Southwest Dallas County Amateur Radio Club

The Groundwire

Volume 2003 Issue 9 August 2003

Hot Topics

CHILI COOKOFF
September 27th
6 pm
Valley Ridge Park

Proud of your radio shack? Send your digital pictures of your shack so that they can be posted on our web pages. Prints can be converted if you don't have access to a digital camera. They will be posted without identification of whose radio shack they are so that members can try and guess the owner. Digital pictures can be Sent to webmaster@swdcarc.org and prints to PO Box 381023, Duncanville 75138.

Inside this issue:

NCS SCHEDULE
September 2003

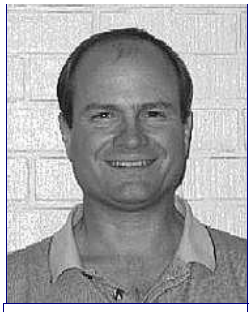
01-No Net-Labor Day
08-W5WB
15 KB5TMD
22-KJ5UY
29-KC5MQC

October 2003

06-K5IWY
13-KC5CPO
20-W5WB
27-KB5TMD

NOTES FROM THE PRESIDENT

SWDCARC....Getting Busy!



Paul Dryer KD5IVP

Greetings all! Thinking back over the last month I found it difficult to focus on a single club subject for this article. It occurred to me that our club is changing, growing, and becoming more "involved". And to make matters even more interesting, amateur radio itself is going through some very crucial changes within the hobby as well as the technological world. Last month we find ourselves in a serious battle with commercial entities wishing to use power lines for data transmission. This in of itself is a promising concept, except for the fact that those entities consider our precious HF bands fair game.
BLP is a very important concern. I hope you wrote your representative as time is running out. And, before our eyes, we are witnessing the world move away from the oldest method of electrical transmission of intelligence, Morse code. The amateur radio world is split down the middle on this one. Element one Morse testing, part of becoming a ham since licenses have been issued, just might become a thing of the past. It is a thing of the past in four countries as of this writing. My feelings...Morse and continuous wave is the essence of radio. It is radio in its simplest form. How can one call themselves a 'licensed radio operator' and not be able to work the most basic of radios? Learn and use code, radio operators! We're supposed to be experts. Soapbox gone.

We now have a permanent meeting place! With pizza! Our grand experiment appears to be a hit. A couple months ago the SWDCARC board decided to move the meeting place to Windsor Park Baptist Church. All you can eat pizza would be served at $5 an eater. Attendance and opinions show favor to our move. The venue offers unlimited seating (within reason), audio/video, and everything else we would ever need. And the bonus is that the church just completed a $500,000 remodeling job. Our new meeting place is just that...brand new. The idea is to make club meetings an all age family event. A new, fenced play ground is slated for next month. Bring the family and enjoy an evening of fine family fellowship at our new meeting place!

August 16, 2003 our club joined up with Dallas ARC and helped with the "Red Hot Chili Pepper" bike rally. Folks, this was amateur radio public service at it's finest. Hams roved the course, helped with course doctors, navigated for sag wagons, ran emergency communications for injured or tired and thirsty riders, proved the worth of APRS (our own Dave 'APRs' Tucker, KC5CPO), staffed rest stops, all in 100 degree heat. The ride left the Calumet Community Center at Davis and Cockrell Hill road and circulated on various routes in southwest Dallas county. Approximately 450 riders participated. Thanks to Floyd Rogers, KC5QBC for being the liaison for the club and thanks for all you hard workers that helped out. I suspect this will become an annual event for the club. We had fun. I'd do it again in a heartbeat!

Members, great things are happening with our club in coming months. The chili cook off is

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slated for September 27. Our special events committee has planned events for the remainder of the year including a club camp-out. Stay tuned!

Since our club accepted the county bioterrorism communications offer, a presentation of equipment from the county for our portable station will take place this September meeting. Please come and be part of this event. As some of you already know, the club decided to construct two HF/VHF/UHF--cross band repeat portable stations. Our equipment sale at Hammock netted approximately $890 to help with the second station. The intent is to make our emergency capabilities as portable as possible in the event we get called into a bioterrorism fray or any other emergency that is liable to crop up. To my knowledge, this is a first for SWDCARC.

Cheers an dah dah dit dit dit dit dit dit dah dah!
Paul Dryer
President, SWDARC
dit dit

FOXHUNT FOLLIES

The August foxhunt turned out to be a wonderful morning for the event. The temperatures were in the 70's throughout the hunt and the rain waited until the hunt was over to make its appearance. This month's fox, Bernie McPartland/KC5MQC, "hid" over by the shed in Cedar Hill where the club equipment is stored. While it may not seem very hard to locate a red pickup parked within 20 feet of the street, I can tell you that this was a difficult fox to locate because it's location was almost directly under the big commercial towers at Cedar Hill and the signal's reflection off the towers and guy wires (not to mention the vast amount of RF in the air) made it difficult to determine the exact direction of the signal.

Despite some very clever clues provided over the air by Bernie, only one team found the fox: Congratulations to Tony Guthrie / KD5TKN and his team (although it should be pointed out that they found the fox with only 12 minutes to go before the 2 hour time limit expired!!!) Another team (whose identity will be protected for now) actually "raided" a small restaurant in the area, thinking that the fox was in there!!

Our next foxhunt will be on Saturday, September 20th: This will be another mobile 2-meter hunt and we will meet at Harrington Park in Duncanville at 8:30 am, with the fox going active at 9:00 am sharp. Get your teams together, put together a cheap yagi and come out and have fun.!!

73 de Rick / KJ5UY

FOXHUNT TIP OF THE MONTH:

Much attention is given to the selection and usefulness of the antenna when talking about foxhunt gear, but I submit to you that the humble, lowly attenuator is just as essential. Ironically, we often look to antennas to provide the maximum gain possible, and the attenuator does just the opposite, it weakens the signal.

So, what is an attenuator? Essentially, an attenuator is a very simple device that consists of a series of resistors and switches in an enclosure that is connected in line with the coax. Attenuators are available commercially but also make a great first time homebrew project for the beginner. If you can solder, you can build an attenuator as an afternoon project. Whether building or buying, I recommend steps of 3, 5, 10, 20, 20 , and 20 (or 30) db of attenuation as a minimum. Less will not be enough to get you into the vicinity of a harmonic signal.

The attenuator is used to weakens the "fox" signal until it barely registers on the S meter, allowing the hunter to swing the directional antenna around and observe the changes in the relative signal strength, thus determining the direction of the signal. I try

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to get enough attenuation in to only hear the signal when the antenna is pointed in the direction of the fox, and sweeping a 360 degree circle to make sure that is the only direction it can be detected. Others like to use less attenuation and observe the dip in the S meter. Remember that if you are using a dual band radio with the intent to listen for the 3rd harmonic (i.e., listening on 70 cm while hunting a 2 meter fox), you will also be attenuating the 3rd harmonic signal, so take the attenuation out during each transmission cycle if you think you're close to check for that harmonic signal. (I got around this by using a dual band yagi, and setting the attenuator between the 2 meter feed and the duplexer that combines the 2-meter and 70 cm feeds, thus attenuating only the 2 meter and leaving the 70 cm free to do it's thing!)

Whatever works is fine, but some practice is helpful to get to know your antenna and attenuator "system" before wandering into the field to hunt the fox.. So give it a try.

73 de Rick / KJ5UY

How to Make a Simple Dual Band Antenna (coaxial-collinear)

In the August Groundwire issue I mentioned my displeasure with the crop of "dual band high gain" VHF/UHF handi talkie antennas I tested at Hamcom. Vswr ran all over the map with the antennas tested, contrary to the claims on the manufacturers packaging. In my usual cheap skate manner, I set out to get inside these antennas and learn how to make one myself. Cheap at under $5. Here's how:

Parts you will need:
1 36" piece of .020 music wire. (available at Westlake Ace hardware or any good hobby store)
1 SMA connector (Amphenol RFX Mouser part number 901-9877-RFX)
1 1/8th inch drill bit.
Super Glue and baking soda or 5 Minute Epoxy

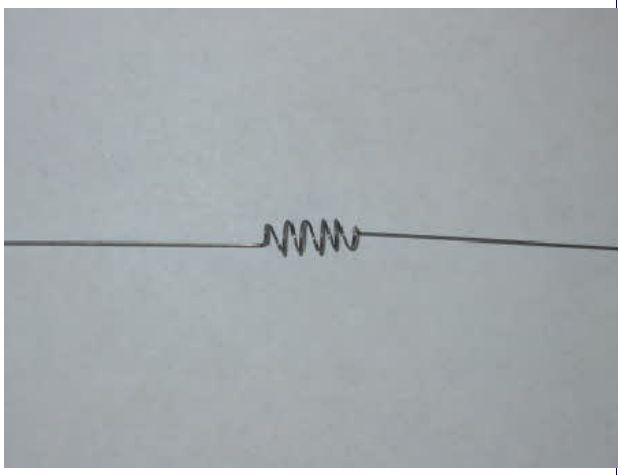
Tools you need:
Soldering iron
Good set of needle nose pliers.
Wire cutters for cutting hard music wire (you destroy the jaws of your good dikes)
Antenna analyzer if you have one.

You will end up with a very springy, 1/4 wave vertical for 146.52 mhz, and 1/2 wave for 445 mhz. The connector used on this project facilitates use of an alligator clip for adding a "tiger tail" or 1/4 wave piece of wire for a counterpoise. The problem with an HT is that they are not all the same in surface area, so getting a universal vswr measurement is hopeless. A tuned counterpoise fixes that. My antenna was below 2:1 vswr on both bands using a counterpoise.

1. Start with your piece of music wire and the drill bit. You are going to wind a "choke" to allow the antenna to behave as 'resonant' on two bands. (remember, this plan works for single band antennas too.... simply skip the choke winding step)

Grip the wire and drill bit with your needle nose pliers and as tightly as possible, wind 4-6 turns around the drill bit. Done correctly, your turns should be spaced about 1/10" apart. Don't worry about getting it perfect as this not that critical.

Remove the drill bit and with the pliers straighten each end of your wire to make it look like the picture to the right.



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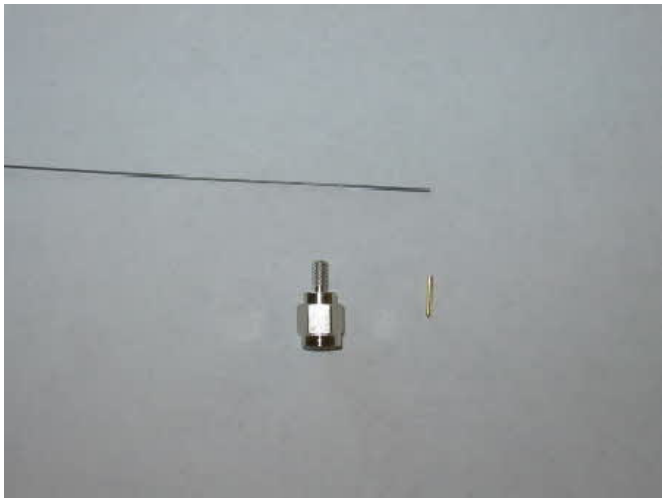
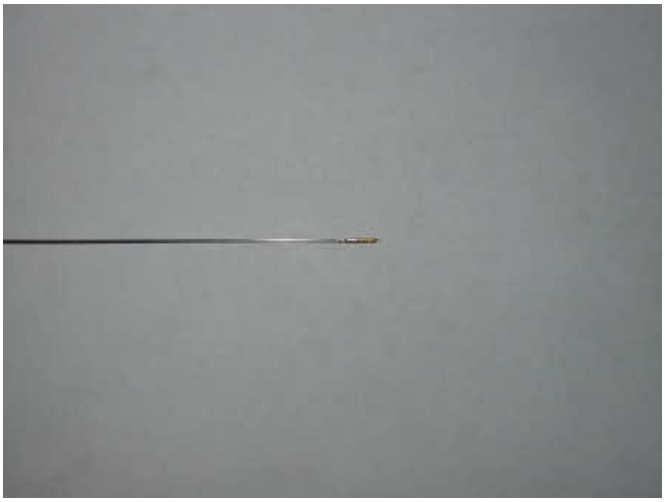
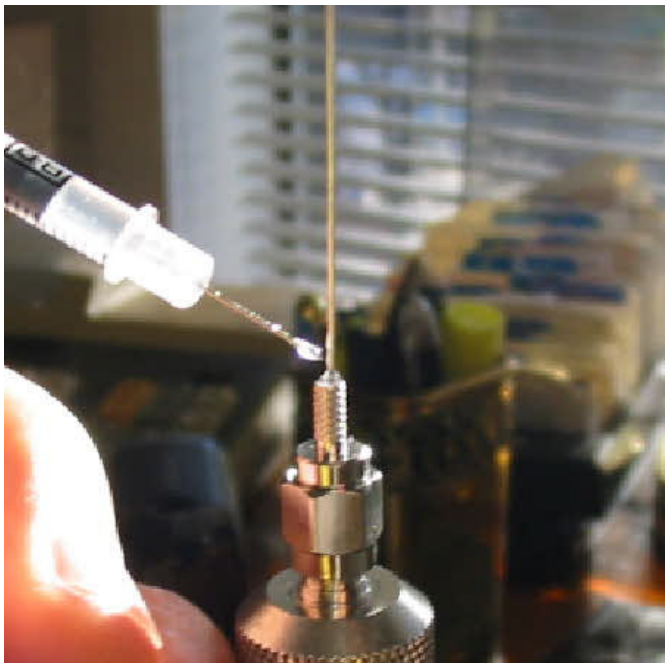
2. Using the formula 234/f mhz * 12, determine your over all length of the antenna for the VHF frequency of 146.52 in inches. You should get 19.16". Do the same for 445 mhz. This should give you 6.3".
Elements each side of your choke will act as 445 mhz elements giving you 1/2 wave.
Because your choke will change the electrical length a bit, use good antenna building practice and cut your wire 'long'. Here are the final measurements for my antenna: From either end of the choke, measure out 7.25" and cut. This is the bottom of your antenna. Now measure from the bottom end of the wire past the choke to the other end and cut at 18.75". This should get you below 3:1 vswr on both bands with out using an antenna analyzer to make fine adjustments.

3. Time to solder. You'll find the particular SMA connector in this project is very easy to work with. The center conductor is a little gold plated pin with a hollow core down one end. Your .020 wire will fit perfectly.







Steel wire is very easy to solder. Simply sand the end clean, tin the end, heat and insert the wire into the center conductor.

4. Once soldered, grip the antenna just above the center conductor with your pliers and insert it into the SMA barrel. A little shove and the center conductor snaps into place.
With the antenna centered in the SMA connector, fill the void around the antenna with super glue and baking soda (fill the void with soda and touch with a drop of glue...concrete!) or 5 minute epoxy. This keeps the antenna from touching the sides of the barrel and shorting the antenna.

On the other end, using you needle nose pliers, bend the tinniest little loop you can make to keep the antenna from poking out your eye. This wire is almost invisible and sharp!

You're done! As I said, handi talkies perform much better with a counterpoise. An alligator clip with a 1/4 wave piece of wire should do it.
Enjoy!

Paul Dryer KD5IVP

August 2003 General Membership Meeting

The August General Membership meeting was called to order at 6:30 pm by club President Paul Dryer, KD5IVP in the meeting room at the Windsor Park Baptist Church located at Westmoreland and Pleasant Run Road in DeSoto. The club provided pizza and chicken strips, all you can eat for $5.00 per person. Thanks to Rick and Rebecca Ellis for bringing salad and salad dressings.

Guests were introduced as Dempsey Stone, KD5YUN and Calvin Adkins, son of Adam Adkins, KM5N.
There were no corrections to previous minutes as published in the club newsletter, The Groundwire. The Financial report was approved as read by club Treasurer, Johnny Roberson, KJ5LB.

COMMITTEE REPORTS:
Repeater – Nothing to report.
VE Testing: There were 5 tested with 4 passing during normal 2nd Tuesday VE session. An additional session was held with one person starting without a license and ending with a General Class License. Congratulations to all!
Membership: The board voted in two new members, Beth Girardi KD5YTK and Fred Tinsley NX5H. **Special Events**: Chili Cook off to be held on September 27th tentatively set to be at the Field Day site at Valley Ridge Park in Cedar Hill. Rebecca Ellis, KC5FHG will have sign up sheets for side dishes at the September membership meeting. **Fox Hunt**: Another mobile fox-hunt was held on August 10th with Rick Ellis KJ5UY and Tony Guthrie KD5TKN teaming up for first place.
Website: A request was made for digital photos of club members ham shacks. The plan is to put them on the website without listing whose shack it is. The plan is that web viewers try to guess whose shacks they are. 640 x 480 pixel size is preferred. Please send your pictures to webmaster@swdcarc.org.
OLD BUSINESS: The Red Hot Chili Pepper Rally communications that the club worked along with the Dallas Amateur Radio Club was a success. There were 29 Ham operators, 14 riders requiring first aid, 1 medical emergency, 15 transported riders found by Ham rovers and 29 riders transported. A big thanks goes to the DARC and Richard Bartlett KE6LOU and also to Floyd Rodgers KC5QBC and all participating Hams for a very well organized event.
NEW BUSINESS: Nothing new to report on our involvement with Country Day on the Hill in Cedar Hill. Paul called for volunteers to assist a Ham operator in Oak Cliff that is disabled on doing some antenna work. Please email Paul Dryer via the club web site if you want to help.
A motion was made by Johnny Roberson KJ5LB and seconded by Todd Houvinen KB5TMD to make non-voting complementary memberships available to those new Hams that we get at our club VE sessions. The complementary membership would only apply to the remainder of the year that they passed the initial test. This would not apply to upgrades but just those that were not licensed before passing the required tests at our VE sessions. They of course could pay the required dues if they wanted to become voting members. The motion was tabled so that it can be discussed at the next board meeting and announced in the next Groundwire before being voted on at the next general membership meeting.

PROGRAM: Paul Dryer KD5IVP on HR713, Broadband over Power Lines and how to write your elected representatives.

Meeting adjourned at 7:15 pm.

YOU ARE INVITED !

The Joshua Adventist Youth Amateur Radio Taskforce (JAYART) will be sponsoring a special presentation by Jim Ryan, Senior reporter for ABC affiliate WBAP radio. He was an imbedded reporter on the USS Constellation in the Persian Gulf. He has taken lots of videos and has many stories to tell. Mr. Ryan will be presenting at the Joshua Seventh Day Adventist Church on the 14th of September at 4:00 pm. The church is located on FM 917 by Union Hill in Joshua. This is your official invitation... we are hoping to have a good turnout. If you would like more info or if you need directions just reply to this e-mail or call me at 817-641-8941

Dave Tucker KC5CPO
dave@kc5cpo.com

September 2003 SWDCARC Board Meeting

President Paul Dryer (KD5IVP) called the meeting to order at 6:30 pm. The meeting was held at the #1 Asian Buffet on Wheatland Rd @ Cedar Ridge in Duncanville. Those attending were Paul Dryer, Todd Houvinen KB5TMD, Neal Palmquist W9NDP, Everett Parramore N5WFA, Aaron McCarthy KD5OYC, Richard Baker N5KXA, Rick Ellis Jr KJ5UY, Rebecca Ellis KC5FHG, Johnny Roberson KJ5LB, Drena Cromaz KK5YC and Danny Cromaz W5WB.

The previous minutes were approved as read. The treasurer's report was read and approved. There were no new membership applications to approve. There were no VE testing sessions held since the last meeting. There was nothing new to report on the repeaters.

SPECIAL EVENTS: On September 27th between 6pm and 8pm, the next club Chili Cook-Off will be held at the Field Day site in Valley Ridge Park in Cedar Hill. Other plans include a Camp out, Pancake Breakfast & Fox Hunt on October 25th. The November 21st General Membership meeting will be also a potluck supper. Plans are to have the December 16th general membership dinner catered in.

FOX HUNT: The next mobile foxhunt will be held on September 20th. Everyone should meet around 8:30 am at Harrington Park in Duncanville.

CLUB PORTABLE STATION: The Dallas County Heath and Human Services have made arrangements to donate to SWDCARC equipment for our planned portable station. A presentation of the donation will be given at the September general membership meeting.

OLD BUSINESS: A tabled motion from the last general membership meeting was discussed. The board ruled that the motion will not be changing the by-laws as presented and voted to allow the motion to be voted on at the next general membership meeting. The motion was to give those that passed their exams at our VE testing sessions and were getting their license for the first time be given complimentary non-voting memberships in the club for the remainder of that current year. If they wanted to become a voting member, the present dues would apply. The only expense to the club would be postage for the newsletter if the new member did not have an email address. The Board felt that this would assist us in gaining new members.

CLUB WEBSITE: Danny Cromaz asked for digital pictures of members radio shacks to be put on the club website picture gallery page. The plan will be to not identify them on the website. We can have some fun trying to guess whose shacks they are as well as vote on neatest, un-organized, etc. If you don't have access to a digital camera, Danny can scan a regular print if necessary.

NEW BUSINESS: The next general membership meeting will be held at Windsor Park Baptist Church in DeSoto and we will continue the $5 all you can pizza.
Meeting adjourned at 7:20 pm.

Respectfully submitted by Danny Cromaz W5WB, Club Secretary

FCC PUTS NO-CODE INTERNATIONAL'S MORSE PETITION ON PUBLIC NOTICE

The FCC has invited public comments on another Morse code-related petition for rule making--this one from No-Code International (NCI) http://www.nocode.org/. It's designated RM-10786. When the FCC put six other Morse-related petitions in the sequence RM-10781 through RM-10787 on public notice, RM-10786 failed to show up on the FCC's Electronic Comment Filing System (ECFS) http://www.fcc.gov/cgb/ecfs/. It remained missing through September 2. NCI calls on the FCC to delete Element 1--the 5 WPM Morse code exam--"totally" from the Amateur Service rules and grant "Tech Plus" privileges to current Technicians. It also wants the FCC to act on the matter as soon as possible, preferably in a separate rule making and without further ado
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"The Commission clearly has the authority to modify its rules on its own initiative and without further public notice or comment," NCI asserted in its 20-page petition.

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NCI notes that World Radiocommunication Conference 2003 (WRC-03) made optional the requirement to prove the ability to send and receive Morse signals to operate below 30 MHz. As a result, "the Commission is no longer bound to maintain any Morse proficiency requirement." The Morse requirement, NCI contends, is keeping newcomers away from Amateur Radio.

Comments poured in this week from members of the amateur community on all seven petitions. Clearly ahead in the comment-collection race is the petition filed by the National Conference of Volunteer Examiner Coordinators, RM-10787, which had collected more than 350 comments by week's end. The other petitions each have garnered more than 100 comments apiece.

Interested parties may file comments on any or all petitions now on public notice http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-238494A1.pdf by using the FCC's Electronic Comment Filing System (ECFS) http://www.fcc.gov/cgb/ecfs/. The ECFS also permits users to view all comments on file. There is a 30-day comment window.

To file a comment, click on "Submit a Filing" under "ECFS Main Links." In the "Proceeding" field, type the full RM number, including the hyphen, and complete the required fields. "RM" must be in capital letters, and you must include the hyphen between "RM" and the five-digit number. You may type your remarks into a form or attach a file. ECFS also accepts comments in active proceedings via e-mail, per instructions on the ECFS page.

To view any comments already submitted for each petition, click on "Search for Filed Comments" under "ECFS Main Links" and type in the complete RM number, including the hyphen, in the "Proceeding" field. "RM" must be in capital letters, and you must include the hyphen between "RM" and the five-digit number.

STORM SHELTERS PROJECT PAYS DIVIDENDS FOR CLUB

An Oklahoma ham radio club's initiative has paid off by helping the community and enhancing public recognition for Amateur Radio. Chuck Kanach, KC5EZS, who's vice president of the Choctaw Amateur Radio Club http://k5car.tripod.com/carc, says his club proposed last year to locate the precise position of storm shelters in the tornado-prone community to enable them to be found later--after a storm. CARC, an ARRL-affiliated club, got the okay this summer.

Members used their own GPS units and kept in touch via ham radio and cell phone as they used an initial list of 137 addresses from the city to track down, pinpoint and inventory the exact location of each storm cellar. Before they finished, the list had grown by another two dozen.

"We worked in teams of two and were able to locate 154 of these shelters within a six-week period," said Kanach, who headed up the project <http://k5car.tripod.com/carc/id1.html>. When the club finally turned over its list, Fire Chief Loren Bumgarner handed the club another dozen to locate.

"We have also been asked to locate storm shelters for neighboring cities, Kanach said. "It looks like we will be staying busy for a while."

The success of the project--and ham radio's contribution in the aftermath of last May's tornadoes in Oklahoma--has encouraged municipal officials to take ham radio more seriously as an emergency resource, Kanach said.

"I am now on first-name basis with our city's emergency coordinator," Kanach said. "He knows that we have people in our club concerned about our city and our people. He also knows the type of services we could provide."

Kanach believes part of the reason for the project's success--which got local media coverage--was not waiting for the city to ask but taking the initiative to propose the project first. "The City of Choctaw and everyone we came in contact with now knows about the Choctaw Amateur Radio Club," he said.

Thanks to The ARRL Letter and The American Radio Relay League for permission to re-publish the preceding two articles.