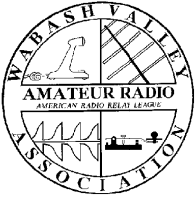


## REGULAR EVENTS

Friday, General Meeting, 7:30 PM, WTHI building.,  
Sept 3 918 Ohio. (1st Friday of September only.)  
Monday, Board Meeting, 6:00 PM, Glas-Col., 7th &  
Sept 6 Hulman (Monday following the Gen. Mtg.)  
Every The Club Station is open, 7:00 - 9:00 PM,  
Thursday Downstairs, Red Cross Bldg., 700 S. 3rd.

## SPECIAL EVENTS

- **Technician entry level class** ----- Sept 7  
See p.3 for details.
- **Deuces Wild Duathlon** ----- Oct 9  
(Columbus Day Weekend) at Lincoln Trail State Park  
(South of Marshall, IL) Put it on your calendar **NOW!**  
More details in the October issue.



# THE BANDSPREAD

SEPTEMBER 2004



OFFICIAL PUBLICATION OF THE WABASH VALLEY AMATEUR RADIO ASSOCIATION, INC.

## NEW SKYWARN REPEATER SYS IN PLACE

A few short months ago, Illiana Skywarn was faced with the loss of the only area high-coverage repeater and our main link with Indianapolis. But with the leadership and foresight of Keith, WA9DRO, and the help of many Skywarn supporters in the Wabash Valley, we now have our own Illiniana Skywarn communications system up and running and also a firm financial foundation upon which to support it.

Congratulations, Keith, and all those who contributed with their individual talents and financial support. -ed.

Thanks to all of you, the 444.350 repeater is now in its new home on the MIX-FM tower, just west of west Terre Haute. It is really doing quite well. However, Kevin, K9HX tells me that we will be noticing further improvements as time goes by.

I cannot imagine better weather than on the day of the Skywarn yard sale. By the time all was said and done, we had received nearly \$800 from the yard sale items, \$500 from the auction of the car and just under \$200 in cash donations, for a total of just under \$1500 from the yard sale. Our goal was, \$2230.00, but we actually received about \$3040.00. But believe you me, it was not extra money. After the repeater was bought and paid for, then came the things that we did not know that we would need to buy and that extra money is coming in most handy.

Please give the 440 repeater a try.

Thank you again from all of us in Skywarn. Come to think of it, that really means all of us.

73 Keith-WA9DRO  
Illiana Skywarn Coordinator.

[See pix of the yard sale on page 3.]



Eric and Kevin at the Club Rpt site



Kevin and Steve at MIX-FM site

## CLUB REPEATER'S MAJOR UPGRADE

The long-awaited upgrade to the WVARA 146.685 repeater was finally accomplished on Saturday, Aug. 21. Here are the 'highlights' of the upgrade.

Basically we took the repeater apart into its component parts and started from scratch to rebuild it. A new controller, power supply, battery, and control receiver were installed. All audio and control wiring was also replaced.

The new controller is a Scom, LLC model 7K. It is equipped with a Vyex 7KDAB digital audio board and a Scom digital audio delay board. The 7KDAB gives the repeater a voice and allows us to upload .WAV files and play them back at any time. The audio delay board serves two functions. First, it prevents the receiver squelch noise from being transmitted. Secondly, it mutes the audio when touch - tones are detected, preventing them from being retransmitted. The overall effect is to make the repeater a little 'easier' to listen to.

The new power supply is an Astron RM-50M-BB. This power supply has the battery revert option in it to automatically charge our battery and switch over to battery operation when the power fails. It is currently running the voice repeater as well as the APRS digipeater.

The control receiver is hooked to a port on a UHF multicoupler system at the repeater site provided courtesy of the Terre Haute Radio Club. This gives repeater control operators a way to get commands to the repeater other than on the repeater input frequency.

-Kevin, K9HX

## September Program

We will meet at 7:30, at WTHI, 918 Ohio, for a tour of their facilities.

## LOCAL NETS

Wednesday Evening	9:00 pm CDT
Clark Co. ARES Net	146.520/S
Thursday Evening	9:00 pm EST
CAARLA Net	146.685/R
Sunday Morning	8:20 am EST
Vigo Co. ARES Net	146.685/R
Sunday Evening	9:00 pm EST
WVARA Net	146.685/R*

\* First Sunday of the month is Simplex night.  
The WVARA Net meets on 146.595



**NOTE:** The August meeting is traditionally the Picnic. Unless it is absolutely necessary, there is no business transacted at the Picnic, therefore, no minutes. - ed.

## Board Meeting Minutes 08/09/04

Club president, Kevin Berlen, K9HX, called the meeting to order at 6:00 P.M. Other Board members present were Vice President, Gary Adams, W9EEU; Trustee, Ray Andrews, K9DUR; Past President, Steve Shorter, NT9T; Treasurer, Don Pine, K9DRP; and Secretary, Debbie Shorter, KC9AOR. Also present was Bandspread editor, Gary Wheeler, K9ERE. **Secretary's Report:** Debbie moved that the minutes be approved as published in *The Bandspread*; Ray seconded the motion. The motion passed. Don presented the **Treasurer's Report** which showed a balance in all accounts of \$4,106.42 after paying insurance and Field Day expenses. Don moved that it be approved as presented. Ray seconded the report as presented; the motion passed. **Old Business:** (1) Vigo County CD Generator. Don had nothing new to report. (2) K9MEL generator: Kevin had nothing to report; (3) Club picnic: the Board voted to provide meat and buns. It was decided to add brats to the usual hamburgers and hot dogs; Debbie was asked to purchase the above items. (4) Repeater upgrade: Kevin reported that he can purchase a kit from Astron for \$190 for a used power supply versus approximately \$350 for new. Warranty and benefits of each were discussed. Comparison costs for the RM50M-BB were checked out via internet. It was discovered that we can purchase a new power supply from R&L for \$290 plus shipping. The Board decided to purchase the new unit as previously approved by the membership. Plans were made to put it in place the 21st of the month. Kevin will also install the new controller at that time. (5) Bison Stampede: Don suggested that we get another dipole between now and then for possibly setting up a "mini field day" 10 A.M. – 10 P.M., the first Saturday in May, possibly in Cory. The Board acknowledged that we need to generate more excitement in the Club for this event to be successful. We must make the decision whether we want to sponsor this event before the next IRCC meeting in October. Steve moved and Ray seconded motion to sponsor the event. The primary bands of interest will be 20 and 40 meter. (6) Tailgate Party 2005: Don has nothing to report at this time. We need to have the date and location finalized before the Ft. Wayne Hamfest so that we can have fliers printed. Ray offered to take fliers and we will also have fliers sent to the Evansville Hamfest. (7) Club Station remodeling project: Ray and Gary have made a diagram based on last months' discussion. Additional assistance will be needed for this project. The date was set for Sunday afternoon, August 29. Ray noted that at least one additional work day will be needed. (8) Amateur of the Year nominations are due by September. Kevin will discuss the submission of this year's Brentlinger Award winner with the chairman of the nominating committee. **New Business:** (1) A mentoring program was discussed; the Board noted that changes reflecting our partici-

pation should be made to the Club's web site. (2) Christmas Party: it was decided to change it to a "carry in" for side dishes with the Club providing the meat, possibly ham and smoked turkey. Date and location were discussed. Kevin will have Dave, N9YNF, follow up on that. (3) Family Learning Day in September: Dave Pifer, N9YNF, is usually our participation in this event; Kevin will discuss this with him. (4) The Santa at the Mall project was discussed. (5) IRCC meeting is Saturday, October 2, from 2-4 at the WHS facility. Election of officers will be held; four elected offices are open, plus two directors positions. September 2 is the deadline for nominations. (6) Don announced that the North American QSO Party will be the 21st of the month. There being no further business, Steve moved that the meeting be adjourned at 7:55. Respectfully submitted, Debbie Shorter, KC9AOR, Secretary

## Dear Dr. Elmer...

What does "kerchunk" mean?

This is more of a "slang" term than a technical term, and usually is used to describe the act of transmitting a short burst, usually on a repeater, with no audio or even station ID. It's not really legal to do this, but it has been around for a long time.

On HF, the practice is to call "CQ", if you want to talk, and wait for a response. On VHF/UHF however, the practice has become simply to announce or "drop" your call. So people have become accustomed to using a kerchunk when they do not want to start a QSO.

Sometimes stations want to find out if their radio is working and set correctly for a particular repeater, or maybe they simply want to know if their radio is working or they want to find out if the repeater is working. Or, maybe someone is traveling down the highway, finds a repeater pair listed in the directory and wants to know if that system is actually working. In the case of bad weather, maybe the operator wants to find out if the "WX" has been turned on. All these situations have been used as an excuse to transmit with no station ID.

However, the FCC Rule ( 97.119 (a) ) states in part "... No station may transmit unidentified communications or signals..."

Whatever the excuse, the kerchunk is still outside the rules.

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Dr. Elmer is pleased to answer your questions in this column. If there is something unclear, or you have a question about ham radio, just send a note to the Bandspread editor.

## The President's Corner

Well, hello once again.

I look forward to our fall session of meetings getting started. The kickoff meeting is a tour of the WTHI/WWVR studios at 918 Ohio Street. There is a great deal to see from the remnants of the old RCA TT-50A that went on the air in 1954 to the latest digital HDTV transmitter.

The meeting will be at the normal time, 7:30 P.M., and I hope to see many of you there.

Recently we completed an upgrade of the Club 2-meter repeater. The highlight of this upgrade was the installation of a new Scam 7K controller and Digital Audio Board that were donated to the club in memory of Natalie Andrews, K9CAT. Look for a story in this edition regarding the upgrade.

Look for an announcement of a different meeting location in next month's issue of *The Bandspread*.

Until then 73,

Kevin, K9HX



Now, if we can just keep it running long enough...



Keith meets the press



Debbie at the cooker



Silent Auction Car

## Technician-Level Class to Begin

The WVARA education committee met on August 24th, at its usual 'watering hole', Maurizio's on Wabash. The subjects were (1) a new syllabus, (2) the Fall Tech class (3) a new location and (4) eating (not necessarily in that order).

Yes, we are going to have a Fall Tech class! It will begin on Tuesday, September 7th, at the World Gospel Church. The primary goals of the first meeting will be registration and a short introduction to Amateur Radio.

As in previous years, Morse code will be taught from 6:30 to 7 P.M. Theory will be taught following that, until 9 P.M. We will NOT run more than 1 minute past 9, so those providing transportation can be sure of the pick-up time.

Tuition again is \$20 which will include the Textbook and various materials.

It is requested that interested individuals contact Gary Wheeler, K9ERE at (812) 877-4371 or k9ere@earthlink.net as soon as possible so that we can more adequately make plans.

TNX,  
Gary, K9ERE, Asst. Education Committee Coordinator

## Repeaters, What Can I Expect?

Whether we like it or not, we are firmly in to the 2004 storm season. Maybe a word or two about repeaters would be in order here.

What is a repeater and what does it do? A repeater is basically comprised of a receiver and a transmitter located hopefully at a tall tower site, with antennas 100 to several hundred feet above the ground. The receiver picks up a signal from an antenna much lower in height and the repeater's transmitter retransmits that signal on another frequency, from an antenna much higher than the antenna of the transmitting station. Basic information right? Well here is some practical application information.

VHF {2 meters}[The 144-148 MHz band] and UHF {70centimeters}[The 440 MHz band]

If you put a 2-meter repeater and a 440 repeater at the same site, with antennas at the same height, using the same amount of power on each, with the same receiver sensitivity, allowing for 2 meter and 440 characteristics in average terrain, all things may not be equal. You may find that one is better than the other, depending on your location.

Two miles down the road, you may find that one repeater seems to work better for you than the other. Generally 2 meters is thought to be a better band than 440. But because of the difference in wavelength and how that difference in wavelength causes your signal to approach an object, or building, tree and even tree leaves, it either passes through that object, or is bounced off that object.

Actually, whether a repeater does well is in part up to the user. In order for a repeater to retransmit your signal well, you must first give the repeater's receiver enough signal to listen to. In other words, if you are in your mobile in Northeastern Vigo County, Parke County, Vermilion county, Clay County, Sullivan County, or eastern Illinois and you are transmitting 5 watts to a Terre Haute repeater, the repeater's receiver will not always hear you well. There are just too many hills, valleys, trees and buildings in our part of the country. A good rule of thumb is when you leave the city of Terre Haute reach down and bump your power up to mid range, if your transceiver is equipped with midrange power, or high power. Unlike cell phones that work with multiple towers, amateur repeaters are generally located on one tower.

You can help the amateur repeater to do its job better, by giving it enough signal to listen to. Did you know that because of the ground plane effect, your 2-meter or 440 antenna will work considerably better on the top of your car than it will work on the trunk or bumper? And a 5/8 wave ground plane antenna will work better than a 1/4 wave ground plane antenna, all other factors being equal. More of the RF is radiated horizontally than with a 1/4.

### Handheld Operation

Let me begin this section by quoting that famous old and I do mean old, philosopher, Jack Derry, K9CUN. "A handheld, with a rubber duck, does not a complete amateur station make." By the way, well-placed members of the Indiana state Skywarn system echo these thoughts. The intended use of a handheld transceiver is to communicate with a repeater if you are just a few miles from that repeater, or to talk with someone on a simplex frequency if you are within a mile or less of them. If you are trying to use a handheld from the above named outlying locations consistently, you will be disappointed and so will those who are trying to listen to you.

Did you know that during an electrical storm, because of the interaction of many factors, your ability to communicate on VHF and UHF is reduced by as much as 25 percent and by numbers greater than these at 50 MHz and below.

You can increase the range of your handheld by mounting an antenna on the top of your car, or on the outside of your home, removing the rubber duck and connecting the outside antenna to your handheld.

We are admonished by the Federal Communications Commission, to use no more power than is needed to maintain communications, however, sometimes just a little more power is needed to get the job done.

73 Keith-WA9DRO  
Illiana Skywarn Coordinator

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## OUR APOLOGIES!

Due to the lateness of this year's Summer issue, we did not make a sufficient enough effort to remind members that in July, there is no general meeting because so many people are off on vacations, etc. In August, the Club Picnic is *in lieu of* a regular general meeting so nothing is scheduled for the first Friday of August either. The picnic is generally not held on the first Friday because of other events, such as the Brickyard 400, which tend to draw our members' attention elsewhere.

Again, our apologies. -ed.

**SKYWARN REPEATER SITE -  
MIX-FM, W. OF W.T.H.**

**CLUB REPEATER SITE -  
DOTY'S, S. OF W.T.H.**



**WABASH VALLEY AMATEUR RADIO ASSOCIATION MEMBERSHIP APPLICATION - 2004**

Please complete this form and include your dues with it. You may return this application in person or mail to:

**WABASH VALLEY AMATEUR RADIO ASSOCIATION, INC.  
P.O. BOX 81  
Terre Haute, IN 47808-0081**

Name: \_\_\_\_\_ Call: \_\_\_\_\_ License Class \_\_\_\_\_  ARRL member?

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone ( ) \_\_\_\_\_ - \_\_\_\_\_ E-mail address \_\_\_\_\_

Date of Birth (Mo/Dy/Yr) \_\_\_\_/\_\_\_\_/\_\_\_\_ Year first licensed \_\_\_\_\_ Year of last renewal \_\_\_\_\_

ARES member?  QCWA?  RACES member?  MARS member?  New member?

Please describe any employment or other special skills that might benefit Amateur Radio.

If you are applying for a family membership, please list below, the licensed family members living at home, that you wish to include.

Name: \_\_\_\_\_ Call: \_\_\_\_\_ License Class \_\_\_\_\_ ARRL member?

Name: \_\_\_\_\_ Call: \_\_\_\_\_ License Class \_\_\_\_\_ ARRL member?

Name: \_\_\_\_\_ Call: \_\_\_\_\_ License Class \_\_\_\_\_ ARRL member?

Add \$5 per family member above to the Single rate below. To include ARRL membership, see QST for amount.

Dues options:  Single (\$20)  Family:  ARRL membership Total pmt: \$ \_\_\_\_\_

Note: 1. Payments made Sept. - Dec. apply to membership for the following year; 2. ARRL also has a family membership program. See QST.

## WVARA PICNIC '04 PICTURES



We regret that, due to space, we had to leave some really good pictures out. -ed.

## VE Testing

**TERRE HAUTE:** 1st Sunday of  
even-numbered months  
1 PM Indiana time  
Red Cross Bldg.  
700 S. 3rd St.  
Terre Haute, Indiana

For further information, contact Steve Shorter, NT9T, Terre Haute, IN., at (812) 232-4788 or nt9t@arrl.net

**MARSHALL:** 2nd Saturday  
of odd-numbered months

8:30 AM Illinois time  
1st Christian Church  
902 N. 6th Street  
Marshall, IL 62441  
- Walk-Ins Welcome -

For further information, contact John Van Sandt, N9YRX (217) 826-8821 or Ray Andrews, K9DUR (812) 535-3222

**SEPT 11** Marshall

**OCT 3** Terre Haute

**THE BANDSPREAD** - Official Publication of The Wabash Valley Amateur Radio Association, Inc.  
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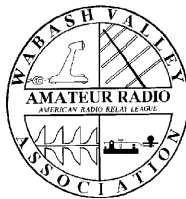
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w9uuu@arrl.net

Or e-mail the Editor at:  
k9ere@earthlink.net

Or e-mail the Discussion Group at:  
wvara@mailman.qth.net

Also, see our web page at...

http://www.w9uuu.org  
Webmaster: David Pifer, N9YNF



**SEPTEMBER 2004**

2004= year;  
NL= Newsletter only;  
COMP= Complimentary  
Membership;  
LIFE=Life Membership

If there is no symbol showing on your mailing label, this is a one-time complimentary copy of The Bandspread. If so, we invite you to fill out the enclosed membership form to join the Wabash Valley Amateur Radio Association.

