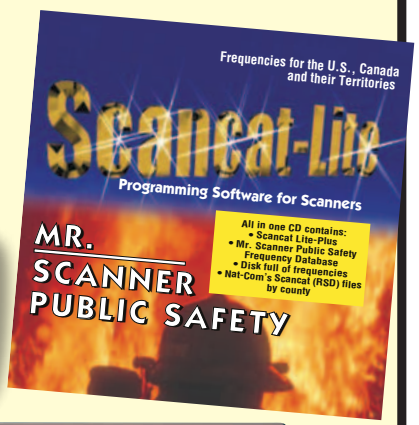
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by Don Messerschmidt
2nd Editors, revised and enhanced

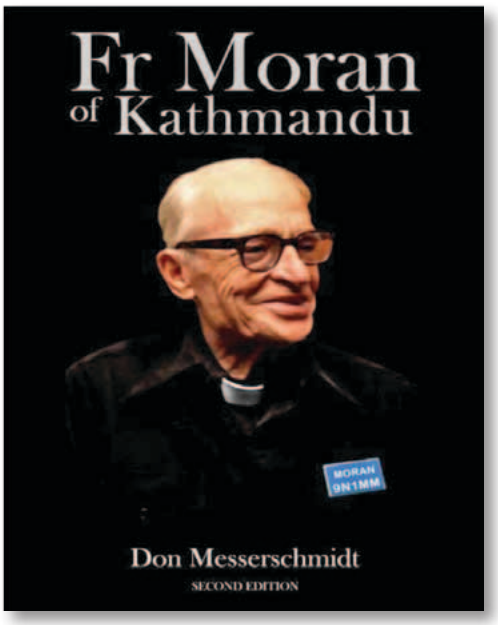
Marshall Moran set out from Chicago in 1929 to join a Jesuit mission on the Indian subcontinent. Over the next six decades he became one of the South Asia's most renowned and remote celebrities in both India and Nepal. He was a pioneer priest and popular educator and, for over three decades, one of the "rare ones" of the world's amateur ('ham') radio fraternity. On the air he was known as 9N1MM-'Mickey Mouse,' in ham radio code.

During his lifetime Fr Moran taught the sons of the rich and the poor, the powerful and the underprivileged. In 1951 he opened the first Western school in Nepal. From simple beginnings he helped set the standards for modern education there, and became known worldwide as 'Father Moran of Kathmandu'.

In this, the 2nd (revised) edition of his authorized biography, anthropologist and writer Don Messerschmidt brings the story of Fr Marshall D. Moran, SJ, to life. It is a remarkable story of quiet accomplishment.

Fr Moran led an amazing life as a teacher, school administrator, and both confidant and friend to many famous people. During his 22 years in north India he became well known to Mahatma Gandhi, Jawaharlal Nehru and other leaders of the India Independence Movement. In Nepal he was a friend of royalty and commoners, alike. Visiting diplomats, movie stars, astronauts, politicians, aid workers, Peace Corps Volunteers, news correspondents and writers went out of their way to meet him. Mountaineers like Sir Edmund Hillary, Sir John Hunt, Willi Unsoeld and Norman Dyrenfurth knew him well. In 1963 he was the main radio contact between the outside world and the American Mount Everest Expedition.

The book covers Moran's life in 16 chapters, from his youth in Chicago, his religious education, his early missionary life in India to many years in Kathmandu. It also includes a brief history of Christian missions in India, Tibet and Nepal. Moran's life as an amateur radio operator in the Himalayas is well covered. The book concludes with an *Epilogue*, an updated Annex: *Fifty-nine Years of Jesuits in Nepal*, Bibliography and Index. It is illustrated with photos of key events and places in his life.



What readers say about *Fr Moran of Kathmandu* –

- *"Very few people are able to create possibilities and persevere for success in the face of unimaginable odds. Fewer leave behind lasting legacies which future generations will remember and admire. And there are not many with the diversity to be priest, teacher, radio operator, social worker, sports enthusiast and more, in one. Fr. Moran was endowed with all these skills and abilities, and his is a life worth remembering and celebrating.*

This book *"is a worthy token of appreciation for the life and work of Fr. Moran... It is not an easy task to bring forth a character so diverse, so intense and driven to achieve the high standards he set for himself. As a former student of Fr. Moran, I read these pages with full admiration for its protagonist, his courage and accomplishments. Fr Moran's life should inspire many others."* – Kumar Pandey, *The Nepal Digest (1998)*

- *"I knew Father Moran in Kathmandu and the author does a wonderful job of accurately portraying this colorful character and his significant achievements in Nepal and influence worldwide."* – Edgar Metzler, on Amazon.com

Widely read and acclaimed by educators, adventure travelers, amateur radio enthusiasts, and fans of exotic biography and mission work the world over. ●

Midland Offers a Variety of Rigs

They've been making CB radios for 40 years – they must be doing something right!

By Chuck Gysi, N2DUP

The very first mobile CB radio I bought was the Midland 13-862B, which was a unique rig in its own respect. It was the mid-1970s and it was time to take my hobby of citizens band from my base station in my house to my vehicle. As a teen-ager, I didn't want to spend a lot on a rig and the 13-862B was a great option to mount under the dash of my 1962 Mercury Comet.

The 13-862B was different because while the volume, squelch and channel selector rotary controls were mounted on the front of the radio, the transmit indication light, LED channel display and S/power meter were mounted on the top of the radio. Thrusting out from underneath the dash of my car's red interior, it was easy to see the most important functions on my new mobile rig. I always admired that Midland rig for offering something different from the normal pack of CB rigs on the market back then. It's what made me purchase this radio.

I had forgotten about Midland until recently. Admittedly, they haven't been on my radar for still being in the CB business these days. I knew they make two-way radios for businesses and public safety and my weather radio at home is a Midland. I know they make FRS/GMRS handhelds, too. But for CB radio, they just slipped out of my mind.

Almost every CB dealer carries the Uniden line as well as Cobra and perhaps Galaxy. I just haven't seen the Midland line carried in too many shops. I'm going to be paying better attention now because they do offer an exciting lineup if you are looking for a slightly different radio. After all, Midland has been making CB radios for 40 years now. They surely know something about the market and they're doing something right.



The Midland 75-822 is a handheld CB radio and a mobile CB rig. Take your pick and use it how you need to operate!

So let's take a look at the Midland offerings for citizens band. You may find your next handheld or mobile rig here.

75-822

The most exciting Midland CB radio actually is two in one! The Midland 75-822 can quickly be converted from a handheld CB walkie-talkie to a full-powered mobile rig in seconds. This versatility of the 75-822 makes it an exciting CB radio to own. As a handheld CB unit, the rubber-duck antenna and battery pack (which uses six AA cells) allows you to take the radio anywhere. Even if you don't use the included car kit, this rig sitting on the front seat of your car still will allow you to hear all nearby CBers on the highway. But if you want to go full tilt, attach the car kit adapter, add a mobile CB antenna on the outside of your vehicle, push the power plug into a cigarette lighter jack, hold the rig just like a large microphone and you're on the air with full CB power. If you still need CB at your destination, detach the car kit, slide the battery pack back on and reattach the rubber-duck antenna and you're walking around carrying CB convenience so you're never out of touch.

The 75-822 also offers easy Channels 9 or 19 access as well as weather broadcast monitoring and the ability to listen to two channels at the same time. This is a handheld/mobile CB radio that deserves checking out.



Midland's 75-785 handheld CB radio is a basic portable handheld CB radio.

75-785

The Midland 75-785 is a handheld CB radio that offers the basics and gets you on the air with portable power. This handheld offers high and low power outputs to help conserve battery power when you don't need full power, as well as a low-battery indicator to alert you that your radio is about to die unless you charge or switch batteries.

If you wish to use the handheld while mobile, there's an external power jack so you can run it off the vehicle's power instead of the batteries. The radio's rugged construction allows it to be used in a variety of environments.

1001z and CB-1

The 1001z and CB-1 mobile radios are the low-end offerings from Midland and depending on your need, either one would be worth exploring if you don't want to spend a lot of cash on a new rig.

Both radios are similar in that they both offer PA and instant emergency Channel 9 access. While the CB-1 offers up/down controls for changing chan-

Midland Offers a Variety of Rigs

continued



The top-of-the-line 9001z from Midland offers features you'd expect in a CB radio made for experienced and professional operators. The classic design looks great in any mobile setting.



The Midland CB-1 mobile is a compact basic CB radio that fits in any budget and any vehicle.



If you like a nice front-panel display with the capability of receiving nearby NOAA weather stations, the 1001LWX is worth checking out.



The 1001z mobile rig from Midland is a basic rig that also offers a front-panel display with S/RF meter and channel display.



The 5001z is Midland's classic CB rig. A mic gain control helps you get your voice across the airwaves.

nels, the 1001z has a full rotary switch for 40-channel selection. The 1001z has an adjustable RF gain control so you can crank down those strong signals overloading the receiver. The 1001z also offers an LED-readout S/power meter so you can monitor the strength of incoming signals as well as your own outgoing power strength.

The CB-1 radio is a compact rig that includes a U-shaped mounting bracket that allows for easy mounting in any vehicle.

1001LWX

The 1001LWX rig offers what Midland calls Weather Scan Technology that allows the radio to find the closest NOAA weather transmitter on the 162-MHz band and allow the user to have instant access to weather-related information when needed. The radio also has a backlit digital display that allows easier operation at night.

All the regular features you'd expect in a radio like this such as PA and an RF gain control are included. Plus, the front-panel meter tells you the strength of incoming signals as well as your power output.

5001z

The Midland 5001z is a classic CB rig, and looks like many other rigs on the market. It's a full-size radio that offers basic CB functions in a fun and attractive package.

The radio's large faceplate has a dimmer that allows you to control the brightness of the controls while operating mobile at night. The analog signal/power meter lets you know how well your signal is doing as well as the signals of others. An adjustable RF gain control allows you to crank down strong nearby signals.

A noise blanker allows you to minimize background noise and PA and instant Channel 9 options are easily used. One unique feature of this radio is Midland's X-TRA TALK microphone control that allows you to boost your audio level while transmitting, to help your signal get across the airwaves better.

9001z

Midland's 9001z rig is the maker's top-of-the-line CB radio and has a lot of fun features in a classic design.

Do you do a lot of driving, either as a trucker or as a traveler? The 9001z offers a very unique feature if you have the propensity to get dozy while driving down the highway. The 9001z features Guardian Alert, which allows the setting of timed alarms or sirens to help you stay awake while you motor along the miles. This CB rig also has Weather Scan Technology that allows reception of the closest NOAA VHF weather broadcast. If you switch primarily between two channels, the last channel recall feature will help you switch back and forth between the two channels.

This professional CB rig has what Midland calls XR technology, which helps filter noise to increase the range that you can hear on the channels. A built-in SWR meter allows you to make sure your antenna system is at full par when you transmit. All the other features of other Midland rigs are included: Channels 9 and 19 instant access, PA, dimmable display and noise blanker. This is a CB radio for the serious CBer.

CB shack contest

We want to see your CB station at Nat-Com! Some CB stations are elaborate, some have the most equipment, and some are built for comfort, while others are just basic.

We don't have anything to give away, but we do want to publish a photo of your CB shack here in the pages of Nat-Com. The winners get to see their very own CB station in the pages of a national hobby radio publication. Now, that's cool!

Here's how you can enter: We prefer digital images of your CB station. Send your shack's photo as an attachment in an email to the author of this column at nat-com@citizensband.net (be sure to put "Nat-Com" in the subject line or your email may get lost in my spam bin). Tell us a little about the radios in your station and be sure to tell us your handle and a little about the hobby for you, such as how long you've been a CBer and who you like talking with.

We look forward to seeing your CB radio shack photos soon!

Sports Broadcasts 'Survive and Thrive'

By Dorothy Rieke

"I love sports. Whenever I can, I always watch the Detroit Tigers on the radio." Gerald R. Ford

In the 1920's, radio became big business for Americans. During that time and later, people began listening and depending on radio to uplift, entertain, and inform them. An additional benefit was added with sports coverage by skilled announcers who made listeners believe that they were watching the actual sporting events.

The radio, of all forms of communication, has had the greatest impact on sports and sports' audiences by covering the different levels and varieties of athletics. Every sport from high school football to professional auto racing is covered.

In addition, radios have certain advantages that no other media can match such as the connection between the broadcaster and the listeners. Bob Uecker commented, "You paint a picture in the mind. It's a kick to make baseball come alive to a guy hundreds of miles away who's never seen your home park." Indeed, good sports announcers are the 'eyes of radio listeners."

Another advantage is listeners' responses. From the early days of radio sports broadcasting, listeners have responded in many different ways depending on what the announcers say and the players' actions. In fact, a good sportscaster can create a bond between the listeners and the sports teams and athletes. Down through the years, millions have devoted time to listening to their favorite sportscaster relating the actions of their favorite teams.

Sports broadcasting is similar in style to a newscast. Individuals are hired to review the leading sports events either daily or weekly. Sports announcers must give the listeners a picture of the action of the game using nimble wits and versatility including a acknowledge able grasp of the English language.

Sports announcers must have a true love for sports and the desire to convey the exact plays to their listeners. They must tell the play-by-play story accurately while conveying the significance of the event with excitement. They must reflect the importance of what has just occurred. If gifted announcers accomplish these, they actually bring listeners "inside the gates" for the first time.

Undoubtedly, lives have been immeasurably enriched by broadcasts of amateur and professional sports events by certain announcers who gained recognition for their intense interpretations of game action. Mel Allen, Red Barber, Harry Caray, Curt Gowdy, Dizzy Dean, Don Dunphy, Red Grange, Ted Husing, Clem McCarthy, Lindsey Nelson, Ernie Harwell, Vin Scully, Bill Stern and Bob Wolff and others were gifted announcers. They announced events in the sporting world including professional and amateur sporting events in every major area of athletic competition.

In reality, some sports announcers became as famous as the players themselves because they succeeded in defining the dramatic historical moments in sports.

Some sports announcers also interview popular players and review recent or upcoming sports events. It is not unusual for two or even three sportscasters to cover a game. One is the announcer who is prepared to cover events of the game; another is the color commentator who gains access to information about individual players of both teams reviewing the players' backgrounds, their achievements, and any injuries.

The color commentator assists the play-by play announcer by filling in time between plays and exchanges comments about background information and statistical analysis, history, or injury reports. Frequently, announcers are former players or coaches of the sports being broadcast because they have the experience and knowledge needed to give a complete picture of what is happening.

The first time sports were "announced" seems to be a matter of opinion. One account reveals that in 1912, Professor F. W. Springer constructed a crude set to transmit the University of Michigan football games to a very small audience. That, perhaps, was the first occasion that individuals experienced listening enjoyment of a sports activity in the comfort of their homes. Of course, as technology evolved and announcers became more efficient, the listening level was taken to a new level of enjoyment and information.

By the 20s, people all over the world were able to enjoy games by listening to skilled radio sports announcers. Sources differ as to when the first boxing match was broadcast on radio. One source reported that in the early 1920's, the first broadcast was when Jack Dempsey fought Billy Miske Another source counteracted this statement reporting that the first radio broadcast of this type of sports event was in 1921 when Station KDKA in Pittsburgh, Pennsylvania, broadcast a 10-round boxing match between Johnny Dundee and Johnny Ray at Motor Square Garden in Pittsburgh.

On August 5, 1921, at the same station, Harold W. Arlin announced the first broadcast of a Major League baseball game between the Pittsburgh Pirates and the Philadelphia Phillies. Two months later, Arlin announced the first play-by-play action of a college football game on KDKA between the University of Pittsburgh and the West Virginia University. Arlin, sending the details of the game through a converted phone, brought sports into American living rooms with immediacy and intimacy.

A few names stand out as "great announcers." Graham McNamee, who originally planned a career as a radio musician, became "the best in the business" after Grantland Rice 'retired" during the third inning of the 1923 World Series. He increased his exposure when he covered the Kentucky Derby, Charles Lindbergh's return from Paris, and the 1924 political convention.

Ted Husing began his sportscasting career in 1925 by recreating the World Series for WJZ from ticker tape reports. He began working for the Columbia Phonograph Broadcasting System, (later CBS) and continued working there for twenty years. He is known for creating

Sports Broadcasts 'Survive and Thrive' continued

the annunciator or spotter board, a device that allowed the announcer's assistant to identify players on the field for the announcer. It was first used at a Princeton-Navy football game in 1926.

Another early announcer who contributed much to sportscasting was Mel Allen. He covered more World Series (20) games and All-Star games (24) than anyone in history. While working for CBS from 1939 to 1942 , he was the chief radio announcer for both the Yankees and the Giants. Lindsey Nelson called Allen "the best ever to broadcast the game."

Football contests had a great impact on radio broadcasting. The first professional football game was broadcast on Thanksgiving Day in 1934 between the Chicago Bears and the Detroit Lions. These games were aired on "sustaining broadcasts," which meant that colleges were not charged for airing rights nor did stations receive income from the advertising during the games.

At one time, owners and officials from colleges, universities, and athletic conferences were concerned with radio sports broadcasts being responsible for lower attendance. Some teams even banned the broadcasting of home games. However, soon owners saw the advantages of game broadcasts and voted that clubs would make individual decisions concerning this problem.

Some individuals used their radio sports announcing as a "stepping stone" to other media positions. Former President Reagan began his media career as an announcer for the University of Iowa football games in 1932 and later worked as an announcer for the Chicago Cubs' games for WHO in Des Moines, Iowa. Walter Cronkite's first media job was broadcasting college football games on WKY in Oklahoma City, Oklahoma.

The popularity of radio sports has increased because Americans listen on the road, at work, at exercise sites, or even on picnics. There are twice as many car radios in use as the total circulation of all daily newspapers.

During the last ten years, sports game coverage and sports news have been dominant on ESPN Radio, Fox Sports Radio, and Sporting News Radio. In addition, all- sports radio stations have been broadcasting in Florida, New Jersey and Tennessee. Recently, four Idaho radio stations switched to all-sports formats. When games are not being broadcast, radio time is filled with talk shows and call-ins.

Today, there are many nationally syndicated shows such as 'Dan Patrick Show,' 'The Jim Rome Show,' and the 'Mike and Mike Show.' This is not surprising as time has shown that local sportscasters who host sports programs have a certain appeal that brings interest and popularity.

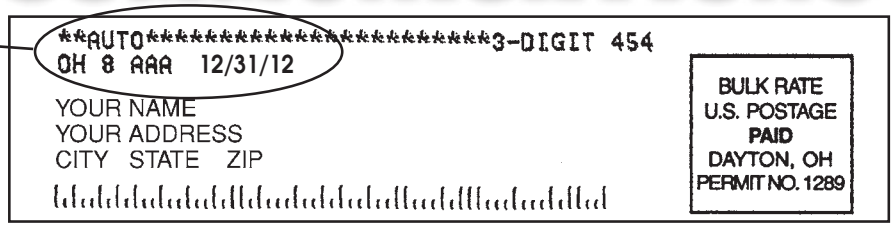
The future of all-sports formatted radio looks bright and lasting. Sports on radio will survive and thrive because people like to hear about sports, talk about sports, and listen to sports broadcasts. ●

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CLOSING COMMENTS



By: Norm Schrein, KA8PGJ

With the January/February issue we start a new era with National Communications. When we published our first amateurish newsletter in 1989, who knew that we would be still publishing a magazine for radio enthusiasts in 2012.

So much has changed during those decades. Frequency books have been computerized going from the printed page to either CDs or on-line. There were many radio publications when we started and today most of them are no longer here. Two major frequency directories, "Police Call" and "Betty Bearcat" are now out of print. Some of you may have remembered the "North East Scanning News". That publication eventually became part of "National Scanning Report" which eventually became "National Communications".

Over the years we have amassed a large inventory of articles involving just about every aspect of the radio hobby. Thousands of articles in fact. These have been written by some of the most knowledgeable radio hobbiests over the past 3 decades.

Now we are taking another turn in the hobby. National Communications will continue to be the excellent publication it is because of the many talented authors who contribute their time and talent to make the magazine what it is today. We hope to reach an even wider audience by providing the magazine on-line. However, there is a down side that we need to face.

Just as with any high-tech endeavor, whether it be scanner radios (you did notice that things have changed in scanners over the past decades), computers, automobiles, televisions, telephones (cell phones were virtually an unknown in the late 80's), or whatever, change has occurred and will continue to do so. All of us have to make a choice to keep up with the technology or just stay put where we are and be left behind.

We have made the decision to provide Nat-Com in an on-line only version but want to make it more than just a magazine. Many magazines and newspapers have gone to the on-line only version. Just recently Newsweek decided to make the change. It is really just a matter of economics. So, when it was time for us to make that decision it came down to the fact that we wanted to keep all the positive aspects of National Communications but we simply could no longer afford to print and mail the issues without increasing the amount of the subscriptions by an amount that would not make it a saleable item.

As many of you have called in your renewals over the past months I have asked you what you felt about the on-line version. Many of you said that you understood the situation and while you would like to have a printed version realize that the technology is moving away from the print version to the on-line version. Thankfully the majority of you have also decided to renew.

I mentioned earlier that I wanted to make Nat-Com more than just a magazine. So, the first thing we will be doing is to put all those thousands of articles on line where you can pick a topic and view the original story. We will continue with our comprehensive frequency databases and we will also offer to those who are interested deep discounts on frequency database CDs and even scanner programming software. We hope to expand those discounts to other items in the future.

I have also talked to some of you who do not have a computer and don't know how to operate one. First of all, if you don't have a computer and are willing to take the time to learn some basics, you will find that an entirely new world of communications will open to you. Not only can you view our magazine on-line, but you can watch the news from around the world, or listen to radio stations from across the globe. You can use the computer to pay your bills, compose a book or write an opera if you wish. You will find that a computer with an internet connection can become very addicting. So, before you go out to buy a computer, and you can find computers from all price ranges, many that cost less than your scanner; take a walk into your local library. Most all libraries have computers for their patrons to use free of charge. If that does not get you interested, probably nothing will. Just start browsing the internet and find out what all is out there. Of

CLOSING COMMENTS

course a good dose of common sense is needed as you should not believe everything you find on-line.

Learning how to use a computer is not as hard as you might think. I know as we all get older we don't really like to learn new things. However, you can ask a younger relative to help you out or take a class. Many schools and other organizations will offer classes on how to properly use a computer. The main thing is not to be afraid of the technology. Learn to embrace it. You will really be surprised to find out what awaits you.

Technology is not something to be afraid of. It is something to be used for your benefit. So, here at Nat-Com we are going to make the technology work for us. Hopefully we will find readers that we might not have found otherwise. -- all those with Kindles and other E-readers. Also, hopefully we can keep the readers we already have. The technology will open an even wider world for Nat-Com readers.

Finally, with the magazine being on-line, you won't have to worry if the post office will get it to you, or if they do, that it will be in one piece. You can be assured that magazine will be posted on line ready for you to read by the 1st business day of the issue month. So, look for the January / February issue to be on line by January 2nd, or maybe even the 1st.

Thanks to all our loyal readers and I hope you understand why we are doing what we are doing with the magazine and that you will continue to stay on-board with us as we continue the great tradition of radio hobby news in National Communications. ●

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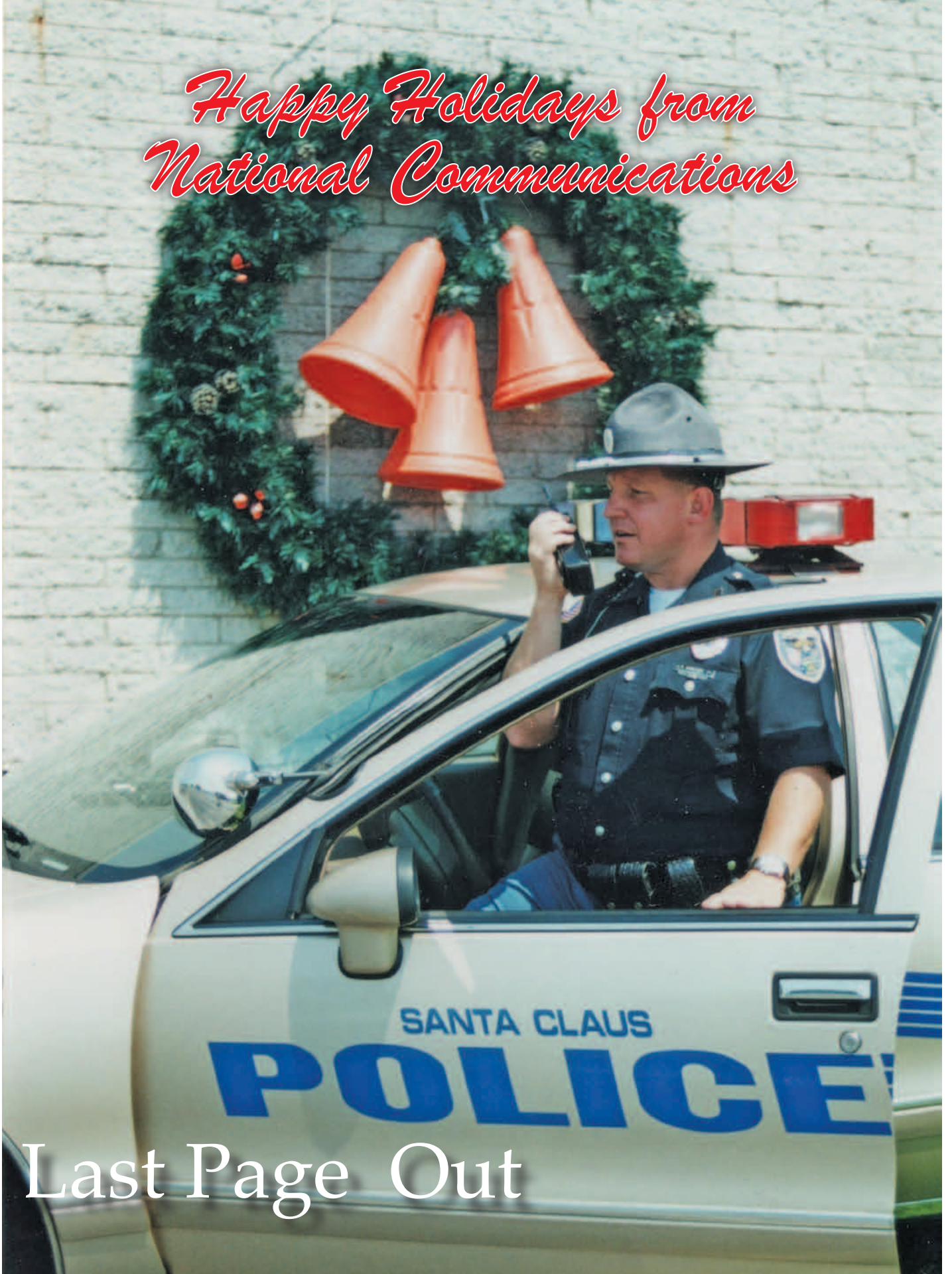
We received these photos a few months ago from Dave Roberts (KZZA2781). Looks like he has his chair all set up with his favorite magazine -- National Communications. Thanks, Dave for the photos.





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