

THE ZARC CARRIER



The Newsletter of the Zanesville Amateur Radio Club

Ham Radio Operators Are All Ears When Emergency Calls

*By Glenn Hassenpflug, Special to the Record Searchlight
Sunday, April 6, 2008*

One Man's Induction into the World of ARES

by Clyde McPhail

In a post-Hurricane Katrina, post-9/11 world, the nation's security may depend on a network of old men who listen.

Men like Ray Tooker, 75, who built crystal-set radios as a kid, then took that savvy into the Korean War and later used it to service communications at Nike missile sites in the San Francisco Bay area. He did it all with radio.

In his 37-year career with a telephone company, Tooker was never part of a telephone crew. Today, retired to a Cottonwood farm, he continues to prefer radio -- two-way amateur "ham" radio -- to the telephone.

"I have friends in Southern California, Nevada, Colorado. I even talk to this local bunch around here," he said, referring to the several hundred other radio buffs in the area. "I leave the receiver on."

Why not the telephone? "The telephone doesn't talk to you all day," he said.

While other north state residents scurry between map points with cell phones to their ears, Tooker talks hands-free with a two-way radio in his car and another radio with both high-frequency (HF) and very high-frequency (VHF) reach in his truck.

"I listen."

Listening in with Tooker are 35 other ham radio operators who together make up the Shasta-Tehama Amateur Radio Emergency Service (STARES). They are the north state's own minute-men for a postmodern world in which high-tech might not always be enough protection.

Al Peña, 47, of Redding, president of the organization, helped revive the local emergency radio infrastructure after the Sept. 11, 2001, terrorist attacks demonstrated the value of local amateur radio. It was demonstrated again just before Hurricane Katrina.

"Even now, with the modern communications, when the chips are down - when you pull the cell phone out of your pocket and the thing is dead and the radio tower for the city goes down - sometimes we're the only thing left," Tooker said.

Stanford Smith, 77, of Redding, another organizer, says the genius of radio is its simplicity.

"Cell phones are out, overloaded immediately. Landlines are out. One of the great things about amateur radio to the Red Cross is, immediately, you can go to wherever shelters are set up," he said. There, most radio equipment can run off a 12-volt battery recharged with solar panels or generators.

Simple, too, is ham radio operators' lingo.

"We don't use 10 code," Peña said. "We don't use '10-4' or 'Roger.' We'll say, 'See you later.'"

We're not supposed to be using 10 codes, the family-friendly service that amateur radio is."

"The fun service with a serious side," Smith added.

A "welfare check" means a check on a family member's welfare - and ham operators are helpful as family go-betweens in an emergency, even when standard emergency channels remain open.

A.E. Hansen III sent us this very entertaining story, about how he found out about Ham Radio, ARES and, by extension, this website. Enjoy!

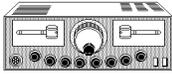
Recently, I encountered the ARES which led me to your site.

I was driving along a few icy patches of road when I got t-boned by a tanker truck who was unable to stop after hitting a patch of ice. He wasn't carrying anything but since the truck was now jackknifed across both lanes it caused quite a problem. Now, I crawled out of my vehicle and went over to the truck driver, and we called the police to report the accident. Within a few minutes a patrol car pulled up followed by the most bizarre site I have ever seen. There, in all it's glory, was a genuine, official ARES vehicle, lit up like a Christmas tree, with more antenna than an insect orgy. After taking down the report, the police officer went back and sat in his patrol car awaiting the arrival of the wrecker needed to move the truck, and the flatbed to take away my car. The truck driver, and I were exchanging information, and a few of the locals had come out to offer some coffee, see if we needed anything etc. The "official" ARES person, guy, fellow, whatever, immediately jumps into action telling people to back up, that this is a very dangerous situation. I proceeded to inform him that the small piece of debris stuck into the grill of the truck was indeed my vehicle, and I had not recovered all of personal belongings yet. His response was that he was an "official"

Continued on page 9

Continued on page

ZARC OFFICERS



PRESIDENT

Joe Paul
255 Bryan Dr.
Zanesville, Oh. 43701
Ph. 740-453-7058

Vice-President

Earl Paazig, N8KBR
10660 Black Run Rd.
Frazysburg, Oh. 43822-9771
Ph. 740-828-1057

SECRETARY

Zippo Gillogly, K8CYN
4510 Pleasant Valley Church Rd.
Hopewell, Ohio 43746
Ph. 740- 452-5879

TREASURER

Don Wahl, WA8BOV
P.O. Box 8203
Zanesville, Ohio 43701
Ph. 740-454-0003

Trustees

REPEATER — 146.610

Zippo Gillogly, K8CYN
4510 Pleasant Valley Church Rd.
Hopewell, Ohio 43746
Ph. 740-452-5879

Packet -- 144.910

Dwight Bonifield, W8TJT
4235 Cherlick Cr.
Zanesville, Ohio 43701

CLUB CALL SIGN — W8ZZV

Danny Grandstaff, KB8RIM
2422 Marion Ave.
Zanesville, Ohio 43701

Web Master & PR

Earl Paazig, N8KBR
10660 Black Run Rd.
Frazysburg, Ohio 43822
Ph. 740-828-1057
<http://zarc.eqth.org/>

Editor - Publisher

Danny Grandstaff, KB8RIM
2422 Marion Ave.
Zanesville, Ohio 43701

ZARC & ZARC CARRIER
zcw8zzv@prodigy.net

THE ZARC CARRIER

The Zarc Carrier is the newsletter of the Zanesville Amateur Radio Club, located in Zanesville, Muskingum County, Ohio and is published January, March, May, July, September, and November.

Send in your items of ham related interest, such as swap n shop ads, new hams in the area, birthdays, anniversaries, silent keys, ham fests, special events, and original written articles. Deadline is the first of the month before the month to be published. Enclose a SASE if your material is to be returned to you.

Any material in *The Zarc Carrier* may be reprinted as long as you give credit to the newsletter, the original author, and the original publication, if given.

Sample copies are available upon request and a SASE. If your club receives a complementary copy of *The Zarc Carrier*, we would appreciate a copy of yours in exchange.

ZARC MEMBERSHIP

The Zanesville Amateur Radio Club is an incorporated not-for-profit association. Membership is open to anyone interested in the purposes of the organization and who agrees to abide by the by-laws and other rules and regulations that may, from time to time, be established by ZARC.

ZARC Membership Application

Date New Membership Renewal

Name Call Sign

Address

City, St, Zip

Phone ARRL Member - Yes No

Prorates apply to new memberships only. Jan-Mar Apr-Jun Jul-Sep Oct-Dec

• Full (*Licensed Amateur*) ... 20.00 ... 15.00 ... 10.00 ... 5.00

• Family (*Of Full member—Licensed Amateurs—1st person, then \$5.00 for balance of family*) ... 10.00 ... 7.50 ... 5.00 ... 2.50

• Junior (*Licensed Amateur, 16 yrs. old or younger, still in school, not in same household as Family member*) ... 6.00 ... 4.50 ... 3.00 ... 1.50

• Associate (*Un-Licensed*) ... 10.00 ... 7.50 ... 5.00 ... 2.50

If Family Membership, Name and Call Sign of Full Member:

.....

E-Mail Address

Share E-Mail Address With: Members Only Anyone No One

Send ZARC CARRIER by: E-Mail (Adobe) USPS

Make check or money order out to ZARC and mail to:

Don Wahl, WA8BOV, ZARC Treasurer, P. O. Box 8203, Zanesville, Ohio 43701-8203



ZARC Net Control Stations

The Zanesville Amateur Radio Club 2 meter net meets every Wednesday night at 9 PM on 146.610 PL 74.4. The PL and time out are off during the net. All licensed Amateur Radio operators are welcome to check in.

May 2007

7th Mary Grandstaff, KB8ZXH
 14th Open
 21st Danny Grandstaff, KB8RIM
 28th Open

June 2007

4th Mary Grandstaff, KB8ZXH
 11th Open
 18th Danny Grandstaff, KB8RIM
 25th Open

Any ZARC club member is welcome to take an *Open* week as net control. Let me know that you are interested and I will see that you get a copy of the ZARC Net Preamble and assign you a Wednesday. Danny Grandstaff, KB8RIM, zcw8zzv@prodigy.net or 740-453-0400.

The Armstrong Radio Repeater System

	<i>Licking County</i>	<i>Muskingum County</i>	<i>Guernsey County</i>	<i>Perry County</i>
VHF	146.835	147.075	147.000	146.820
UHF	443.925	442.250	444.375	none
PL	91.5	91.5	91.5	100.0

Bzzzzzt Again!!



Apparently these guys wanna die, and still felt it necessary to go out with a flash !

Printing Donated by:

Dan's Barber Shop
 819 Linden Ave.,
 Zanesville, Ohio

The Fix It People! Communications Electronics

2617 Palmer Rd.
 Hebron, Oh 43025
 740-929-2500



ZARC Meeting Place

From Rt. 40 at Pleasant Grove Rd. go north (Rt.93) on Pleasant Grove Rd. 1.1 mile, turn left on Adamsville Rd. and go about 0.3 mile. You will see a building on the right with multi antennas. Stop here. Coming from Underwood St. go north on Hall Ave. from the traffic light about 2.5 miles and the building is on the left.

Area 2 Meter Nets

Sunday

147.045 Coshocton 9 PM

Monday

146.730 New Philadelphia 8 PM
 147.030 Lancaster 9 PM
 145.230 Coshocton 9 PM

Tuesday

146.760 Columbus 7:30 PM
 146.850 Cambridge 8 PM & 8:15 PM
 146.670 Millersburg 9 PM
 146.880 Newark 9 PM

Wednesday

147.345 Logan 8:30 PM
 146.610 Zanesville 9 PM
 147.210 Wooster 9 PM

Saturday

* New Lexington 8 PM
 * © Multi-County Coalition 9 PM
 * The Armstrong Radio Repeater System
 © Alternate Frequency 146.610

Other Area Nets

Daily

147.240, PL 179.9 Columbus 7 PM

Wednesday s

1st - 8:30 PM 146.460
 2nd - 8:30 PM 52.540 Simplex
 3rd - 8:30 PM 28.390 SSB
 4th - 8:30 PM 24.980 SSB
 5th - 8:30 PM Wildcard
 (Any of the above)

Thursday

ZARC Six Meter Net 9 PM
 51.135 FM Simplex

Friday

Johnny Applesced 9 PM
 28.450 USB

Multi-County Coalition N C S

First Sat. - Licking County
 Second Sat. - Guernsey County
 Third Sat. - Muskingum County
 Fourth Sat. - Open
 Odd Fifth Sat. - Coshocton County

Ham Speak - Know the Lingo

Ø "Slashed Zero" - distinguishes a ZERO from the letter "O". Intended to resolve ambiguity in callsigns like ""WØOF". Not needed for callsigns like "WØRK". Can be produced by pressing Alt0216 on your PC keyboard (Note: you must use the numeric keypad, not the numbers across the top row of the keyboard. This method should work in most PC-based editors such as e-mail clients, word processors, etc.) **73** "Best Regards" (Source: "Morse Code: The Essential Language", 2nd Ed., ARRL Publishing)

807 An old glass vacuum tube, several inches tall and around. Also, slang for a beer, as in "there's nothing like a cold 807 on a hot Arizona afternoon" (*thanks to W7QY*). According to our friends in Ireland, a pint of Guinness is known as a "Black 807" (*thanks to GI4FUE*). **88** "Hugs" and/or "Kisses" **ACSB** Amplitude Compandored Sideband modulation **AGC** "Automatic Gain Control"; a circuit in a radio which automatically adjusts the overall gain of the receiver **A-Index** Linear index for measuring the disturbance level in the earth's magnetic field. The index is defined over a period of one day (*Courtesy of IPS Radio and Space Services, Sydney, Australia*). **AM** "Amplitude Modulation"; slang often used is "Ancient Modulation" (*courtesy of VE3FFK*). **AMTOR** "Automatic Teleprinting Over Radio"; popular digital mode on HF **Antenna Gain** The ratio of the power required at the input of a loss-free reference antenna to the power supplied to the input of the given antenna to produce, in a given direction, the same field strength at the same distance (def. courtesy of Telecom Glossary 2000) **Antenna Party** A long-standing tradition among hams where several gather to assist a fellow ham in mounting antennas and/or towers. Often accompanied by malt consumables and lies **AFTER** the tower and the antennas are up and working...well, the consumables anyway (*thanks to WD5CTQ*). **AOS** "Acquisition of Signal" from a satellite; occurs when the satellite becomes "visible" to the antenna as it comes up from the horizon. **ARRL** "American Radio Relay League"; A U.S.-based organization which exists to support Amateur Radio. For more information, please visit <http://www.arrl.org>. **ATV** "Amateur Television"; typically found on the 430 MHz and 1.2 GHz bands; see <http://www.hampubs.com/atv.htm> for more information (*thanks to KG4LXA for the suggested link*). **AWG** "American Wire Gauge"; a system of describing the diameter of wire by which the wire size increases as the gauge number decreases. **Barefoot** Refers to running your transmitter without an amplifier (in other words, the "power out" is being produced entirely by the transmitter, without any assistance from an amplifier). **BFO** Beat Frequency Oscillator **Bird** 1. nickname for "satellite", in the case of Amateur Radio, examples include RS-12/13 (Radio Sputnik) and AO-40 (AMSAT-OSCAR). See <http://www.amsat.org/amsat/sats/n7hpr/satsum.html> and <http://www.hampubs.com/satellite>. 2. brand name of a high-end, high quality directional wattmeter. **Birdie** A signal produced within a radio, typically by it's microprocessor or related circuitry, that appears at specific intervals across the tuning dial of a receiver. Usually it is a product of mixed intermediate frequencies within the radio. Considered bad form. **Boat Anchor** Slang for a large, heavy, usually old radio, typically restored (*courtesy of VE3FFK*). **BPSK** "Binary Phase Shift Keying"; a modulation technique used in LowFER and MedFER operation, as well as HF operation. For more information, see <http://www.computerpro.com/~lyle/watsbpsk.htm> (*courtesy of KØLR*). **Brass Pounder** Refers to someone who sends telegraphy by old fashioned "straight" key, i.e., without any keyers, etc., or paddles. **Bug** A mechanical keying device for transmitting Morse Code semi-automatically. **Bureau Buro** See "QSL Bureau" **Channel Guard** General Electric's trademarked name for CTCSS. (RCA called it Quiet Channel, or QC) **CBA** Call Book Address **CC&R's** "Covenants, Conditions, and Restrictions"; an extensive set of rules drawn up by homeowner's associations and their lawyers which, among other things, typically restrict or completely prohibit a homeowner from having most forms of antennas on his/her property. Such regulations are formed and placed upon the property before the home is initially sold, and typically remains in effect for the life of the home. **CG** See "Call Guard" **Coax** Coaxial cable; RF transmission line; used to connect an antenna to a radio; "coaxial" indicates that the conductors are about the same axis, with a center conductor being on that axis, and the "shield" wrapped around the axis (dielectric separates the center conductor and the shield wires). **CTCSS** "Continuous Tone-Coded Squelch System", also known as "PL" ("Private Line", trademarked term by Motorola), "Call Guard" (trademarked by GE), or "subaudible tone". A means of transmitting a tone along with your signal. This tone tells a receiver to open up its squelch so that the signal is received. This method is commonly used with repeaters. **CW** "Continuous Wave"; popular digital mode on HF which utilizes Morse Code; regarded by many as the *first* digital mode. **DCS** Digital Coded Squelch **DE** "From" in CW-speak **Deviation** The resultant frequency swing of a signal that is frequency modulated (FM). **Dielectric** A non-conductive material used to separate the center conductor and shield (conductor) in coaxial cable; typically made of foam or plastic. **Dipole** Likely the most common wire antenna amongst hams, the easy-to-homebrew dipole consists of two legs (each 1/4 wavelength) which typically extend horizontally and away from each other. One leg connects to the coax's center conductor, and the other leg connects to the coax's shield as a counterpoise. The dipole antenna is usually strung in a horizontal fashion between trees, and works best when at *least* 1/4 wavelength above the earth. **DR** A CW abbreviation for "dear", used as a respectful salutation. Example "GOOD EVENING, DR JOHN, HW ARE U?" **Driven Element** An "arm" of a yagi antenna to which RF power is fed from the coax. **DSSB** Double Suppressed Sideband modulation **DSW** Russian abbreviation for "goodbye" on CW. **DTMF** "Dual Tone, Multiple Frequency"; a tone that is actually comprised of two different tones sounded at the same time. It is what you hear when you use the pushbuttons on a standard non-pulse telephone in the U.S. It is also a common way to send analog numeric information, since each numeral between Ø and 9 has its own separate tone (and also # and *, and in the case of some radios, A, B, C, and D). **Dummy Load** Typically a power dissipating resistor or device substituted in place of an antenna on a transmitter, used for testing purposes. **DX** Long distance; making contacts over long distances. For HF contacts, "DX" is typically considered as such if the station contacted is outside of your country. In some other cases, making a contact over what is considered extremely long distances (for the conditions and band) can be considered "DX" (i.e., a QSO from one end of a state to another, on 2 meters simplex, can be considered "DX"). **DXCC** "DX Cen-

Continued on page 7



Ohio Section News

By Joanne Solak, KJ30
 Affiliated Clubs Coordinator
 April 2008 News



What Kids Say

I have been fortunate to have attended several hamfests in the area this year and quite honestly they all seem to be well attended. I do know the League Table is well attended and we are kept busy from beginning to end. Lots of questions and literature is flying off the table.

Seems there are lots of "new" amateurs interested in awards. I think that is great!

There are lots of ideas out there for making your club meetings more interesting and thus better attended. Anything from speakers, videos, classes, etc. One thing that seems to be most popular is naming a "ham of the year" award in your club. You can choose a committee for that purpose. Use the point system and decide accordingly whomever makes the most points qualifies for "ham of the year" award. Any other ideas, send them my way so we can share them.

Tornado and Severe weather Spotter training sessions are scheduled all around the Ohio Section. In fact, some have already been held, others scheduled in the upcoming month. Make sure to attend one of these sessions in your area.

A very popular event with Ohio Section Affiliated Clubs, as well as other affiliated clubs throughout the Country, is FIELD DAY! It is not too early to start planning your event. Find the perfect place for your Club Field Day. Media Publicity has to be requested in time for the reporters to schedule your club for publicity. The local media likes to have events scheduled especially for photos well ahead of time. Remember to place your newspaper articles in the local papers as a press release or just an article announcing your event. Invite State and/or County Officials to your Field Day. Get your traffic handlers ready to send traffic and pick up traffic for your club. (Details on the points are in the Field Day rules and traffic net frequencies are in the rules as well). Field Day will be held June 28-29 this year 2008. Schedule GOTA stations for your event and get the public involved and remember to have a control operator in attendance in case an unlicensed person cares to get on the air. Get a list of the Field Day Bonus points and see how many you can qualify for on the date of the event.

Congratulations! to the Lake County ARA, The Milford ARC, and the Massillon ARC. These Clubs have all been reviewed and renewed as Special Service Clubs!

Check your Club status and register your renewals as needed. REMEMBER TO FILE THE ANNUAL REPORT FORM! Keep all your Club information current with the ARRL.

If you have any Club information to share with the Ohio Section, just send me the information by the 10th of the month.

Remember to support your Ohio Section Hamfests

The 20/9 Club remains active with many events on their calendar. The V.E. Exams, the Skywarn Training Session, Amateur Licensing Classes, the various training nets and on and on. A very busy Club.

The Mount Vernon Club will be Celebrating FIFTY years affiliation with the ARRL in September . CONGRATULATIONS!

Well, that's it for this month. The Ohio Section is gearing up for a very busy year. So keep in mind that sometime, somewhere, when you least expect it, I will be seeing YOU!

*The Ohio Single Side Band Net meets 3 times a day
 (10:30am-4:15pm-6:45pm) on 3.972.5MHz.
 Why not join in on the fun and learn to pass formal traffic.*

TEACHER: Why are you late?
 WEBSTER: Because of the sign.
 TEACHER: What sign?
 WEBSTER: The one that says, "School Ahead, Go Slow."

TEACHER: Cindy, why are you doing your math multiplication on the floor?
 CINDY: You told me to do it without using tables!

TEACHER: John, how do you spell "crocodile?"
 JOHN: K-R-O-K-O-D-A-I-L"
 TEACHER: No, that's wrong
 JOHN: Maybe it's wrong, but you asked me how I spell it!

TEACHER: What is the chemical formula for water?
 SARAH: H I J K L M N O!!
 TEACHER: What are you talking about?
 SARAH: Yesterday you said it's H to O!

TEACHER: George, go to the map and find North America.
 GEORGE: Here it is!
 TEACHER: Correct. Now class, who discovered America?
 CLASS: George!

TEACHER: Willie, name one important thing we have today that we didn't have ten years ago.
 WILLIE: Me!

TEACHER: Tommy, why do you always get so dirty?
 TOMMY: Well, I'm a lot closer to the ground than you are.

TEACHER: Ellen, give me a sentence starting with "I."
 ELLEN: I is...
 TEACHER: No, Ellen..... Always say, "I am."
 ELLEN: All right... "I am the ninth letter of the alphabet."

TEACHER: "George Washington not only chopped down his father's cherry tree, but also admitted doing it. Now do you know why his father didn't punish him?"
 JOHNNY: "Because George still had the ax in his hand."

TEACHER: What do you call a person who keeps on talking when people are no longer interested?
 PUPIL: A teacher.



Handihams Courage

From the Handi-Ham E-Letter, December 06, 2005

Avery's QTH: Black & White TV Days Teach Us a Lesson

Welcome once again to my humble QTH.

Back in the early days of black & white-only TV's, there were many stories of people who turned on the TV just to find it didn't work. They would check the rabbit ear antennas or the wires going to the outside antenna. Then, if that looked OK, they would peek in one of the ventilation holes in the back of the set and see if all the tubes were still in their sockets. If so, then they maybe hit the set once or twice and only then would call the TV repair person, who would come out to the house try the on/off switch, take a quick look around and pick up the power plug, plug it into the wall, turn on the TV, charge the TV owner for the trip out, and leave. Also, there are stories about the business person who bought a brand new top-end very prestigious car. Well, there were no cell phones in those days so, very first thing they did, they proceeded to have a "Business Band" two-way radio installed. About a half hour to forty-five minutes after they had driven away, a call comes into the office. "Please send someone out here. My car won't start." So someone goes out there, checks out a couple of things, looks at the gas gauge and discovers it shows empty. Hey! Even that brand-new very wonderful dream car needs gas to run on. When you buy that new HT and "can't get out", what is the very first thing you should do? Yeah! Check the batteries. Many newer HT's even have an icon that will show when the batteries need to be recharged or replaced. Check that icon often. Remember most of the power draw on the battery will come when transmitting, so check that icon while transmitting to get a real indication of the battery condition. It may show "OK" when just receiving but may start blinking and doing other things to let you know that the battery is very low when you transmit. If you are using replaceable-type cells, stay away from the carbon zinc and stick to the alkaline for a much longer usage curve. If you are using rechargeable, then follow the manufacturer's directions because there are a few different kinds of rechargeables which may require doing things differently. OK! So now you have "GOOD" batteries in the unit and you still can not hear anything. Check the volume control. Is it turned up to a reasonable level? Is the squelch control turned up way too high? Is the tone squelch on the receive turned on, so the receiver audio will only hear stations transmitting that one tone? (If so, turn it off, most people don't use it -- and don't get that tone confused with the transmitting tone used on getting into repeaters when transmitting.) Is there a good connection to the antenna? Along this same reasoning, is the antenna good enough to do the job? Maybe the little 3 or 4 inch antenna on that new two meter HT just won't reach that repeater 60 miles away. Maybe instead you should be using an outside antenna on the roof. If you are on duplex, is the repeater turned off or timed out? That little HT running off of two "AA" cells won't have the power that an HT running off of six dry cells will have either, so your buddy with the five-watt unit may get out just fine, while with your two-cell much lower power unit you may not. There are many factors to consider when "you don't get out" so just make a mental list of what to look for and go down that list checking out things one after another before taking your unit in to be fixed or checked out, as it could cost you for something simple you can find yourself. Always have the manual with you for reference if you do ask someone else for help with the unit. They may not have ever used the unit you have or be familiar with it and might need the manual to figure things out.

73 and DX from K0HLA, Avery
k0hla@handiham.org

Linux Open-Source Screenreader Updated

Emacspeak version 23 is now available. This is a screen reader system for Linux, available on the open-source website: <http://www.sourceforge.net> Blind hams are often forced to choose between spending money on ham gear or buying expensive computer software that will speak what is on their computer screens. If you run Linux, and use the free open-source Emacspeak, you won't have that problem! Here is the website: <http://emacspeak.sourceforge.net/>

Let's Ask Elmer!

Dear Elmer, It is really cold where I live, and I have a mobile rig in my car. Sometimes the temperature outside is so low that my transceiver doesn't work properly. The display might act up, and the on/off switch is hard to use. Should I be warming the car (and the rig) up before I even try turning it on? Signed: Tundra operator Dear Tundra dude, Poor old Elmer is all too familiar with operation in really cold weather. He lives on the frozen tundra himself for what seems at least six months of the year. Before we get to your rig's specifics, let's talk in a general way about what happens in really cold temperatures. Materials behave differently as they get really cold. In fact, they shrink, and do so at different rates, Rubber can even expand when it gets cooler. Metals conduct heat better than plastics, making for some interesting results as the environment warms or cools! Since radio equipment is made from a variety of materials, mechanical tolerances may be out of specified working limits at temperature extremes. That is why Elmer has noticed that switches sometimes stick when it's really cold, even the kind that are just basic pushbuttons with a printed circuit board switch underneath. Solid state devices are made to operate within a specific temperature range, too. When they get really cold or really hot, they may simply fail to work, or perhaps even fail permanently, especially if overheated. The liquid crystal displays on most rigs will misbehave in extreme temperatures. In fact, since LCD's are less tolerant of operation outside "normal" conditions, they are like the canary in the coal mine, giving you the first warning that something is wrong when you try to operate equipment in temperatures that are arctic or tropical! So your rig is not unusual, and you should warm up the interior of the car before you get on the radio. Besides, Elmer has learned that it is really hard to run the radio with mittens on anyway! Finally, look around for your instruction manual. In the specifications section, there will usually be an item called "Operating Temperature Range". For example, Elmer's Yaesu FT-2800M manual specifies an operating range of -4 to +140 degrees Fahrenheit, or -20 to +60 degrees Celsius. Here on the tundra, it can easily get colder than that, and in the summer a closed automobile parked in the sun can be hotter than specs allow. Do your equipment a favor and make the working temperature a bit more comfortable before you get on the air. You can write to Elmer with your questions, which he may or may not answer here, but it's worth a try! His email address is: elmer@handiham.org

Know the Lingo *From page 4*

Club". An ARRL-sponsored club by which membership is allowed only after showing proof of having made contact with at least 100 different countries. For more information, please see <http://www.arrl.org>. **DXpedition** Derived from the words "DX" and "expedition", this term typically refers to a trip made by experienced ham operator(s) to a "DX" country for the purpose of providing other hams an opportunity to make a contact (QSO) into that country. **EME** "Earth-Moon-Earth" communication; moonbounce; using the moon as a reflector to "bounce" your signal back down to Earth. For a complete resource, please see http://www.nitehawk.com/rasmit/wsl_1.html **ERP** "Effective Radiated Power"; the power supplied to an antenna multiplied by the antenna gain in a given direction (if the direction is not specified, the direction of maximum gain is assumed). **Eyeball** Face-to-face meeting, as in "eyeball QSO" (to speak to one another in person). **FB** "Fine Business"; cheerful acknowledgement, or adjective for describing a good quality. **Field Day** A once a year contest sponsored by the ARRL where hams go to remote sites and operate for 24 hours. Used to assist hams in emergency preparedness as well and to practice not sleeping, treating insect and other vermin bites and the drinking of cold coffee and the ever present telling of lies. Great fun for all! (*thanks to WD5CTQ*) **Fist** The sending style of a particular CW operator. In the old days, telegraphers knew each other by their "fists" (*thanks to WD5CTQ*). **FM** Frequency Modulation **FOC** "First Class CW Operators' Club"; an exclusive CW club based out of the United Kingdom. **Gain** As it applies to antennas, see **Antenna Gain** **Green Stamp** U.S. dollar bill sent along with a QSL card (instead of an IRC) to offset postage costs of a return card.

Harmonic 1. Children. 2. Secondary RF emission that is a multiple of the fundamental emission. **HF** "High Frequency"; generally regarded as the band of frequencies between 1.8 MHz and 30 MHz **Homebrew** Refers to equipment that is "home built"; something you built yourself. **Hz** "Hertz"; a unit used to measure frequency. Typically used with "Kilohertz" (KHz) to indicate 1,000 Hertz, or "Megahertz" (MHz) to indicate 1,000,000 Hertz. **Iambic** A method of Morse Code keying. Holding both paddles at same time sends alternating dits and dahs (*courtesy of VE3FFK*). **Intermod** Derived from the expression "Intermodulation Distortion" (IMD). A problem caused in the receiver of a radio by a nearby transmitter's spurious signals which may fall on or very near to the receiver's receive frequency. In some cases, a perfectly clean transmitter (i.e., no spurious signals) can produce intermod if it overloads a receiver or if there is some other point for 3rd order intercept. Intermod which is close, but not necessarily right on, the receiver's frequency can cause the receiver to become less sensitive (also known as "desense"). **IOTA** "Islands on the Air"; for more information, please see <http://www.islandchaser.com/>. **IQØ** Slang for "IQ of zero"; an idiot (*courtesy of GI4FUE*). **IRC** "International Reply Coupon". A system by which most country's postal systems provide a coupon which can be purchased, and then used by a sender in any other country to obtain return mail postage. This system allows you to provide return postage for those in another country, especially useful when you do not have access to that country's postage stamps or currency. IRC's are frequently used to assure return postage for a QSL card. For more information, please see QRZ's "QSL Corner" at <http://www.qrz.com/qs1.html>. **J-Pole** An antenna design that is relatively easy to assemble yourself. For more information, see <http://www2.arrl.org/tis/info/JPole-V.html> (*Courtesy of ARRL*). Note: The basic J-pole design can be applied to any frequency, as long as measurements are proper for that frequency. Furthermore, a 2-meter J-pole will also resonate on the 440 MHz (70 cm) ham band, making for a reasonable dual-band antenna. **Kc** "Kilocycle"; equivalent to KHz; regarded as an "old fashioned" way of describing frequency. **Key** Device used by hand to produce Morse Code; can contain either a single, vertically travelling arm (see "Straight Key") or horizontally travelling paddles (see "Paddles") that are used to make ground connection and produce the Morse Code. **Keyer** Electronic device for sending Morse Code semi-automatically; connects to a key (see above). Dits are sent by pressing one paddle [of the key], dahs sent by pressing the other one (*courtesy of VE3FFK*). **KHz** See **Hz** **K-Index** A three hourly index of geomagnetic activity relative to an assumed quiet day curve for the recording site. K index values range from 0 - very quiet- up to 9 -extremely disturbed- (*Courtesy of IPS Radio and Space Services, Sydney, Australia*). **LID** Slang term, often referring to a CW operator with very poor practices and manners. **LiIon** "Lithium-Ion". A type of rechargeable battery commonly used with radio equipment. **LOS** "Loss of Signal" from a satellite; occurs when the satellite becomes "invisible" to the antenna as it goes below the horizon. **Lowfer** One who experiments with radio communications at unusually low frequencies (typically 1750 Meters, which is 160-190 kHz and can be used under FCC Part 15). For more information, take a look at <http://www.altair.org/lowfer.htm> (*courtesy of N4YWK*). **LSB** Lower Sideband **Machine** Slang for "repeater", and sometimes for rig. **Matchbox** A device placed between a transmitter and an antenna to tune the circuit to resonance. Normally called an **Antenna Tuner** (*thanks to WD5CTQ*). **Mc** "Megacycle"; equivalent to MHz; regarded as an "old fashioned" way of describing frequency. **Medfer** One who experiments with radio communications at low frequencies such as those on the edges of the AM broadcast band (under FCC Part 15). **MHz** See **Hz** **MPR** "Mass Produced Rig"; a radio which is produced in large quantities; often used to describe radios that are NOT originally purchased in "kit" form. **MUF** "Maximum Useable Frequency"; that frequency above which expected propagation no longer exists. **NB** Noise Blanker **NCS** Net Control Station **NiCd** Or "Ni-Cad"; "Nickel Cadmium". A type of rechargeable battery commonly used with radio equipment. **NiMH** "Nickel Metal Hydride". A type of rechargeable battery commonly used with radio equipment. **N-P Junction** See "P-N Junction". **NPN** See "P-N Junction". **NTS** "National Traffic System". Please see <http://www.weca.org/nts.html> for more information. **OM** "Old Man"; affectionate way to address a fellow ham operator, like saying "Old Buddy!" **OO** "Official Observer"; a volunteer of the ARRL's Official Observer program who monitors the airwaves for FCC rules violations. For more information, please see <http://www.arrl.org>. **Paddles** Short for "Morse Code Key", one that contains small paddles that are tapped in order to produce semi-automatic Morse Code (when connected to a "keyer").

Continued on page 8

Know the Lingo *From page 7*

Q-Signals Originally developed by CW (Morse Code) operators to make certain, frequently used phrases short and concise -- a sort of Morse Code "shorthand". Common signals include "QST" (announcement), "QSL" (confirmation), and "QTH" (location), and "QRZ" ("who is calling me?"). For more Q-signals, please see http://en.wikipedia.org/wiki/Q_code. **QSL Bureau** Also known as the "buro"; an organization that provides a collecting and distributing point for QSL cards. In large scale situation, typically broken into an "incoming" and "outgoing" bureaus. A good example is the biggest QSL Bureau representing the U.S., the ARRL QSL Bureau. For more information, see ARRL's Incoming Bureau at <http://www.arrl.org/qs/qslin.html> and their Outgoing Bureau at <http://www.arrl.org/qs/qsout.html>. **QSL Card** Often referred to as simply a "QSL"; similar in size to a postcard, it is used to "confirm" (or show proof of) having made contact with another station on the air; applies to both "two-way" and "one-way" (SWL) communications; the QSL card is filled out by the issuer/sender, and by convention it contains (1) the station contacted, (2) UTC date and time of contact, (3) frequency/band, (4) signal report (RST), and (5) callsign and address of issuer/sender. QSL cards are commonly used as proof of fulfilling various operating awards such as DXCC, WAS, etc. **QSL Manager** A person, commonly an Amateur Radio operator, who manages the receiving and sending of QSL cards for a particular Amateur Radio station (the "managed" station). Often, a QSL Manager performs this service because the managed station either has difficulty handling the volume of incoming QSL cards, or the station is geographically located such that it is difficult or impossible for that station to accept and/or send QSL cards. It is very common for "rare" DX stations and DXpeditions to have a QSL Manager. **Repeater** A system consisting of at least one transmitter, one receiver, and a controller, which receives a signal on one frequency and retransmits it on another frequency. Repeaters are typically located in high locations so that they have greater coverage area. They greatly increase a user's communication range since they can retransmit his/her signal across all of its coverage area. Repeaters are most commonly used on the 2 meter and 70 centimeter bands. See also "Simplex Repeater". **RF** "Radio Frequency"; typically used as slang for "Radio Frequency Energy". **RF Burn** A painful sensation felt when coming into direct contact with RF energy; can be dangerous when experienced with high levels of RF power. **Rig** Radio **RT** "Receive Incremental Tuning"; a common feature on HF radios that allows the user to slightly change the receive frequency while leaving the transmit frequency the same. **RST** "Readability, Strength, Tone"; a system by which a *received* signal quality is graded, and a signal report is given. "Readability" is judged on a scale from 1 to 5, and "Strength" and "Tone" are judged on a scale from 1 to 9. "Tone" does not apply to a "phone" (voice) signal. A very high quality CW signal is "599" (pronounced "five nine nine"), and such a phone signal is "59" (pronounced "five nine"). **RTTY** "Radio Teletype"; popular digital mode on HF. **Rubber Duck** Also known as "Rubber Duckie", a flexible antenna normally found on hand-held transceivers. Inefficient, but useable, and they don't poke you in the ribs too badly either! (*thanks to WD5CTQ*). **RX** Abbreviation for "receiver" or "receive". **SASE** "Self Addressed, Stamped Envelope"; for more information, please see QRZ's "QSL Corner" at <http://www.qrz.com/qs/>. **SFI** See "Solar Flux Index" **Simplex** Communicating directly from radio to radio (without the use of an intermediary *repeater*). This term is normally used in the context of environments that frequently use repeaters. **Simplex Repeater** A radio that has a digital audio store-and-forward relay system. Produces results similar to that of a conventional repeater. **Slug** A short, cylindrical unit that is inserted into a Bird® Wattmeter (or similar) that allows the unit to read power (watts) for a particular frequency range. A slug always has a finite frequency range and a maximum power rating. By swapping out different slugs, the wattmeter can be used for many different frequencies and power ranges. **Solar Flux Index** A measurement of radio emission from the sun. HF propagation conditions are considered good when this number is high and the A- and K-index numbers are low. **Special Event** A radio operating event, usually on HF, in which a group or organization celebrates an event or holiday by making contacts and offering special QSL cards or certificates to confirm the contact. Ham Radio magazines, such as QST, usually publish a monthly list of Special Events. **SSB** Single Sideband **Straight Key** A device for sending Morse Code, consisting of a single arm making contact with another point to complete a circuit and key a transmitter (*thanks to WD5CTQ*). **Switching Power Supply** A power supply that uses switching transistors (on-off) to increase the efficiency of the power conversion, rather than the simple transformer/rectifier design of traditional power supplies. **SWL** "Shortwave Listener"; one who enjoys listening to shortwave transmissions, without intention of transmitting. **SWR** "Standing Wave Ratio"; an indication of how well matched an antenna is to its transmitter. A "one to one" (1:1) SWR indicates a perfect match. Anything less than 1:1 (i.e., 2:1) indicates that the antenna is not perfectly resonant for the transmit frequency, and that some RF power is being reflected back down the transmission line into the transmitter. In general, any SWR which is 3:1 or better is acceptable. **Talk-Around** Same as "Simplex" (see definition above). **Ticket** Slang for "FCC License" **Transistor** See "P-N Junction". **TX** Abbreviation for "transmitter" or "transmit" **USB** Upper Sideband **UTC** Coordinated Universal Time; a single time reference to be used worldwide (reduces the confusion that can occur when considering multiple time zones). **VEC** "Volunteer Exam Coordinator". Examples include the ARRL (<http://www.arrl.org>) and W5YI (<http://www.w5yi.org>) **VOX** "Voice Operated Relay"; allows the presence of a sound to trigger the **PTT**. **WAC** "Worked All Continents"; an award issued to those who make, and have proof of, contact to at least one ham on each continent. **Wallpaper** Slang for QSL Cards and operating/contest certificates. **WAN** "Worked All Neighbors"; a station that continually gets complaints about signals showing up on the telephone or televisions at neighbor's houses. Not a desired situation. Polite conversation and changes in operation practices are a common solution. Another is providing simple and often inexpensive filters for the offended neighbor. See the TVI solutions page at the ARRL web site for more information on cures (*courtesy of K4GVN*). **WARC** "World Administrative Radio Conference"; most commonly associated with the "WARC Bands", those bands added to the Amateur Radio band plan which include the 30, 17, and 12 meter

Continued on page 9

Ham radio operators

From page 1

The guts of the equipment look like two car radios set on a desktop, near a console holding a computer monitor and a keyboard, in an otherwise empty back room in a chilly warehouse in the BloodSource North State building on Park Marina Drive in Redding. That - plus a few small portable units - is it.

But wait, one of the radios, a so-called packet radio, permits keyboard-to-keyboard communication on the computer. Isn't that called "e-mail"? "Packet radio was e-mail for years before people even had a thought of doing that," Smith points out.

To participate in STARES, you don't have to be a techie, although many of the members have an electronics or military background. Morse code is no longer a requirement. A license, obtainable on completion of a free class (offered periodically by STARES), gets interested individuals started. A class this winter won licenses for 16 area residents; four are expected to become emergency operators. Still, Smith says, the group has only enough members now to staff a single shift in an emergency.

"I don't think we'll be confident till we have three times as many."

To participate fully, members are encouraged to buy their own equipment, because as volunteers, operators traditionally have used private equipment in public emergencies. A VHF unit costs between \$500 and \$700; a HF unit starts at \$1,200 and can run as high as \$10,000. A \$20,000 communications trailer, on order with financial help from Shasta and Tehama counties, is expected to ease members' financial strain and add to the group's serviceability.

STARES - accredited by the American Radio Relay League - partners with public and private health, emergency, fire and humanitarian agencies. In addition to the radio room at BloodSource, the group has a station at the California Department of Forestry and Fire Protection and sends portable units to fires.

Members responded to the Manton fire in 2005 and spent two weeks at the French and Bear fires in 2004, Peña said. STARES has also been called to Plumas and Butte counties.

All its work is not grim. Members keep people in touch during fun events such as bike and horse rides and relay races. And they can reach out, if nothing more, to each other. They are always listening.

Glenn Hassenpflug is a freelance writer.

Scripps Newspaper Group — Online

© 2008 The E.W. Scripps Co.

Know the Lingo *From page 8*

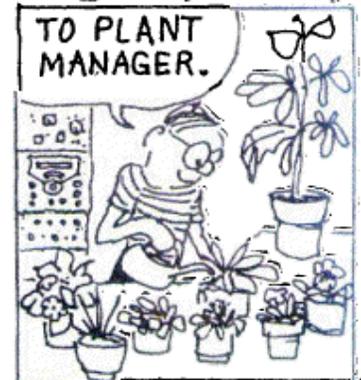
HF bands. **WAS** "Worked All States"; an award issued to those who make, and have proof of, contact to at least one ham in each U.S. state. **WOLF** "Weak-signal Operation on Low Frequency" - for more information, see <http://www.computerpro.com/~lyle/wolf/wolf4dummies.htm> (*courtesy of KØLR*). **Wouff Hong** An instrument of sadistic torture for hams who do not follow generally accepted rules of courtesy on the air. It looks something akin to a Saguaro cactus with one arm missing (*courtesy of AA7VP*) Note: [the truth] The Wouff Hong sprang from the imagination of ARRL cofounder Hiram Percy Maxim, W1AW, as a means to combat poor operating. **WWV** A radio station located in Fort Collins, Colorado, that continuously broadcasts standard time of day and other radio and navigation information. For more information, see <http://www.lerc.nasa.gov/WWW/MAEL/ag/www.htm>. **WWVH** A radio station located in Kauai, Hawaii, that continuously broadcasts standard time of day and other radio and navigation information. For more information, see <http://www.chem.hawaii.edu/uham/wwwvh.html>. **WX** Abbreviation for "weather" **XCVR** "Transceiver" (a unit integrating both a transmitter and a receiver). **XIT** "Transmit Incremental Tuning"; a common feature on HF radios that allows the user to slightly change the transmit frequency while leaving the receive frequency the same. **XYL** Short for "wife" **Yagi** An antenna consisting of two or more elements ("arms" that run perpendicular to a common boom) which are fed parasitically from one or more "driven" elements. The number of elements is proportionate to the gain (more elements means more gain). **YL** "Young Lady"; short for "girlfriend" **Zed** A way of saying the letter "Z"; considered by many to be a more precise way of expressing that letter "Z"; prevents others from confusing "Z" with "E", "P", etc. **Zulu** Often used to refer to **UTC** (see above), as in "Zulu Time".

ELMER



by Rich Regent, K9GDF

THEN I GOT A PROMOTION

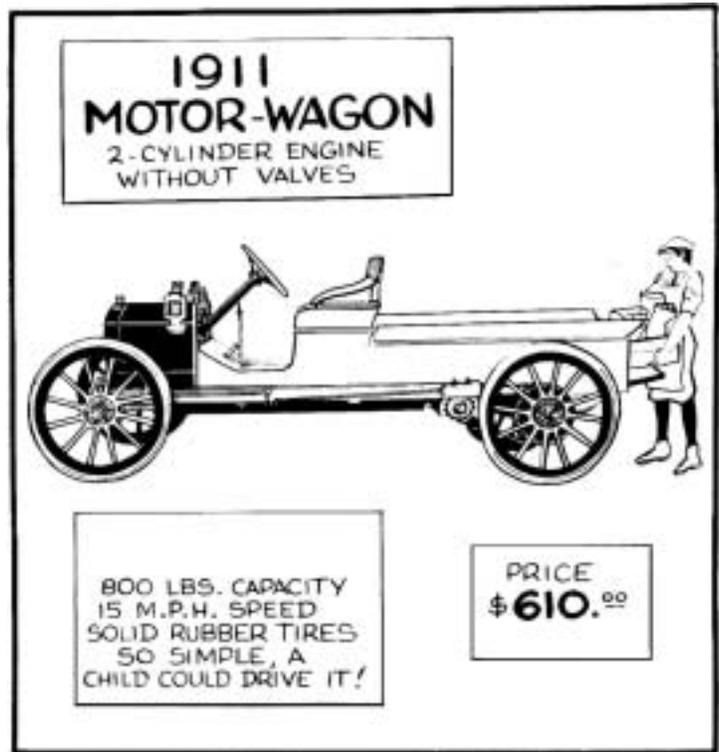




THE ZARC CARRIER

Danny Grandstaff, KB8RIM
2422 Marion Ave.
Zanesville, Oh 43701

Down Memory Lane

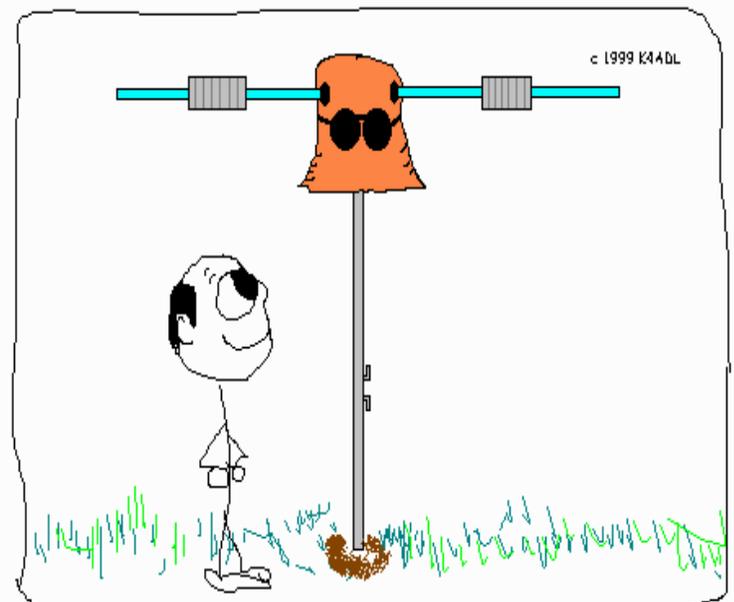


(Included in E Mail version only)

CLUB MEETING:
First Tuesday of each month 7 pm
EOC Building
Adamsville Rd.
Zanesville, Ohio
ZARC Packet Station 144.910

UNDER THE COVERS

- Page 1. Ham Radio Operators Are All Ears When Emergency Calls
- Page 1. One Man's Induction Into The World of ARES
- Page 3. Area nets
- Page 4. Ham Speak—Know The Lingo
- Page 5. Ohio Section News
- Page 5. What Kids Say
- Page 6. Avery's QTH
- Page 6. Let's Ask Elmer



WARREN REALLY DIDN'T UNDERSTAND THE CONCEPT OF A "DISGUISED FLAGPOLE ANTENNA."