



THE TARA NEWS

Affiliate of the American Radio Relay League

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T.A.R.A.'s "Summer-Fall Fund Drive"

A Success Because of the Membership

Man it was so much fun to be up at Saratoga for the Ballston Spa Hamfest. Over the years these folks have been so good to us and I just hope we add a little something to their Hamfest with our raffle.

It was really neat seeing the expression on your face as you learned that you won that radio. I can't wait to hear what it's going to sound like. You were so supportive of TARA and the raffle, which is very much appreciated by our membership! In such a short period of time you have blended in very well. I hope you get as much back from the club for all that you have offered.

Yes, we had a GREAT gang up there today. In fact I'd say it was the best in a number of years, dating way back to when we used to sell ARRL Publications at the Hamfest.

I want to thank everyone who helped, but I want to recognize two people in particular and I hope nobody takes offense that I didn't mention them personally. Craig, W2XAD, did an outstanding job with the ticket sales. Craig knows a lot of hams and he made all of feel welcomed at the TARA table.

Then there was Ken, WA2TQK. Man alive, I thought I was going to pass out when I first saw him in his Uncle Sam attire. Again, it just added to the fun and hype of our raffle. Not to mention, he also attracted a large number of folks towards our raffle table.

All in all, I'd say we're well on our way to getting those generators and trailer. We'll have a full report at the September meeting on September 25, 2007 at 7:00 PM at the Green Island Municipal Center.

In closing, I want to thank ALL of the clubs and their members for the support of our raffle. This year we had Stan Engel, WA2UET, who won the Yaesu FT-8900. Stan is a member of the Rip Van Winkle Club and they too have supported our organization over the years. Stan is a personal friend and we've already heard from him. He couldn't believe he won and was pretty much at loss for words.

Next, there was Ray Loeper, N2RAD, a long time member of Albany County RACES and he won the Bozak VHF/UHF Mobile Antenna donated by Steve Bozak, WB2IQU of Bozak Antenna Company of Clifton Park. www.bozakantenna.com. Gerald Murray, WA2IWW, notified Ray immediately and he too was very much delighted to be a winner.

Again, THANKS to all of you that made this a huge event!

73,

"Mr. Bill" - WJ2U

See Picture on Page 2

*Thanks to all of Our Friends
and Supporters who Assisted Us*



More than a Club



We're a Family



Upcoming Public Service Events

26th Arsenal City Run



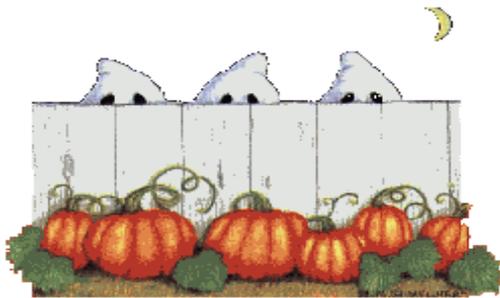
The 26th Arsenal City Run will be held this Sunday on September 23, 2007.

The Run / Walk will begin at 10:00 AM and should finish around 12:30 PM. We will need six to eight volunteers for this event to arrive at 9:00 AM so that we can get into position

The weatherman is predicting sunny weather for the Run, which will be a first if it happens.

If you would like to volunteer for this event, Contact Karen Smith at 273-6594 or at KS2O@n2ty.org .

Pumpkin Patrol



We also have our Annual "Pumpkin Patrol" which will be coming up on Tuesday, October 30th & Wednesday, October 31st. We are looking for many volunteers to help out on either one or both nights and in different Counties this year. If you are interested or need more information, please call me anytime at 273-6594 or email me at KS2O@N2TY.ORG

Thank you,
Karen KS2O



Happy Winner

Lee Hatfield, K2HAT was winner of the Second place prize of a Yaesu FT- 2800 2 Meter Transceiver in the TARA Summer/ Fall Fund Drive, proudly shows off his prize with TARA's own "Uncle Sam" Ken Smith, WA2TQK.

The drawing was held at the Saratoga Co. RACES Ballston Spa Hamfest which was held on Saturday, September 8, 2007.

We thank Saratoga Co. RACES for their Invitation to their wonderful event.

Old Time Loop Antenna *A Series of Articles*

By *John "Steve" VanSickle* WB2HPR

In a previous edition of the TARA NEWS, this author described a restoration project involving an old ERLA broadcast radio from the 1930's. As you may recall, many radios of that era utilized external (often outdoor) antennas, which captured the incoming signal from the distant stations. Sometimes, these antennas took the form of indoor loop antennas (fore runner of the TV rabbit ears?). The advantage of the indoor loop was easy setup, AND a high degree of selectivity and directional control, achieved by simply rotating the loop to maximize incoming signals and to null out interference. (Sounds similar to the modern beam antennas we use in amateur radio). This article is about the construction of such a loop antenna, and the results obtained with the old ERLA.



To begin, I researched some of the basic loop antenna principles in the ARRL antenna book. This is one of my "go-to" resources for antennas. Next, I searched the internet and found two informative sites; the best one is "Dave's Loops." The site shows numerous examples of home-built broadcast radio loop antennas. The intent was to use these resources as idea generators, not to make exact copies of their loops.

** Dave's Loop's <http://www.schmarder.com/radios/loops/index.htm>

Next, out came the scientific calculator. I "plugged in" my design goals and determined what would be needed to achieve the following results:

Tuning range: 500 to 1600 kHz using a 365 pF variable capacitor and the ability to rotate the loop. The loop also needed to be a manageable size and have good mechanical stability.

The tuning range was made possible by calculating the required inductance, allowing for stray capacitance and distributed capacitance within the coil, itself. After trial computations, the best guess value was used to "back calculate" the required coil (loop) turns needed to achieve that inductance, based on coils having a round cross section. Since my loop was to be square in cross section, I needed to guess-timate the difference in inductance between coils having a diameter equal to one side of a square inductor. As it turned out, the difference was a bit less than 5 percent!

Next, out came the note pad and engineer's scale, and the physical design followed. Most of the mechanical components are made from wood (6 different varieties) – based on what I had available in my wood working shop. The base needed excellent strength and high density – it was made from laminations of particle board (OSB) and later veneered with cherry and ash.



The vertical support and cross arms were cut from fir. A scrap of birch dowel formed the cantilever bracket. The spreader looms that actually hold the coil wires were cut from white pine. The tuning box was made from spalted hickory and the front panel utilized cherry. Initially, this was to be a prototype, NOT the final version! Brass hardware and knurled nuts completed the mechanical assembly. The wire used to wind the 18-turn loop and coupling coil was NOS Belden cotton-covered, 22 gauge stranded. The combination of the old wire and the varnish finish contributes to the vintage "look" in keeping with the age of the old ERLA. See the photo's for these details.



Old Time Loop Antenna *continued*

Results

So how does it play? I have not made any analytical measurements of the performance, other than checking the tuning range. With the low-Z coupling coil connected to the ANT and GND terminals, the first station received was a big band station from Toronto. The ability to physically turn the loop enables the user to null out heterodyne interference and actually peak up the desired station. Also, resonance obtained with the tuning capacitor adds another stage of selectivity to the system – again, helping to reject interference and noise. The results are quite gratifying, and the old ERLA never sounded so good! This performance makes me want to build a similar receiving loop antenna for the HF ham bands. Stay tuned.....



73,

Steve - WB2HPR

**RESTORATION
PERSPIRATION
SATISFACTION**

ARRL/TAPR CONFERENCE LISTS SPEAKER SCHEDULE

The ARRL/TAPR Digital Communications Conference, scheduled for September 28-30 in Hartford, Connecticut, has released its slate of speakers. The three-day conference is an international forum for radio amateurs to meet, publish their work and present new ideas and techniques. Presenters and attendees will have the opportunity to exchange ideas and learn about recent hardware and software advances, theories, experimental results and practical applications. Registration for the DCC is still open and will be available at the door. Friday's speakers include Bob Bruniga, WB4APR, speaking about "The APRS Local Voice Repeater Initiative"; Ev Tupin, W2EV, speaking about "Growing APRS' Value within the Emergency First Responder Community"; Paul D. Wiedemeier, PhD, KE5LKY, will talk about "Performance Modeling of TCP and UDP over Packet Radio Networks Using the ns-2 Network Simulator"; ARRL Chief Technology Officer Paul Rinaldo, W4RI, will speak about "Results of HF Digital Protocol Survey"; Mel Whitten, K0PFX, will speak about "DRMDV for HF"; Bob McGwire, N4HY, is talking about "NUE-PSK31: A Digital Modem for PSK31 Field Operation Without Using a PC," and Bill Tracy, KD5TFD, will give an HPSDR update. Saturday's line-up starts off with Steven Bible, N7HPR, and Robert McGwier, N4HY, giving an update on SuitSat-2; McGwier will also speak on AMSAT's Phase IV and "On a Method for Automatic Image Balancing in IQ Mixer Based Software Defined Receivers," as well as sharing presenting duties with Gerald Youngblood, K5SDR, with "The Flex 5000 and SDR Software." Roderick D. Mitchell, KL1Y, will speak about "The Integration of Amateur Radio and 802.11"; Martin Ewing, AA6E, will present "SurgeForge, Hamlib and Rigserve: Free Beer, Free Speech and Rig Control"; Frank Brickle, PhD, AB2KT, will talk on "The FSM Virtual Radio Kernel: Why, What and How (in that order)"; John A. Hansen, W2FS, will speak about "The Nordic nRF2401 Single Chip Data Transceiver," and Hank Javin and Jerry Newman will present "Transmission Lines, Parameters and Application in Communications Systems." Two introductory forums are also scheduled on Saturday: Intro to Eagle CAD, given by Dan Welch, W6DFW, and Intro to HF Digital, given by Steve Ford, WB8IMY. The TAPR annual meeting is scheduled for Saturday afternoon. Sunday's Seminar, a four-hour presentation led by McGwier on the topic of "A Stroll through Software Radio, Information Theory and Some Applications" will cover the basic building blocks of a simple software radio system, as well as a discussion of information theory and its practical use in communication systems. As time permits, McGwier plans to demonstrate several software radio systems ranging from the Softrock40 to the GnuRadio/USRP and the Flex5000. Attendees will receive packages containing tutorials and software. For more information on the ARRL/TAPR Digital Communications Conference, please see the conference Web site <<http://www.tapr.org/dcc>>.

AMATEUR RADIO

Ham radio enthusiasm still resounds in an age of e-mail, cellphones



Steve VanSickle is on the air globally from his home in Troy. Some of the ham radio enthusiast's equipment dates from the 1960's, although he has modern technology in place as well. (Luanne M. Ferris / Times Union)

where VanSickle sat waiting. Then came a voice from the static: "KB2KFV, go ahead."

"Oh, it's Ken," VanSickle said, recognizing the call sign of a friend from Green Island. The two men traded pleasantries for a few minutes, and then the communication was over.

This contact, though short, is an example of what VanSickle and thousands of others across the United States do for a hobby. They are amateur radio operators or, as they call themselves, hams. They are people who, in the age of cellphones, instant messenger, e-mail and chat rooms, still enjoy contacting friends and strangers on the radio.

"This was probably one of my first loves," VanSickle said. The 60-year-old retired electrical technician said he has been a ham radio operator for 44 years.

Going farther

There have been huge technological advances since the time he built his first radio at 11, but Morse code is still his favorite way to operate, VanSickle said.

"You can actually talk a lot farther on Morse code than most any other transmission media," he said. For instance, he recently contacted a Japanese research station in Antarctica.

The reason he is able to talk farther is because hams operate using groups of radio frequencies called bands, which can reach varying distances. Amateurs are allocated 26 different bands that no one else has access to. Hams can also relay signals through local amplifying stations called repeaters and satellites called Orbiting Satellite Carrying Amateur Radio. Some people even bounce signals off the moon, VanSickle said.

Continued on next Page

Loud and Clear continued

VanSickle is a member of the Troy Amateur Radio Association, one of several local amateur radio clubs in the area. Members of the clubs include people who have been operating for decades and also those who have just begun. Lee Hatfield, 48, signed up to get his license three months ago, because of a lifelong fascination with the airwaves. "I always thought wireless communication was a really neat idea," Hatfield said. "You don't have to be plugged into anything to be able to communicate with somebody, whether they're a mile away or literally on the other side of the world."

Amateur radio is exciting, because you could be talking to someone in South America one minute and then to someone in England or Portugal the next, Hatfield said. There's no predicting who you might end up talking to.

Licensed operator

Ham radio dates back to the beginnings of wireless communication in the early 1900s. Today, the practice is regulated; the Federal Communication Commission licenses operators to transmit over designated frequencies. Amateurs are given call signs, such as VanSickle's WB2HPR, which they use to identify themselves during transmissions.

There are 650,000 licensed amateur operators in the United States and 2.5 million in the world, according to Allen Pitts, the media and public relations manager of the Amateur Radio Relay League. The ARRL, based in Newington, Conn., is one of the largest amateur radio organizations in the U.S. with around 150,000 members.

The range of users is diverse, with some more than 100 years old and others as young as 7, Pitt said. Still, the majority of current operators are middle-aged, and most new members are people who have recently retired, he said.

Daniel Bradke, 17, of Niskayuna belongs to the minority of younger members of the hobby. When he was 11 he became interested in amateur radio after his father, also a ham, explained what it was and encouraged him to learn Morse code.

"I love it," Bradke said. "There's always that mystery of, like, 'Who can I get?'"

"It's not like I could just pick up my ham radio and call someone in Taiwan or North Korea," he said. Instead, contacting someone from Taiwan or North Korea happens completely by chance, which is thrilling, Bradke said. "It's just not the same when you use your cellphone or send someone an e-mail."

Disaster help

While Bradke operates for fun, Pitts said there are others in their teens and early 20s joining the hobby out of "civic mindedness." After seeing what happened during Hurricane Katrina and on Sept. 11, they want to be able to help out when future disasters occur, he said.

"Really one of the areas where we shine is in emergency communications," VanSickle said at TARA's Field Day, which was held in late June.

The field day is an annual emergency preparedness exercise practiced by amateur operators throughout the United States and Canada. "The reasons we do this is to simulate emergency communications setups and practice our skills," VanSickle said. "Test our equipment in a field setting where we might find ourselves should a Hurricane Katrina-type thing come along, where we were the only ones communicating for a long time."

Although technically an emergency readiness test, the event is also a picnic and social gathering. Each local club sets up a site in a different location, having barbecues and contests to see which group can contact the most stations across the country.

George Wilner, 66, the president of the Albany Amateur Radio Association, said that one of the fastest growing segments of amateur radio is the "radio sport" called contesting. These worldwide contests vary, but most involve hams operating for 48 hours to contact as many people, on as many different frequencies, as possible, Wilner said. While many are entering the hobby for this competitive aspect of it, those who've been involved for years enjoy it for the friendships, as well as a fascination with the medium, Wilner said.

"I always thought it was magical," he said. "Being able to hear these signals that came down from afar."

Continued on next Page

Loud and Clear *continued*

A declining hobby

Saul Abrams, 59, the treasurer of AARA, said he and many others became interested in radio during the Sputnik era of the 1960s, when the technology was cutting-edge. Today, though, other types of multimedia technology distract from the old-fashioned activity.

"There are loads and loads of people who have dropped out," Abrams said. "It's a declining hobby. With cellphones and computers, it just doesn't have the same aura as it had for us as kids."

Pitts doesn't see the hobby as dying out anytime soon, though. He said there are twice as many people involved today as during what might be considered the heyday of radio: the 1930s, '40s and '50s.

"We have tapered off in the sense we are not gaining," he said. "But we are far from dying off."

VanSickle admits that there have been fewer joining the hobby in recent years, but that it still has its supporters. He said that the ARRL promotes amateur radio at the grade-school level, and there are hams who help Boy Scout troops build crystal radios, so some children are still exposed to it.

It may be an old pastime, but it's still satisfying, even in 2007, VanSickle said. "Forty-four years of doing it and it's always been fun, it's never been boring," he said.

It's never been boring because he continues to discover new and unfamiliar contacts. He recently had a conversation with a man in Beirut, who told him all about his country and its problems. Communications like that, with strangers from faraway places, are what interests him the most, VanSickle said.

It's what draws him back to his radio room day after day, to listen and wait for unknown signals to break through the static.

William Nettleton, a senior at the University at Albany, is a Times Union intern.

His Father William Nettleton Sr. - K2BX is Secretary of the Albany Amateur Radio Association and is a Past President of that fine organization. See <http://www.k2ct.net>

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Fall TNT Trader Net returns September 20th

On Thursday - September 20, 2007, TARA will begin the Fall TNT Trader Net Season starting at 9:00 PM on the 145.170 / 447.075 MHz repeaters.

I ask each of you to come join us for this weekly net. This is your best chance of selling your new/used amateur related equipment locally. So, gather up your goodies and come 9:00 PM Thursday you can list them on the repeater. The more folks we get to join the net the better the chances are to sell your items.

73,

"Mr. Bill" - W4ZU

TARA International Trader Net

Come Join Us Every Thursday Night at 9:00 PM



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(It won't hurt my feelings if you steal this

Job) ☺

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THE TARA NEWS

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Visit us on the Internet

At <http://www.n2ty.org/>

Regular monthly Meeting

Tuesday, September 25, 2007

7:00 p.m.

Green Island Municipal Center

Intersection of

George St. & Hudson Ave.

Green Island, New York

Ample Parking

Parking Lot on Hudson Ave.

Troy's Full Service Repeaters

145.170/R

447.075/R