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# THE WECAGRAM



Newsletter of the

Westchester Emergency Communications Association, Inc.

Post Office Box 831

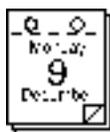
North Tarrytown, New York 10591-0831

WECA Information Hotline: 914-741-6606

Web site: <http://www.weca.org>

*Serving the Public through Amateur Radio and serving Amateurs since 1972*

**Volume 20, Issue 10 December 1996**



## Next Meeting

The next WECA meeting will be held on Monday, December 9, 1996 at the Westchester County Center in White Plains, beginning at 7:30 p.m. with a social half-hour followed by the main program at 8 p.m.

This month's guest speaker is Jack Arnouts, N2KUO, from Ham Central in Poughkeepsie. He will show and discuss new radios, such as the Kenwood TS-570D, TS-870S, and TM-V7A.

Hope you can all make it to the meeting.

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## Hudson Division Elections

On November 15, 1996, the ARRL announced the results of the election of directors and vice directors for the 1997-1998 term. Frank Fallon, N2FF, was elected Hudson Division Director, and WECA member J.P. Kleinhaus, W2XX (formerly AA2DU), was elected Vice Director. Fallon won by a vote count of 2168 vs 1680 against incumbent Director Richard Sandell, WK6R, in what is said to have been relatively low voter turnout. Kleinhaus received 1905 votes to his opponent Peter Malvasi, WB2BYQ's 1864 votes.

The terms of office are two years beginning at noon on January 1, 1997.



Frank Fallon, N2FF



J.P. Kleinhaus, W2XX

## Field Day Results

According to results published in the November issue of QST, WECA's 10,098 score in the 4A class came in third this year. First place was K7TR of the Scottsdale ARC/Central AZ DXA with a score of 14,854 and second place was W2GD of the Cherryville Repeater Association, in Northern New Jersey, with a score of 14,790.

WECA's score this year is a significant improvement over last year, when WECA came in eighth, with a score of 9,896. The W2GD team came in first last year with a score of 17,472.

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## **THE WECAGRAM**

**Editor** : Fuat Baran, N2YGN

**Assistant to the Editor** : Melissa Metz, KB2SXB

The WECAGRAM is the official newsletter of the Westchester Emergency Communications Association, Inc., a Special Service Club affiliated with the ARRL, ARES, the Westchester County Office of Disaster and Emergency Services, and RACES, and a member of the Westchester County Emergency Medical Services Council.

Any inquiries, comments, items for Swap and Shop, commercial advertising, suggestions, contributions and letters for inclusion should be sent to the editor at:  
3215 Arlington Ave, #4H

Riverdale, NY 10463.

Submissions via electronic mail to [wecagram@weca.org](mailto:wecagram@weca.org) are especially welcome. You can also fax them to 212-662-6442 (ATTN: Fuat Baran). Submissions may be edited for clarity, style and space. The deadline for acceptance of material for each newsletter is the twentieth of the preceding month.

All materials are the opinions of their authors, and do not necessarily reflect the official position of WECA, its officers, directors, or the editor.

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The WECAGRAM would like to exchange newsletters with other clubs. If you are interested in receiving the WECAGRAM through such an exchange or know someone who would, please contact the editor.

### **WECA Officers/Directors**

**President:** Joseph L. Brown, KB2NBN

**Executive Vice President:** David J. Weiss, N2OGK  
Michael J. Weitzner, N2EJI

**Secretary:** Anthony J. Licata, N2NWZ

**Treasurer:** Andrew R. Farber, N4OOX

**Trustee:** Paul S. Vydareny, WB2VUK

**County Liaison:** Sanford H. Fried, N2SF

**Digital Modes:** Richard L. Benda, WB2QJA

**Director At Large:** Ronald E. Devenuti, N2TJE

**Education:** Barry J. Frajer, N2LE

**Engineering:** Robert A. Wilson, N2DVQ

**Membership Services:** Peter A. Johnson, N2TFC

**Newsletter:** Fuat C. Baran, N2YGN

**Repeater Operations:** Dwight P. Smith, N2FMC

**Public Relations:** William E. Hertwig, Jr., N2QZB

**Public Service:** Robert Kantor, N2TSE

**Social:** Salvatore Cresenzi KB2GTE

**Bylaws Committee Chair:** Andrew Farber, N4OOX

**Awards Committee Chair:** Richard Benda, WB2QJA

**President Emeritus:** Thomas R. Raffaelli, WB2NHC

WECA gladly accepts donations of equipment, new or used (such as from estates). Please write to WECA at the North Tarrytown address on the cover.

**WB2ZII/R** WECA operates the following repeaters:

147.060(+) MHz PL 2A (114.8 Hz)

447.475(-) MHz PL 2A (114.8 Hz)

224.400(-) MHz PL 2A (114.8 Hz)

**WECAGRAM Online:** <http://www.weca.org/wecagram>

## From the Editor

In this issue, the series on APRS continues with an article on APRS maps by amateur cartographer Alan, N2YGG. Bob, N2DVQ, continues his discussion of repeater key-up delays, and we continue the series on RF Safety.

Included in this issue WECA members will find the latest club roster. If you've received a new vanity call sign, don't forget to send an update to Peter, N2TFC, our membership director.

As I wrap up my sixth issue of the *WECAGRAM* (and the last issue of Volume 20), I'd like to thank all of you who have made submissions. Without your support, this newsletter would not exist. I urge all of you to try your hand at writing for the *WECAGRAM* and hope to see many more of you represented in future issues.

Hope you all have a happy holiday season.

73,

## November Meeting Notes

by **Fuat Baran, N2YGN**

The meeting opened with a reminder that the ARRL had declared the upcoming year to be the Year of Public Service.

The guest speaker was Hank Lopez, N2MSS, who gave a lecture on VHF/UHF weak signal operation. He also had some equipment on hand. For more details on the topic Hank recommended the web site at

<http://uhavax.hartford.edu/newsvhf>. You can also contact Hank by email at [hlopez@delphi.com](mailto:hlopez@delphi.com).

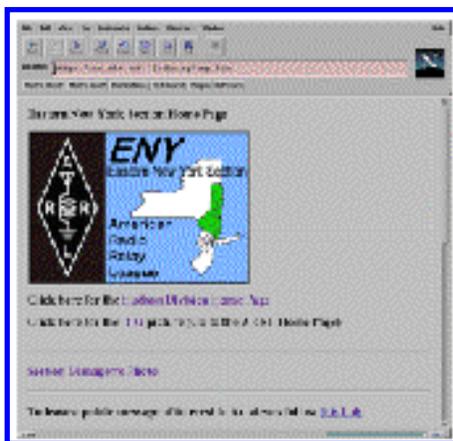
Robert, N2TSE, announced that the New York Philharmonic concert organizers had run out of t-shirts, but instead had sent compact disks as a token of their

appreciation. Robert handed out the CDs to members who participated in that event.

Stan, WA2NRV, mentioned that he was still waiting for further info on the bulk battery purchase plan. (See the article in this issue.)

Tom, WB2NHC, handed out patches to JOTA participants.

## Web Sites of the Month



1) <http://www.columbia.edu/~fuat/cuarc/>

2) <http://www.mhv.net/~fritzing/eny.htm>

1. CUARC 2. ENY



## Blythedale

On Wednesday, December 18, Santa's helpers will be visiting the children at Blythedale and Santa will be talking to them via ham radio. Volunteers are still needed to hand out the gifts and communicate with Santa over the repeater. Volunteers will be served dinner at the cafeteria beginning around 5:00 or 5:30 p.m. and presents will be distributed starting at 7:00 p.m.

If you can participate or would like more information, please contact Robert Kantor, N2TSE, at 914-949-4231. You can also send tax-deductible contributions, payable to WECA to:

George G. Manning, K2RRR  
60 Coachlight Square  
Montrose, NY 10548.

## Correspondence

**The following was originally sent as a letter to QST.**

We, the ARRL, need to wake up.

As I write this email, my division, the Hudson Division, is in the middle of an election for Director and Vice Director. Both candidates for Director and one of the two candidates for Vice Director are extolling the virtues of their amateur radio experience in CW, contests, towers and operating awards. They clearly feel that these are the things that will appeal to the membership to get them elected. And, they are probably right. That is what bothers me.

The League and its membership must come to terms with the changing face of Amateur Radio. Most new hams are coming into our hobby with a no-code license and privileges only above 30 Mhz. They are not interested in CW, contests and operating awards. Don't misunderstand my concern here. This is not an anti-CW diatribe, but instead, a call for us to acknowledge our future. The low bands and all that come with them will always be important, but not the "end all" for this hobby.

I criticize the League for not leading here. Our elected representatives need to stop bragging about their low band accomplishments and start talking about the future. Most young people, whether they be hams or not, are not impressed by short wave communications. In this era of satellites and cellular phones, noisy low band contacts are not as impressive as they were thirty years ago.

Do we really believe that our newer, younger members are going to be interested in joining the League with this emphasis? What is happening to the average age of our membership? Where will the League be in twenty years?

I call on Headquarters to take the lead, not brag about the past. We have always been innovators, not antique dealers. Acknowledge the obvious. Rather than trying to appeal to the past (as the candidates in my division are currently doing), point out the future. That is what leadership means. Here are some suggestions:

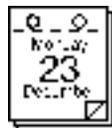
Stop spending so much time worrying about CW, operating awards and endless low band incentives. Our first and primary objective must be to maintain membership levels to protect our spectrum (the single greatest problem facing us). Encourage a two license class system so that all hams, including the rapidly growing VHF/UHF population, don't feel "out of the loop" because they don't have a "higher" license class that has as its basic premise that everyone wants more and more low band privileges. Pro

mote ham radio as a hobby that has utilitarian purposes as well as hobby features. Encourage computer enthusiasts to become hams by pointing out the obvious overlap between the hobbies. Impress prospective hams with a demonstration of average people using repeaters rather than noisy, QSB filled contacts with difficult to hear voices and CW. Explain to people that we talk about a whole lot more than technical analysis of RF and SWR. As a group we are a whole lot more interesting than Talk Radio and we *all* get a chance to speak! We're friendly and help each other out. That is how you promote Amateur Radio.

*This* is the future! Those among us, mostly those who have been hams for a long time, need to be told this and elect their directors accordingly. Not doing so denies the inevitable future and weakens both the ARRL and, ultimately, Amateur Radio.

Allan Sniffen, WB2IXR  
Yorktown Heights, NY

[asniffen@computer.net](mailto:asniffen@computer.net)



## Next Board Meeting

The next WECA board meeting will be on Monday, December 23, at 8 p.m. at the EOC (148 Martine Avenue) in White Plains, NY. Meetings are open to all WECA members.

## **APRS Maps**

by **Alan Crosswell, N2YGK**

There are now three major versions of APRS available:

The original DOS APRS (APRSdos), written by Bob Bruninga, WB4APR.

Macintosh and Windows APRS (WinAPRS), by Keith and Mark Sproul, KB2ICI and WU2Z.

and, Java APRS (javAPRS), by Steve Dimse, K4HG (ex-KO4HD). Java is a programming language invented at Sun Microsystems that is used for programs that run in World Wide Web browsers such as Netscape. It's called Java because it is so slow you need to go get another cup of coffee while you wait for it to update the display.

### **Types of APRS Map Files**

Each APRS version has a distinct look and feel, and uses at least one map file format unique from the others. Some versions can read more than one map format. The map file formats reflect the various features and limitations of the software environments the programs run under and the particular programming styles of the authors.

### ***Vectors vs. Bitmaps***

APRS maps fall into two main categories: vector data and bitmaps. Vector maps enumerate each road or other map feature (such as a lake or river) as a series of interconnected points. The points are encoded as latitude and longitude pairs. Vector maps usually contain other data such as labels for places and highways, and information about what color should be used to render a particular feature or at what zoom factor a particular feature should be displayed. Vector maps are rendered (converted to a visual image) by the APRS program when it runs, which means it potentially has significant control over how the map is displayed, using various map projections (e.g. Mercator), level of detail displayed, and so on.

Bitmaps are analagous to a photo of a printed map. Bitmaps are stored in a common computer image format (GIF) and have a fixed rendering (and map projection) which was determined when the bitmap was generated. In general, bitmaps in APRS look "better" because they contain a lot of graphical content to make them more pleasing to view and easier to comprehend.

### *APRS Map File Formats*

The specific APRS map file formats in use today are:

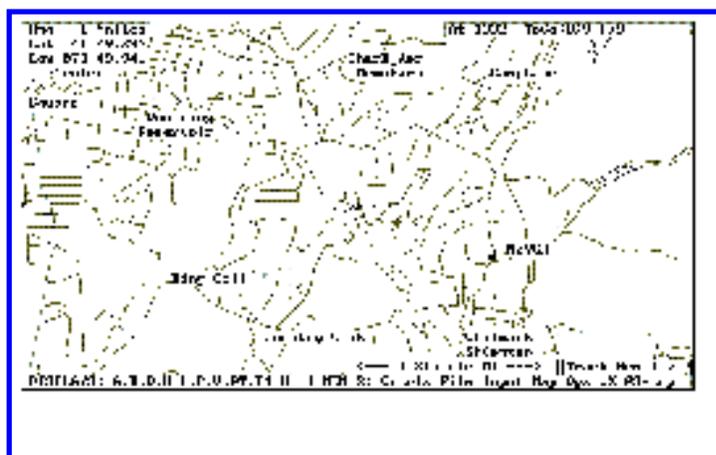
#### **DOS Map Files**

DOS map files are small text files that encode

features as vectors. DOS maps are intentionally limited to 3,000 data points so that APRSdos can run on older PCs with limited memory and speed. This limitation means a given map will have very little clutter to make it "pretty." It also means APRSdos maps are small, fast, and functional and can be viewed on any DOS PC capable of CGA graphics, including laptops.

The maps include a feature for labels which limits display of them based on how far zoomed in or out one is. APRSdos uses a maplist containing the names, center latitude/longitudes, and ranges of over 150 maps to enable automatic switching to the most appropriate map as one pans and zooms the map display. The format of DOS maps is fully documented in the APRSdos README\MAPMAKIN.TXT file.

**DOS map generated using tig2aprs, by N2YGK, and displayed by APRSdos, by WB4APR.**



#### **Windows & Macintosh Map Files**

Not much is known about this format as the authors have chosen not to publish the specifications. That said, they are much larger than DOS maps, since any computer capable of running MacOS or Windows has plenty of memory and speed. The maps are vectors like the DOS maps but have a few added features for coloring maps to make them more pleasing to view.

### **javAPRS GIF Map Files**

These map files are standard GIF (Graphical Image Format) color bitmaps. javAPRS GIFs are usually about 500 by 300 pixels in size due to unpredictable limitations of the Java interpreters. GIFs can come from any number of sources, such as by scanning a printed map, or by obtaining a computer-generated map from a DeLorme CD-ROM program or from the US Census Tiger Map server at <http://tiger.census.gov>, as I did for the example shown here.

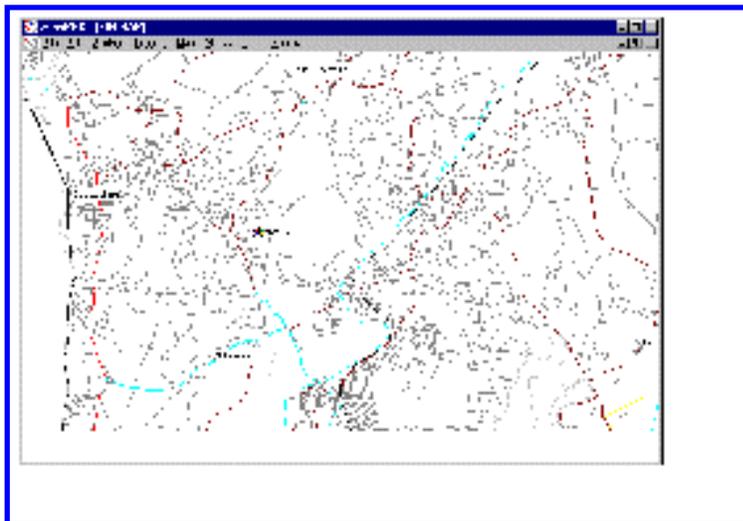
A concern with GIF maps is that the projection used must be properly calibrated so that javAPRS correctly plots stations on the map.

### **Which APRS Programs Read Which Map File Formats?**

APRSdos only reads 3,000 point DOS maps and uses MAPLISTs to automatically choose the best map as one zooms and pans.

Win/MacAPRS read their proprietary format. They can also read DOS maps, and do not have the 3,000 point limit. I have generated 250,000 point DOS maps and displayed them in WinAPRS. They look quite good. Large DOS maps are the workaround for the lack of published documentation of the proprietary Win/Mac format.

**A big DOS map generated using tig2aprs, by N2YGK, and displayed by WinAPRS, by WU2Z & KB2ICI.**



javAPRS currently reads 3,000 point DOS maps and GIFs. This program is still under active development, so expect new map formats in the future. There are many sites on the World Wide Web running javAPRS that enable anyone with a Java-capable web browser to watch APRS live. Start at Steve Dimse's page, <http://www.bridge.net/~sdimse> , for the latest.

**A GIF map generated using the US Census Tiger Map Service and displayed by javAPRS, by K4HG.**



## Finding Maps

Thousands of maps for APRS have already been generated and are available on the Internet (<http://www.tapr.org/tapr/html/sigs.html> ) as well as on a couple of CD-ROMs (one sold by TAPR and another by the Sproul brothers). Of course, some of these maps are DOS and others are Mac/Windows format and a few are large DOS format for use in Mac/WinAPRS.

These maps are generally not very detailed as they cover large areas (usually at

least four or five counties). A collection of more detailed maps is beginning to appear as well. For Westchester, take a look at some of my experiments at <http://www.cloud9.net/~alan/ham/aprs> .

In general, the best way to find appropriate maps for the area is to find a local APRS elmer.

**Next Month: Map Making**

## **APRS Helps Recover Ham's Stolen Car**

**by Tuck Miller, KC6ZEC**

**(Reprinted with permission from the ARRL Letter Electronic Update, November 1, 1996)**

Scotty Liekette, W8KXX, of San Diego, California, made one of those mistakes that paid off big time! While calling the police to report his car had just been stolen, he remembered he had accidentally left his new project--an APRS car tracker--turned on inside the car. Using his home computer and the WB4APR Automatic Packet Reporting System (APRS) software, he located his car on the local San Diego map, still sending current GPS position beacons from a location on the other side of the city. Liekette told the police dispatcher he'd spotted his missing car, but the police had a hard time understanding how he could "see" the vehicle across town. When an officer showed up at his door, Liekette showed him the stolen car's symbol with its unique amateur call sign on an APRS city map and the officer relayed the location to police department units.

As Liekette later learned, the stolen car and a police unit stopped at the same red light at that time. The thieves were still in the car! Surprised at the officer's attention, the thieves made an illegal left turn at the light, and the chase was on. Unfortunately, the thieves abandoned the vehicle in the middle of a nearby street and got away. The recovered car had suffered only minor damage.

## **ARES/RACES Storm Activation**

**by Alan Crosswell, N2YGK**

Due to coastal flooding and wind damage, especially in Long Island Sound coastal areas, Westchester ARES/RACES was activated at approximately 6:15 p.m. on Saturday October 19th, 1996 to provide communications for the Westchester County chapter of the American Red Cross, the Westchester County

Office of Disaster and Emergency Services Emergency Operations Center, and the Village of Mamaroneck and the City of Rye police departments. As usual, the Westchester Emergency Communications Association's (WECA) repeater systems were used. The Red Cross communications van that has been outfitted by WECA was also used.

Twelve ham communicators operated at the Red Cross evacuation center at St. Thomas Church in Mamaroneck, the Village of Mamaroneck Police headquarters, the City of Rye Police headquarters, the County Emergency Operations Center in White Plains, the Red Cross Chapter in White Plains, and in vehicles in the affected areas providing damage assessment reports until 10:15 p.m. Three additional hams acted as net control stations and coordinated from their homes.

The following morning, six hams assisted the American Red Cross by fielding five damage assessment teams in their personal vehicles and an operator at the American Red Cross Chapter in White Plains to survey and report on the extent of damage to residences along the coast in the City of Rye, the Town and Village of Mamaroneck and the Village of Larchmont. The first damage assessor arrived at the area at 9:10 a.m. The last returned to Red Cross Headquarters at 12:15 p.m.

During the storm, as is customary, several hams called in from their vehicles to report road and highway closures due to flooding in Yonkers, Mamaroneck and Portchester; traffic accidents on the Saw Mill River parkway near Jackson Avenue and the Cross Westchester Expressway in White Plains; and an inoperative traffic light in Katonah. These reports were dispatched to the appropriate authorities via the County Emergency Operations Center. A ham whose car stalled when it went through deep water on the Grand Central Parkway in Queens was also assisted.

Special thanks to the following hams who participated in this activation:

Richard Anderson of Ossining, KB2MGM  
Russ Biltz of White Plains, N3EMF  
Joe Brown of Mt. Vernon, KB2NBN  
Joe Bruno of Pleasantville, WB2VVS

Alan Crosswell of Briarcliff, N2YGK  
Ron Devenuti of Scarsdale, N2TJE  
Michael Di Fabio of Cortlandt Manor, N2YYL  
Adam Epstein of Ardsley, N2DHH  
Carl Everts of Yonkers, N2VQP  
Sandy Fried of New Rochelle, N2SF

Steve Hunt of Hastings, N2IYR  
Robert Kantor of White Plains, N2TSE  
Anthony Licata of Yonkers, N2NWZ  
Chris Maselli of Pelham, KB2PWJ  
Darlane Mayo of Mt. Vernon, KB2EPU  
Andrew Purchia of Greenwich, CT, N1XXU  
Roger Purchia of Mamaroneck, KB2ZXP  
Tom Raffaelli of Thornwood, WB2NHC  
Robert Schaps of Scarsdale, WB2NVR  
Alessandro Sicilia of Yonkers, N2TWN  
Bob Wilson of Yorktown Heights, N2DVQ



## EC and DEC Appointments

by Joe Bruno, WB2VVS

As mentioned at a recent WECA meeting, Alan, N2YGK, has been appointed the new ARRL Emergency Coordinator for Westchester County. As you know, Alan had been a very active Assistant Emergency Coordinator, and runs the ARES/RACES training net on .06. Alan has brought the enthusiasm that "new blood" brings to an organization, while listening to advice about potential pitfalls from some of us Quarter Century Wireless Association kind of guys. I think he's already been doing a great job. Congratulations, Alan.

At the same time, I was appointed an ARRL District Emergency Coordinator. The "district" includes the following counties: Orange, Ulster, Dutchess, Putnam, Sullivan, Rockland, and Westchester. As there was no prior DEC for this area, it may be a difficult job. These counties approach emergency communications slightly differently, and, given the population density differences, it is no surprise. All have cooperated in planning/obtaining the NORMET antennas. By the way, the first meeting I went to where we talked about the possibility of this seven county VHF network for hospitals was in 1992! Although I hope future projects don't take four years to complete, I'm pleased we had success and I'm hoping to see some intercounty training in the not too distant future.

The EC salary is double that of the AEC, so Alan was able to buy a new rig. The DEC salary is double that of the EC salary. And just to put things into perspective, the AEC salary is double the league member salary.

## Key-Up Delay, Part 2

by Bob Wilson, N2DVQ, Engineering Dir.

The time it takes for detection of a PL tone in our system is around 1/4 of a second, minimum. So the remote starts transmitting your signal after it hears you for 1/4 second. Normally that would be OK but as you will see we have more delays to go. So our first delay is generated at the remote receiver site since this receiver must detect your PL tone.

At the other end of the remote link, the main site, the receiver there (called a satellite receiver) must also detect this PL tone. So this adds another 1/4 second. We now have minimum of a 1/2 second delay in the system and the signal has just arrived at the main site. This delay is ALWAYS present when your signal is using a remote receiver and may even be slightly longer in an imperfect world.

The controller also delays this first key-up by another 1/4 second. This delay, however, only occurs when the repeater was not being used, asleep (even for a few seconds), and you key it up. So the total key-up delay is almost a full second when you "wake up" the repeater using a remote receiver. This is the worst case. But remember the remote sites ALWAYS have 1/2 second delay built in. You can actually hear this delay if a signal is heard by the main site noisy and DFQ at one of the remotes.

If your signal is noisy at the main site, the voter wants to select the remote receiver audio because it has much less noise. But the main site only has to detect your PL tone one time unlike the remotes which must detect it twice. So the main site receiver always keys up the repeater first (if it can hear you), then about 1/2 second later the signal from the remote arrives. Now the voter can select DFQ audio and the noise disappears. Listen to someone using the repeater that is going through a remote because they would be noisy to the main site and you can hear this happen. It happens fast and only at the start of their transmission and when the repeater has been in use. It sounds like a burst of noise mixed in with the audio. If you don't have a good ear you won't hear it. For the first 1/2 second of their transmission they are noisy. When the signal from the remotes makes it to the jail and the PL tone is detected, all the noise disappears. Remember that the delay is not due to the remotes being far from the main site but due to the PL detect delay occurring at least twice.

When the repeater is *not* being used and someone keys it up, that user must provide at least 1 second of carrier to keep the repeater transmitter up. If it's a

short burst of signal the repeater transmitter will not

stay up. This filter keeps the repeater from staying on the air when someone sends a very short carrier just to hear the repeater beep (kerchunk).

So that's why you hear the first part of a call chopped off, when one doesn't wait for the system to wake up if it was asleep. The easiest solution is not to talk as you're pushing the PTT switch. Think "ahh" (don't say it, just think it) and then talk.

**Next month: "Beeps and Boops 101"**

## **Winter Weather Safety Tips**

**(Submitted by Sandy Fried, N2SF. Excerpted from National Weather Service public information statements made during Winter Weather Awareness Week.)**

The following is a collection of winter weather safety information prepared by various state agencies in New York:

When driving:

- Clear your vehicle of all ice and snow.
- Keep extra distance between you and other vehicles.
- Be extra alert. Roadside snow drifts can hide small children.
- Drive according to the weather and road conditions. Slow down on slick roads.

Proper heat and humidity:

- If possible, have emergency heating equipment available to keep at least one room liveable, in case you run out of fuel or power is lost.
- To sleep: several lightweight blankets are warmer than one heavy one.
- To stay warm: dress in layers and wear a hat.
- If you need more information on saving energy in your home or believe your heat has been turned off without proper notification, the energy office's tollfree hotline is at 1-800-423-SAVE.

### Treatment of Hypothermia:

- A victim must be rewarmed and should be seen by a physician, preferably in a hospital.
- While waiting for emergency help to arrive, prevent further heat loss by wrapping the victim in a warm blanket and applying either heating pads or a hot water bottle to the abdomen.
- If the victim is alert, give small quantities of warm food and drink. Do not give alcohol.

### More winter preparedness driving tips:

- Allow yourself extra time to travel.
- Avoid skidding on slick roads by "tapping"

(Continued on page 9)

## **Bonfire of the Vanities: Gate 2 Call Signs Finally Issued!**

(Excerpted from *The ARRL Letter Online* , 11/8/96)

After an approximately six-week wait, most of the hams who got their applications to the FCC on the opening day of vanity call sign Gate 2 were rewarded with one of their new call sign choices. The logjam broke on Election Day, just before the close of business at the FCC's Gettysburg, Pennsylvania, office, where the amateur computer system had been down for more than a week. A spokesman at the FCC said the computer system was finally fixed that morning, and most of the approximately 4500 first-day vanity applications were successfully run. According to the KI4HN (now K4MA) call sign database, 3790 new call signs were issued.

For the most part, hams were ecstatic. "The wait is over. I, for one, am very pleased with the results!" said Joe DiPaolo, W2DI (ex-AA2LZ), in a message of thanks to the ARRL. "Christmas came early," messaged Lawrence Macionski, W8LM (ex-WA2AJQ). Several other enthusiastic hams--eager to tell the world about their new Amateur Radio identities--posted their new call signs to various

Web groups and broke them in on the air. But one veteran Midwestern ham-- apparently bitter that he did not get one of his three choices and that the FCC did not base its selection system on seniority in the hobby--wrote HQ to say he was getting out of the hobby altogether.

While some applicants got their initials for call sign suffixes, others obviously applied their imaginations. For example, W4FEZ was issued to the Yaarab Shrine Temple Communications Unit in Atlanta, Georgia (get it?). The call sign NS4DX went to the North Shenandoah DX Association in Boyce, Virginia. NU1AW is the new call sign of the International Amateur Radio Union club station. As of Thursday, November 7, some 200 first-day vanity applications were being held up due to unspecified problems or errors on the application. The FCC indicated it would process these soon. A spokesman in Gettysburg estimated that "between 500 and 550" applications were dismissed because the FCC was unable to grant a new call sign. Applicants who did not get one of their choices will have to apply in writing for a refund of the \$30 filing fee. The FCC will mail to all unsuccessful applicants a copy of the application (including FCC processing numbers) and a copy of their check. To request a refund, applicants then must send a letter to the FCC, 1270 Fairfield Rd, Gettysburg PA 17325-7245, along with their taxpayer ID number (Social Security number).

The earlier computer problems had not only

affected the vanity program but caused the FCC to rescind all call sign grants after October 24 because of widespread errors. In some cases, the FCC's Gettysburg office had reissued call signs that had already been issued. An FCC spokesman said that the unspecified computer problems were not related to the vanity call sign program.

[According to ARRL Bulletin ARLB084 dated 11/19/96, the FCC has put Gate 2 processing on hold pending resolution of complaints filed by hams whose applications were rejected because they arrived too early. -Fuat]

## **WECA Members with New Call Signs**

Several WECA memebtrs took advantage of Gate 2 of the Vanity Call Sign Program. A quick search through the first day assignments on November 4 shows the following changes:

<b>Name</b>	<b>Old Call</b>	<b>New Call</b>
J.P. Kleinhaus	AA2DU	W2XX
Darlana Mayo	KB2EPU	N2DB

Barry Frajer N2LER N2LE  
Stanley Siegel W6TJS W2ST

Wilford Bailey WT2G W2ED

Congratulations to all on your new calls!

## Cool Calls

by Darvell D. Hunt, KE7GW <dvhunt@es.com>

(Excerpted with permission from a rec.radio.amateur.misc posting about some of the new vanity call signs.)

If you are looking for a *really cool* call, how about this one:

K00L Hause, Daren W

Or:

K00P Koop, Keith L

K0VAR Kovar, Jack L

KN0TT Knott, Isaiah H

KE1TH Bransky, Keith M

In the callsign section, this license will say: none.

N0NE DX Radio Club, Rochester, WA

Wanna catch some waves, dude!:

W6AVE Surfers United Radio Federation, Santa Monica

This one's got this guy's initials TWICE!

WW5WW Williams, William J

And here's a few more interesting ones:

W6MTR S. California Six Meter Aux.

## QSY Society Ham Radio Classes

The QSY Society, a new Amateur Radio organization in the Putnam and Dutchess County area, is pleased to announce that it will be sponsoring Amateur Radio Classes.

In order to become a ham radio operator, the Federal Communications Commission requires that a candidate demonstrate a level of technical expertise as well as a thorough knowledge of the rules and regulations of radio communications. Depending on the type of license desired, a knowledge of Morse Code may also be required.

The Society will offer both types of programs. Five word-per-minute Morse Code will be incorporated into a Novice-Technician class which will also cover the technical and regulatory aspects of licensing. Thirteen word-per-minute Morse Code, required for license upgrades, will be offered as a separate program. There is no fee for the classes but, in either case, pre-registration is required.

The program will last four to six weeks, depending on group size. Sessions will be held twice a week on Mondays and Wednesdays at a soon-to-be-announced, centrally located site in Carmel. Upon completion of the program, a license exam session will be scheduled for the "graduates."

For further information about the Society, its meetings or to pre-register for either program, please contact Len Sanchez at 914-878-9704.

AC2DC Electronic Technologist  
Experimenters Club

W1RE Edry, Robert A

2 Meter fans?:

WA2MTR Mountain Top Radio Association, Bridgewater NJ

My condolences to Jerry Garcia:

WD6EAD Jerry Garcia Memorial ARC

Turn these upside down:

W7LM Serilla, James S

N3EN Mc Donald, Arthur K

WL7M Hannigan, Joseph C

N00N Thorson, Barry J

And this guy changes from an upsidedown reversible call to another one!:  
W9GM (old call: WG9M) Weigel,

Kenneth R

I guess this guy *doesn't* like long distance contacts:

N0DX Weigelt, Frank H

English teacher?:

N0UN Ordakowski, Wayne G

PBS fan:

N0VA Smith, Kenneth A

10, 30, and 40 meter Old Man:

W1OM Grant, Kevin E

W3OM Stovall, David B

K4OM Perkinson, Joseph E



## License Examinations

The next WECA sponsored ARRL VE session will be on Thursday, December 12, 1996 at 7 p.m. at the EOC (Emergency Operations Center) in the County Office Building, sub-basement EOC/ODES office (Office of Disaster and Emergency Services), 148 Martine Avenue, in White Plains, NY (across from The Galleria). For information contact Sandy Fried, N2SF, during regular business hours at 914-285-3029.

### Winter Weather (continued)

on your brakes.

- Clear your windshield and windows before starting out. Don't travel "blind" waiting for the defroster to start to work.
- Turn on your headlights while driving in rain or snow.
- Carry a survival kit in your car consisting of: an ice scraper and snow brush, a properly inflated spare tire, a functioning jack, a flashlight, extra anti-freeze and windshield washing fluid, flares or a reflective device, a couple of blankets, gloves or mittens, and a shovel.

#### Winter preparedness at home:

- If you use an electric heater during cold weather, don't overload the circuit, and only use extension cords which have the necessary rating to carry the amp load.
- If your pipes freeze, thaw them with hot water or hot air from a hair dryer. Do not use a torch.
- If your home is heated with oil and your furnace has an electric turn on, prepare an alternative heat source. Have an adequate supply of wood for fireplaces or wood stoves, or kerosene for space heaters.

## **RF Radiation and Electromagnetic Field Safety Part 2**

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### **Athermal Effects of EMR**

Nonthermal effects of EMR may be of greater concern to most amateurs because they involve lower level energy fields. Research about possible health effects resulting from exposure to the lower level energy fields, the athermal effects, has been of two basic types: epidemiological research and laboratory research.

Scientists conduct laboratory research into biological mechanisms by which EMR may affect animals including humans. Epidemiologists look at the health patterns of large groups of people using statistical methods. These epidemiological studies have been inconclusive. By their basic design, these studies do not demonstrate cause and effect, nor do they postulate mechanisms of disease. Instead, epidemiologists look for associations between an environmental factor and an observed pattern of illness. For example, in the

earliest research on malaria, epidemiologists observed the association between populations with high prevalence of the disease and the proximity of mosquito infested swamplands. It was left to the biological and medical scientists to isolate the organism causing malaria in the blood of those with the disease and identify the same organisms in the mosquito population.

In the case of athermal effects, some studies have identified a weak association between exposure to EMF at home or at work and various malignant conditions including leukemia and brain cancer. However, a larger number of equally well designed and performed studies have found no association. A risk ratio of between 1.5 and 2.0 has been observed in positive studies (the number of observed cases of malignancy being 1.5 to 2.0 times the "expected" number in the population). Epidemiologists generally regard a risk ratio of 4.0 or greater to be indicative of a strong association between the cause and effect under study. For example, men who smoke one pack of cigarettes per day increase their risk for lung cancer tenfold compared to nonsmokers, and two packs per day increase the risk to more than 25 times the nonsmokers' risk.

However, epidemiological research by itself is rarely conclusive. Epidemiology only identifies health patterns in groups--it does not ordinarily determine their cause. And there are often confounding factors:

Most of us are exposed to many different environmental hazards that may affect our health in various ways. Moreover, not all studies of persons likely to be exposed to high levels of EMR have yielded the same results.

There has also been considerable laboratory research about the biological effects of EMR in recent years. For example, it has been shown that even fairly low levels of EMR can alter the human body's circadian rhythms, affect the manner in which cancer-fighting T lymphocytes function in the immune system, and alter the nature of the electrical and chemical signals communicated through the cell membrane and between cells, among other things.

Much of this research has focused on low-frequency magnetic fields, or on RF fields that are keyed, pulsed or modulated at a low audio frequency (often below 100 Hz). Several studies suggested that humans and animals can adapt to the presence of a steady RF carrier more readily than to an intermittent, keyed or modulated energy source. There is some evidence that while EMR may not directly cause cancer, it may sometimes combine with chemical agents to promote its growth or inhibit the work of the body's immune system.

None of the research to date conclusively proves that low-level EMR causes

adverse health effects. Given the fact that there is a great deal of research ongoing to examine the health consequences of exposure to EMF, the American Physical Society (a national group of highly respected scientists) issued a statement in May 1995 based on its review of available data pertaining to the possible connections of cancer to 60-Hz EMF exposure. This report is exhaustive and should be reviewed by anyone with a serious interest in the field. Among its general conclusions were the following:

1. "The scientific literature and the reports of reviews by other panels show no consistent, significant link between cancer and powerline fields."
2. "No plausible biophysical mechanisms for the systematic initiation or promotion of cancer by these extremely weak 60-Hz fields has been identified."
3. "While it is impossible to prove that no deleterious health effects occur from exposure to any environmental factor, it is necessary to demonstrate a consistent, significant, and causal relationship before one can conclude that such effects do occur."

The APS study is limited to exposure to 60-Hz EMF. Amateurs will also be interested in exposure to EMF in the RF range. A 1995 publication entitled *Radio Frequency and ELF Electromagnetic*

*Energies, A Handbook for Health Professionals* includes a chapter called "Biologic Effects of RF Fields." In it the authors state: "In conclusion, the data do not support the finding that exposure to RF fields is a causal agent for any type of cancer" (page 176). Later in the same chapter they write: "Although the data base has grown substantially over the past decades, much of the information concerning nonthermal effects is generally inconclusive, incomplete, and sometimes contradictory. Studies of human populations have not demonstrated any reliably effected end point." (page 186).

Readers may want to follow this topic as further studies are reported. Amateurs should be aware that exposure to RF and ELF (60 Hz) electromagnetic fields at all power levels and frequencies may not be completely safe. Prudent avoidance of any avoidable EMR is always a good idea. However, an Amateur Radio operator should not be fearful of using his equipment. If any risk does exist, it will almost surely fall well down on the list of causes that may be harmful to your health (on the other end of the list from your automobile).

### **Next Month: Safe Exposure Levels**

in NTS.

If you live in an area that rarely receives messages for delivery, you can still be an asset by serving as a Net Control Station or as a representative (liaison) to another net. If you're not ready for that much commitment, just check in regularly, send a few messages once you get the hang of it, and maybe more messages will start coming your way.

For you longtime hams and those of you who feel that amateur radio needs your help to keep from degenerating, message handling is a fine opportunity for you to deliver "welcome to amateur radio" radiograms to new amateurs from the Hudson Division Director, Richard Sandell, WK6R (previously from Paul Vydareny, WB2VUK). This program has been a tremendous success since it was reinstated in July of 1995. In most cases, the delivering station has the privilege of informing the new ham of his call sign. This is also a fine chance to advise the new ham of local clubs, activities, and repeaters. In many instances delivering these simple messages has led to several hours of phone conversations and lasting friendships.

If you are not comfortable with the net procedure, listen for the first few days before you start checking in. Contact me after the net and I can arrange for some information to be mailed to you. The Net Control Station and other participants will also be happy to talk to you about NTS. When you do check in, the net control will ask you for some introductory info. If you are asked to take traffic, let them know it's your first time, and they will be gentle.



## **NTS and You**

**by Darlana Mayo, N2DB,**

**Net Manager of the Southern District NTS Net (SDN)**

Is there a friend or relative you have not contacted in quite some time? Do you enjoy providing emergency communications? If so, traffic handling in the National Traffic System (NTS) is for you.

Just as fire departments conduct drills with no fires, and store owners hire people as shoplifters to test the alertness of their employees, traffic handlers practice for emergencies with routine traffic. Then, when a disaster strikes, hams can handle the messaging needs flawlessly.

Every evening at 9:30 p.m., WECA hosts the Southern District Net (SDN) on

WB2ZII/R (147.060). SDN covers Westchester and Rockland counties, but has amateurs checking in from the neighboring counties as well. There is a different Net Control Station (NCS) every night, on a weekly rotation.

For those of you nine-to-fivers who have little time, 15 or 30 minutes of net operation is all that is needed, and you *don't* have to check in daily. Retired people can also spend more or less time staying active

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## Group Battery Purchase

by Stan Rothman, WA2NRV

Once again we are putting together a bulk battery purchase. Below are some sample prices from Periphex. The cost to members will be five to ten percent less depending on our total purchase.

Alinco EBP-24S \$62.00

Icom BP-3 \$39.00

Kenwood PB-1 \$67.00

Yaesu FNB-11 \$52.50

Chargers, cell phone batteries, camcorder batteries, etc. will be available as well. A Periphex catalog will be at the next meeting, or you may contact me by phone at 914-949-6838 or by email at [SEROTHMAN@AOL.COM](mailto:SEROTHMAN@AOL.COM).

## For Sale

Motorola Radius P10 UHF business band handi-talkie with battery and rubber duck antenna. \$40 or best offer.

Contact: Brian Torpey, N2PHW. Home: 914-769-1413 (leave message). Pager: 914-554-4500.

Westchester Emergency  
Communications Association, Inc.  
P.O. Box 831  
North Tarrytown, NY 10591-0831



RUSH DATED MATERIAL  
PLEASE DO NOT DELAY

Reminder: Next meeting December 9



## Colophon

This issue of the *WECAGRAM* was produced on an Apple Power Macintosh 7500/100 using Canvas 5.0, Emacs 18.59, SimpleText, and Graphics-Converter 2.3.1. It was printed on an Apple StyleWriter 1200 printer. Fonts used were Times, Helvetica, and Black Chancery. HTML output was generated with Canvas using the WWW/HTML XTDN translator from Claris.

## Happy Holidays!

## Latest Call Signs

As of November 21, 1996, the following call signs have been allocated in the "2" call district:

Group A (Extra) AB2CL

Group B (Advanced) KG2JE

Group C (none left)

Group D (General/Tech/Novice) KC2AHA