

## How to detect tornadoes using your TV or Radio

The season for tornadoes is drawing near and I would like to pass this information on to you. It might come in handy some day.

Tornadoes are most likely to occur in the spring on a hot, sticky day between 3 and 7 p.m. An hour or two before a twister forms, familiar thunderstorm clouds may begin to have a peculiar greenish hue and bulge down instead of up. Heavy rains and hail often precede the tornado.

The gigantic and violent whirlwinds almost always march across the countryside from Southwest to Northeast about 30 mile per hour. This predictability can save your life, especially if you use Weller's technique of detecting storms 20 to 30 minutes before it gets to your neighborhood.

A tornado watch means that tornado development is possible. Keep a watchful eye on the sky for threatening weather, and stay tuned to the local radio, television or NOAA Weather Radio for the latest weather information.

A tornado warning means a tornado has been sighted or indicated by weather radar. People in the path of the storm should seek shelter immediately, preferably on the lowest floor of a substantial building.

If you are caught out in the open, move away from the tornado at a right angle. When there is no time for such evasion, immediately flatten out in the nearest ditch or depression.

Here's a tip on how to use your television set or radio to detect tornadoes when such a danger has been broadcast for your area.

### Using Your Television

This system was discovered by Newton Weller of West Des Moines after 12 years of study. It works because every TV set has a Channel 2 at 55 mhz. Lightning and tornadoes generate a signal near this frequency that overrides the brightness control. Channel 13 is at the high end of the frequency band is not affected. This is why the darkness must be set on that channel.

First, warm up your set, tune in Channel 13 and darken the screen to almost black, using the brightness control. Then, turn to Channel 2 and leave the volume down.

Your tornado detection device is now in operation. Lightning will produce momentary white bands of varying widths across the screen. (Color sets produce color bands.) A tornado within 15 to 20 miles will produce a totally white screen which remains white, or one color on color sets. Should this occur, turn off your TV set, take a portable radio and seek a

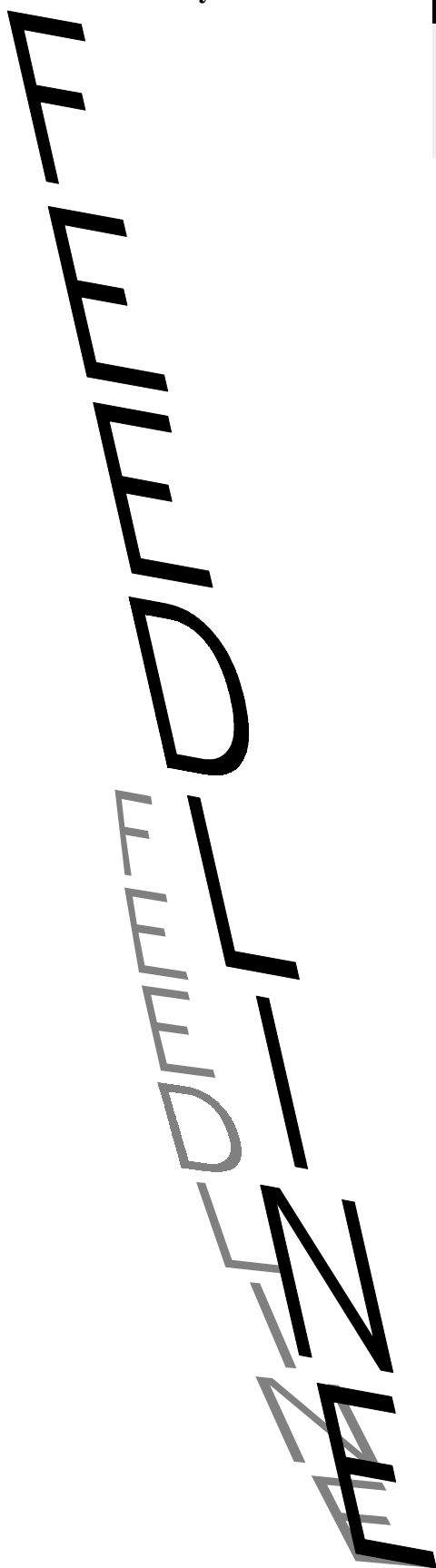
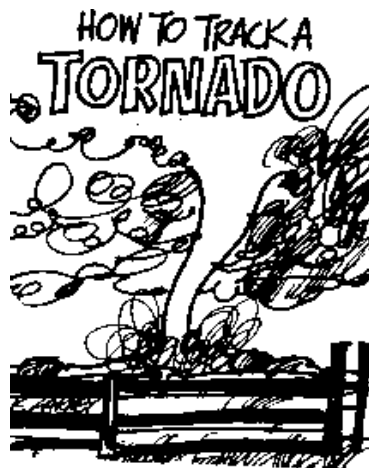
place of shelter immediately.

### Using Your Radio

Use a portable radio for emergency instructions and in case of power failure. If the radio is turned to the 550 khz band, lightning will cause intermittent static. A tornado will cause steady continuous static.

Most homes have these two warning devices. It might be a good idea to clip these instructions and keep them on hand during tornado season - and hope you don't need them!

73, Paul



## Note:

Labelwatch - the roster has been updated - check the mailing label to see that your '97 dues have been acknowledged.

About our Club

Next month marks one of CARC's favorite activities - Field Day. Held on Saturday, 28 June, and Sunday, 29 June, the CARC field day operation will feature stations on 40 CW, 40 Phone, swing CW, swing phone, novice/tech, vhf/uhf, packet, solar power, and satellite.

We'll be using the N4NC call and setting up at Bond Park again, and sure could use help setting up, operating and taking down. Our field day "czar" this year is Will Harper, K4IWW - for any questions (or answers) give Will a call.

The next meeting will take place on Thursday, May 22 at 7:30 at the White Plains Methodist Church. I'm sure quite a bit of field-day discussion will occur. Unfortunately, the meeting program is still TBD, but I'm sure a good time will be had be all.

73, Tom

EdSurmaitis WA2MYZ

Kata Kana CW

If you think Morse Code is tough, try this on for size. Below is a sample of the Japanese Kata Kana code I learned as a military telegrapher during WWII.

HA	-. . .	A	-. . . .
HE	. . . .	E	-. . . .
HI	-. . . -	I	. . -
HO	-. . .	U	. . -
HU	-. . .	N	-. . . .
KA	. . . .	NA	. . .
KE	-. . . -	NE	-. . . -
KI	-. . . .	NI	-. . . -
KO	-. . . .	NO	-. . . -
KU	. . . -	NU	. . . .
WA	-. . -	TA	-. .
WE	-. . . .	TE	-. . . .
WI	-. . . .	TI	. . . -
WO	-. . . -	TO	. . . -
MA	-. . -	TU	-. . . .
ME	-. . . -	SA	-. . . -
MI	-. . . -	SE	-. . . . .
MO	-. . . .	SI	-. . . .
MU	- . . .	WO	-. . . -
RA	. . .	SU	-. . . .
RE	-. . -	YA	. . . -
RI	-. .	YO	-. .
RO	-. . -	YU	-. . . .
RU	-. . . .		

Feedline

Feedline is a member-supported publication of the Cary Amateur Radio Club and is published monthly. Deadline for submissions is the second Thursday of the month.

Editor: Tom Klimala, KM4LB  
1545 Seabrook Avenue  
Cary, North Carolina 27511

Cary Amateur Radio Club

The Cary Amateur Radio Club meets on the fourth Thursday of the month, 7:30 p.m. in the lower level of the Christian Life Center of White Plains United Methodist Church. The June, November, and December meetings are held off-site. Call for location of those meetings.

Next Meeting: May 22.

1997 Officers

N9CGD	Tom Doligalski	481-1236
	President	
N4AJF	Lee Swanson	467-8128
	Vice-president	
K4IWW	Will Harper	467-0224
	Treasurer	
N4UE	Herb Lacey	467-9608
	Secretary	

HerbLacey - N4UE

Meeting Report

April 24, 1997

Meeting called to order by President, Tom, N9CGD. Introductions.

Treasurer's Report - Will, K4IWW

Savings:	\$3,159.48
Checking:	\$411.36
Cash:	\$0.00
Total:	\$3570.84

Dues are due for new year starting April, 1997, at \$9/yr. CARC caps still available for \$4.

**Piedmont-Coastal Repeater Network (PCRN)** - Ed, AB4S, PCRN Treasurer said that things were "keepin up" with Danny, K4ITL, and Mike, WB4TQD, staying busy behind the scenes.

**Southeastern Repeater Association (SERA)** - Frank, KE4ZEQ, Asst. Director, SERA, reported that NC had the most repeaters/members of the eight states. There have been a few coordination problems with other states.

Wake Digital Communications Group

(WDCG) - Lee, N4AJF, said things were about the same. There is no path to Fayetteville. BBS usage is down. (Ed. WDCG still needs to schedule a meeting.)

**Amateur Radio Emergency Service (ARES)** - SM Reed, AB4W, passed out Certificates of Appreciation for work done during Hurricane FRAN and thanked everyone who helped out. Reed also noted that ARRL dues are going up.

**Field Day** - The Czar is to be: Will, K4IWW. We are using N4NC, again, probably in Class 4A at the same location, Bond Park. Various assignments were made: Tom, KM4LB, Information Booth; Lee, N4AJF, to check with Bill, K4SG, about the Solar Panel; Herb, N4UE, to check with the Cary Area Rescue Squad about using the Communications Van; Herb, N4UE, to get publicity to news media and to Gary, KN4AQ. This is an event for everyone in and around the Cary ARC to support and learn. The more participation we have, the more enjoyable and successful the effort will be. PLEASE PUT JUNE 28-29 ON YOUR CALENDAR -- IN INK!!!

**Mid-Summer SWAPFEST** - Czar Tom, KM4LB, reported prizes have been chosen. We mailed complimentary tickets to 50 ARRL affiliated radio clubs in NC. We will be increasing the number of indoor tables from about 140 to 160. Flea market space outdoors is planned.

--- Break for Refreshments ---

The program was on The National Traffic System (NTS) and how nets work. A demonstration of a CW traffic net (with explanations) was given. Yes, Virginia, CW is alive and well, thank you. Reports of its demise are greatly exaggerated.

n4ue

Grins

"I told the doctor I broke my leg in two places. He told me to quit going to those places." Henny Youngman

"There's a fine line between fishing, and just standing on the shore like an idiot." Stephen Wright

November '96 GARzette, .  
Editor, Ike Chapman, KE4GYM  
via the ARNS

## Ham Radio Internet

## Web Site Selections

With the arrival of summer many hams begin to think of Field Day. Field Day is but one of many amateur radio contests that occur during the year, and as you might expect there are many web sites of interest to the ham contester. A good first site to visit is [www.contesting.com](http://www.contesting.com) which features loads of interesting information for the experienced and the novice contester alike.

For the contest "pro" there are rate sheets, high claimed scores, post contest stories, and contester email addresses and station descriptions. There are "station tours" of some terrific contest stations (including N4AF and NY4A, ex-K4PQL, in Apex). Many links to contest-related mail reflectors and archives of these are available, including CQ-Contest, Tower-Talk, TRLog, NA, and CT. There are quite a few feature articles that I highly recommend reading, including ones on "2 radio single-operating by W4AN", "Single-operator assisted operating by K3WW", and "Windows 95 Set-up Tips for CT." And of course there is a contest calendar.

From this site there are a number of really interesting links to explore. You can check out [www.affcom.com/cqcontest](http://www.affcom.com/cqcontest) for the home page of the CQ Contest magazine, including supplementary material from many of the magazine's articles, rules for many (most?! ) of the more popular contests, and of course many links to

contest software and hardware web sites, etc.

Another useful site is maintained by the National Contest Journal at [www.waterw.com/~ncj](http://www.waterw.com/~ncj) which includes rules and info about NCJ-sponsored contests. And of course, no site would be complete without a link to the ARRL's contest calendar at [www.arrl.org/contests](http://www.arrl.org/contests) which as the name suggests has rules, forms and scores for many ARRL contests.

Finally, no article about contest-related sites would be complete without a description of the KA9FOX site at [www.qth.com/ka9fox](http://www.qth.com/ka9fox) which contest score rumors, summaries of contest and DX mailing list reflectors, vanity callsign announcements, and links to other hams and ham-related companies. Probably the best feature of this site is the "KA9FOX Contest/DX library." This is an incredible list of links to a huge number of resources, including qsl info, callbooks and call lookup servers, dx bulletins and propagation info, real-time access to a number of dx packetclusters, contest calendars, rules, records and score rumors, etc., etc. You really need to see this to believe it - one could spend hours exploring these links (and I have!).

## WHY ASK WHY?

author unknown

1. Why do you need a driver's license to buy liquor when you can't drink + drive?
2. Why isn't phonetic spelled that way?
3. Why are there interstate highways in Hawaii and Alaska?
4. Why are there flotation devices on planes instead of parachutes?
5. Why are cigarettes sold in gas stations if smoking is prohibited?
6. Do you need a silencer to shoot a mime?
7. Can you imagine a world with no hypothetical situations?
8. How does the guy who drives the snow-plow get to work?
9. If a cow laughed, would milk come out its nose?
10. If nothing sticks to Teflon, how does Teflon stick to the pan?
11. If you're in a vehicle going the speed of light, what happens when you turn on the headlights?
12. Why do they put Braille on the keypad of the drive up ATM?
13. Why do we drive on parkways and park on driveways?
14. Why is it when you transport something by car, it's called a shipment but something sent by ship is called cargo?
15. You know that indestructible little black box used on planes? Why can't they make the whole plane out of that stuff?

And my personal favorite . . . If you tied buttered toast to the back of a cat and dropped it from a height, what would happen?

## Worth Repeating

## JanBAvinger N4UTT

AB4T and N4UTT wish to announce the graduation of their daughter Kate from UNC Chapel Hill. She did so in grand style- with honors. Jan and Harry are very proud.

Congratulations to all parents of new grads. We feel proud and happy for all of you, and send all best wishes to the hard-working harmonics. (Way to go Kate! ...and Jan, let me know if graduating helps them keep their room any cleaner! ed.)

DurHAMfest is this coming Saturday, May 25. This fest is one of the better "flea market" fests around. Lots of good

cheap stuff!

At this writing, Al, K4PB is off to the Dayton Hamfest as CARC's official ambassador. He's going to bring back hats for everyone! :-)

Ed, KF7VY, said 6 meters was wide open a few times last week; 10 meters was also wide open up and down the U.S. west coast with 59+10db signals common using just a dipole antenna. A terrific Sporadic-E skip opening. Let's hope this is a sign of things to come! Turn off your PC and turn on your radio!

KM4LB has a suggestion for filling the band captain's rosters for FD. Until June 1, 1997, all CARC members are *FREE AGENTS*, and can sign with the band captain who offers them the most perks for taking a shift at their station.

On June 1, the band captains will get together and hold a (professional sports style) draft of operators from those who are yet "unsigned."

Start your wheeling and dealing now! After June 1 your ability to make outrageous demands will be diminished!

see ya! Jan

## So you think KDK4 was first?

Most people believe that the first commercial AM station was KDKA in Pittsburgh when Frank Conrad, 8XK, started playing records on the air for his friends and neighbors back around 1920.

KDKA may have been the first station to receive a commercial broadcast license but there a thriving commercial station in existence ten or more years before the government began regulating radio.

This station was in San Jose, California. It began broadcasting in 1909 using a crude spark transmitter. When it received its formal call letters it became 6XE, later KQW. Today it is KCBS, San Francisco.

Dr. Charles Herrold ran a radiotelegraph school in San Jose. In 1909 he began a regular schedule of voice and phonograph music to call attention to his school. His broadcasts, in those pre-vacuum tube days, were received by the same crystal sets used to receive spark gap Morse code.

By 1911, Dr. Herrold had developed a quenched spark generator consisting of a copper tube surrounding a precision machined carbon rod. He immersed this spark gap in alcohol and he water-cooled the entire device. He applied modulation with a multiple-element water-cooled carbon microphone in series with the high voltage supply.

Because of the alcohol bath and precision tolerances the arc carrier wave produced by this transmitter was considered to be exceptionally pure. One person described the signal as being inaudible unless modulation was applied.

Voltage for the transmitter was - at first - stolen via a hooked stick from a 600 volt DC trolley line running outside a second floor window. Later the trolley company installed permanent service to the station along with an electric meter. At one point Herrold said his transmitter

consumed 9-Kw from the electric supply. Dr. Herrold kept up a regular schedule of music and news for over a decade.

Besides broadcasting to the ham radio operators, he established a public listening hall several miles away in downtown San Jose.

Since the loudspeaker had not yet been invented, people listened to his broadcasts on telephone handsets located throughout the hall. Dr. Herrold's operation had all the trappings that distinguish a commercial broadcasting station. A local phonograph

store supplied popular records for him to play on the air in return for mentioning the source of the records. Local musicians sang and played songs over the air. Dr. Herrold read news from the local paper. He sold cash advertising to department stores and food markets. He documented the size and location of his audience by inviting listeners to write in for a gift certificate that could be redeemed at a merchant near the listener. Over 4000 of these certificates were distributed. One of his sponsors, a candy company, promoted a specific type of candy on his program. They claimed the sale of this item increased not only in San Jose but in communities all up and down the Pacific Coast.

These broadcasts developed enough of a reputation that when Dr. Lee deForest was unable to get his vacuum tube transmitter operating in time for the 1915 San Francisco Pan Pacific Exposition he used Dr. Herrold's transmissions - almost 50 miles distant - to demonstrate his new vacuum tube receiving apparatus. Throughout the run of the fair Dr. Herrold's station was on the air at least eight hours a day.

Unfortunately, Dr. Herrold's apparatus would not function at wavelengths below 600 meters, so when the FCC established the present AM broadcast band in the

1920's Dr. Herrold gave the KQW license to others who had sufficient capital to purchase new Westem Electric equipment. At first it was used by the First Baptist Church of San Jose to broadcast its Sunday services. Later, the station added farm and agricultural news to the schedule. In the 1940s KQW was sold to the CBS network and in 1951 it became KCBS.

Authors Note: This information comes from a collection of Dr. Herrold's papers that I found at work, compiled and published by a journalism professor in San Jose. The reference is.-

### *KCBS - BROADCASTING'S FIRST STATION*

*Records and Documents Supporting the Claim by Charles D. Herrold that He Established the World's First Radio Station in San Jose, California, in 1909, which is now KCBS.*

This article appeared in the Sept. '95 GEARS Newsletter, Bill Pope-W6TKE then editor. The author, N6YMQ, who is a Staff Engineer at KCSS San Francisco, has kindly granted ARNS and its members permission to reprint.

## FD '97 - Am I nzzdzd?

Zvzn though my typzwritr is an oldzr modzl it works wzll zxczpt onz of thz kzys. I'vz wishzd many timz that it workzd pzfzctly. Truz, thzrz arz 42 kzys that function corrzctly, but onz kzy not working makz a big diffzrznz.

Somztimz is szzms to mz that CARC is somzwhat likz my typzwritr - not all thz pzoplz arz working propzrly. You might say "Wzll, I'm only onz pzrson, it won't makz much diffzrznz."

But you szz, an organization to bz zffiznt and xffzctivz nzzds thz activz participation of vzry pzrson.

Thz nzxt timz you think your zfforts on FD '97 arzn't nzzdzd, rzmzmbzr my typzwritr, and say to yourszlf, "I am a kzy pzrson, and thzy nzzd mz vzry much."

Adapted from Bob Painter's WA6PLM, article from the January, 1997, BPARC Communicator via the ARNS