



DIGITAL DISPATCH

A publication of the
West River Radio Club



July—2010

Volume VII—#VII

VITAL STATISTICS

The West River Radio Club, an ARRL Special Service Club, was founded in 2004 through the efforts of KA1ZQX, Tim Bell, and N1JSG, Richard Pierce.

Our 50 members pride themselves on belonging to an active and productive organization with involvement in many aspects of this great hobby: public service, special events, Field Day, repeaters, emergency communications, contesting and chasing DX.

Current officers are:

N1TOX, John Borichevsky; President
W1CWB, Chas Baker; VP
KD6MPY, Sean Sanderson/WK1L, Bro Frank Hagerty
ED/VE Liaison
K1KU, Darrel Daley; Secretary/Treasurer
KA1ZQX, Tim Bell; Public Relations/ARES

PREZ KORNER

Time to Celebrate

Summer has started and the time is flying by. Here we are in the 7th month of 2010 and ramping up for our summertime festivities. Field Day 2010 was a great success, Girl's on the Run in Brattleboro is growing (1,496 runners/walkers), we continue our VEM Support via the RACES Program, our ARRL ARES program continues with our training for weather and emergency preparedness, Grace Cottage Hospital events are scheduled as usual and we have plans to have a picnic at the Townshend Dam later on during the summer.

As we all celebrate the birth of our country on the 4th of July, make sure you drive safely, take time to relax and enjoy the reason for the celebrations! Remember our troops who are deployed to keep our country as safe as it is. We can all hope that there will be a time when we do not need to deploy our troops any longer, but there will always be countries with border disputes which will get heated and have disputes. To our deployed troops, thank you one and all! And to Tim – KA1ZQX, we have just a few more months until we can see you again! Stay safe!!

Where did the last 2 years go? Two years ago, WRRRC applied for a "Special Services Club" designation to further endorse our efforts of an ARRL Affiliated Club, our EmComm leadership, training classes, VE Sessions, special events maintained by WRRRC to strengthen amateur radio worldwide, and to strengthen our members knowledge of amateur radio overall. Well, as of this writing, we have received confirmation that our SSC designation application has been accepted and approved! Thanks to Allen Tinker, W1AAT and Paul Gayet, AA1SU for their kind words about WRRRC and acknowledging our dedication to the art and science of amateur radio today and in the future. And we even mix in some of the old stuff to make interesting!!

So as we close on this segment of the July edition of the President's Corner, Celebrate the 4th of July in style with friends and family. A simple reminder to remember our family members and friends deployed in whichever branch of service he or she might be in, and pray for their safe return home once their tour of duty is up.

Until next month!

73

...

de N1TOX

John Borichevsky – President
WRRRC



(Ed note: Below find the congratulatory email from our VT Club Coordinator, W1AAT, Allen Tinker re our receiving Special Service Club accreditation for the next two years.)

Congratulations West River Radio Club! Vermont ARRL and everyone else in the Green Mountain State salute you!

Cheers,
Allen—W1AAT

THE WRRC ARES NET

WHEN: Every Monday evening at 19:30L

WHERE: The Marlboro Repeater—147.015 MHz. Positive offset and a 100 Hz PL

WHAT: The net varies between rag chewing on some Mondays and a bit of training on others. Often there is a combination of some training and rag chewing.

The NCS lineup through July follows:

- July 5—
- July 12—K1KU, Darrel
- July 19
- July 26

All are welcome and encouraged to check in.

You'll get in some rag chew time with a little training thrown in now and then.

Want to be a Net Control Station? Contact N1TOX, John at n1tox@comcast.net

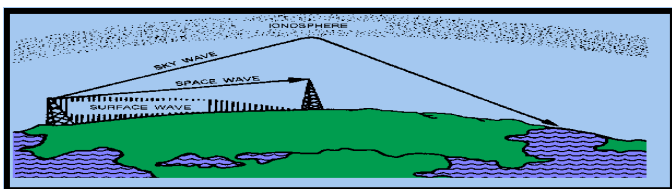
Every heart that has beat strong and cheerfully has left a hopeful impulse behind it in the world, and bettered the tradition of mankind."
—Robert Louis Stevenson, (1850-1894); Essayist, Poet, Novelist

WORK AN ISLAND

If you're not busy on July 24—25 why not fire up the rig and work an island. Why? Well, it's the weekend of the IOTA contest. That stands for *Islands on the Air*.

You can find the rules at <http://www.rsgbcc.org/hf/rules/2010/riota.shtml> Listen on the bands and you're likely to hear my call in there—on CW, of course.

The program was founded in 1964 by Geoff Watts, an avid SWL. The RSGB (Radio Society of Great Britain) took over the program in 1985. To learn more about the IOTA program go to <http://www.rsgbiota.org/>



UPCOMING EVENTS & LOOKING AHEAD

Ongoing: WRRC ARES net...19:30L, 147.015, positive offset and 100 Hz PL tone.

July 4—Celebrate our nations' founding. After all, we are an exceptional country.

June 13—Regularly scheduled meeting of the WRRC in the EMT room of Grace Cottage Hospital at 19:00L. The program will be

July 31—The monthly Board Meeting will be held at the House of Pizza in Brattleboro next to Staples.

Also check out WRRC events on the club calendar at <http://www.westriverradio.org/> and scroll down the page a bit.

RUNNIN' ON EMPTY

Thanks to our unseen friends...

Now how can you have a friend that you haven't seen? In Ham radio it's simple. Aren't we always talking to people via CW, PSK, RTTY, or phone that we don't see? In this case, though, I'm referring to WRRC members who we don't see, or see much of, that is.



Not that we don't give thanks to those faithful ones who show up at nearly each monthly meeting. We're glad for that and appreciate their faithfulness. Here I'm thinking of those who, for one reason or another, find it difficult to join us, other than in spirit, that is.

One such soul in Irv, W1ERE. His QTH in Northford, CT doesn't make it too convenient attending meetings. He does manage, though, to show up at our annual meeting each December and attended our Field Day festivities in 2009.

Another friend from the olden days is Bob, W1LTD. He lives in Perkinsville, VT and that would a bit of a drive for him each month.

Another reason we probably don't see some members is the press of other duties. One of our members spends most of his time in Montpelier trying to keep things in order up there. An almost impossible task, I'm sure. We have another resident close by in Vernon who does his bit keeping VY humming along and is involved in more activities than he can shake a stick at. I've told him to slow down and smell the roses, but like most people I give advice to, he won't listen.

I don't want to forget Tim, KA1ZQX. He definitely has an excuse for not being available for meetings. When he's done with this stint of utilizing his skills in the service of our country I'm sure that he'll be hanging out with us each second Tuesday of the month.

Now the danger in doing a write up like this is that some-

one is bound to be offended because they got left out of things. If so, my apologies, and it was not my intent. As for those of you who are not swamped with duties or job commitments and live fairly close by – hey, we'd like to see you now and then, mostly now. Our meetings are fun, informal, and even educational. Attending any WRRRC gathering is also guaranteed SAFE. To my knowledge no one has ever been bitten by another attendee.

To make a long story even longer – If you just can't join us physically, well, we miss you. In the meantime we appreciate your continued financial support for the many good things that the WRRRC accomplishes.



THANKS FROM KA1ZQX

(Ed: The following was received from Tim, KA1ZQX, via email.)

Thanks so much for your (the club's) generosity. I appreciate that you guys are keeping me in your thoughts. I will really be ready to see you all this winter. I am ready to come home now. I will be there this weekend in spirit to help you guys out. I will miss being out there with you guys. Enjoy and will have to look forward to 2011. Have a great day.

SFC Tim Bell



(Ed note: the below comes to us courtesy of the pen of Brother Frank, WK1L. By the sheer force of my persuasive nature I prevailed upon him to contribute a monthly column on antennas or tutorials having to do with assorted aspects of our great hobby. I know that you'll be pleased that he agreed to this arrangement. Let him know that you liked his contribution by sending an email. The author can be reached at hagertysse@myfairpoint.net)

Cheap and Easy Choke Baluns

Bro. Frank Hagerty, SSE WK1L

When coaxial cable (unbalanced impedance) is used to feed a wire dipole or the driven element in a beam antenna (balanced impedance), a balun is highly recommended. Otherwise, there is a risk of having "common mode" currents flowing on the coax shield back toward the radio (causing "RF bites") or radiating from the coax shield. This most often occurs when the two antenna halves are not perfectly balanced with respect to ground; it may be caused by having wires of different lengths, or it may be a result of proximity to objects or differences in height. The result is less RF radiating from the antenna itself in the pattern you expect.

There are two basic types of baluns: voltage baluns and current (or choke) baluns. Voltage baluns are not the best choice (see "Broadband Baluns"—link be-

low¹). A regular dipole has a characteristic impedance of around 50 ohms (depending on height above ground and other factors), which matches 50 ohm coax. What is needed is a balun that will provide high impedance to RF flowing on the coax shield without changing the characteristic impedance—a *current balun* with an *impedance ratio of 1:1*. There are several ways of doing this: winding wire or coax on toroid cores; using many ferrite beads along the outside of the coax (a W2DU bead balun); running coax through steel wool²; or by coiling the coax itself on an air or non-conductive core. I want to focus on the last method.

Older articles in QST and ARRL Antenna Books often recommend coiling the cable like a rope with windings crossing over each other—"scramble wound"—but this is less effective than winding the coax on a form to keep the windings even. It is important to prevent the end windings from contacting each other; this could cause the distributed capacitance of the balun to increase, and subject the vinyl jacket of the coax to high RF-voltage. With a small coil diameter, it is important to avoid using coax with a foam dielectric, like RG 8X: the center conductor can migrate through the foam when coiled tightly. Cables with a solid dielectric, such as RG 8, RG 213, and RG 58 are OK. My favorite building method is the "Ugly Balun,"³ winding coax around PVC pipe or some other plastic form; and my favorite form for portable use is an inverted Folgers **plastic** coffee can. The can is light weight, but sturdy; it's about 4 ½" in diameter, and I can wind 22' of RG 58 U around it with a coil length of about 5". The coils are secured to the can with electrical tape and cable ties. I run the bottom end of the coax through a hole (sealed with rubber electrical tape) to the inside of the can, where it is connected to an SO-239 mounted in the can lid. I seal the lid to the can with rubber tape covered with PVC tape. This produces a balun that covers 1.8 to 30 MHz.

An eye bolt through the can's bottom serves as a hanger, and this should be sealed to keep water out, too. Condensation inside the can may occur, so I make 2 small holes in the lid to let any water out and keep it away from the SO-239. The choke balun should be close to the feed point of the antenna, and the coils should not be in contact with conductors (that's why I use a wooden adapter on top of a metal mast). Ugly balun? I think it's beautiful!

¹ Broadband Baluns http://www.qsl.net/ta1dx/amator/broadband_baluns.htm

² "Build a Budget 1:1 Choke Balun" (QST November 1992)

³ Build an All Band HF Air Core 1:1 Choke Balun: THE "UGLY BALUN" <http://www.hamuniverse.com/balun.html>



NUMBER SIX

Where does the time go? It seems like only yesterday that the WRRRC held its first ever Field Day event, and at the same location, too, with minor variations, as you'll learn.

On the last full weekend of June the WRRRC held its sixth consecutive Field Day. For 2010 we returned to the QTH of Ed, KB1KSR, and Lois Phoenix. As KB1OQG, Gaila, has a house close by we also took advantage of her hospitality and expanded our operation onto her land. A big thanks to Gaila, Ed, and Lois for allowing a handful of FD aficionados to interrupt what would have probably been a quiet weekend in the country. A real sacrifice unless you enjoy the sound of Morse Code, the chirp of PSK signals, or the incessant and repetitive voice that says, "Thanks for Wisconsin (or whatever state/province), you're 3 Alpha Vermont. QSL?" - or variations of the same.

Field Day devotees don't just live in Windham County and belong to the WRRRC. This ARRL operating event (that's right, it's **NOT** a contest.) began in 1933. Now that's even older than I am - **WOW!** It's not older than Ed, KB1KSR, though - so double **WOW!** Somewhere along the line it has become, and remains, the most popular operating event sponsored by the League.

With even our small 3A operation we work nearly all states and many Canadian Provinces. But if you were with us this year, or have ever been to a FD you know that it's not just about making contacts, but many other things, as well:

- Eating
- Drinking. Yes, a brewski or two may pass our lips, but we're always well behaved
- Emergency preparedness:
 - Running our rigs off of batteries or generators
 - Stringing temporary antennas
 - Experimenting with new antennas
 - Operating in screen houses
 - Honing our listening and sending skills
- Swatting the occasional flying critter or two
- **AND** camaraderie plus having a lot of fun. That's what our hobby is all about, right?

My own personal thanks, as well as thanks from the club go out to the regulars that show up year after year for setting up, operating, helping with food/beverages, keeping the networked PCs functioning. Those thanks are also intended for any first time folks who got involved. This year's team consisted of:

SETUP CREW:

KB1OQH, Paul
KB1SPC, PJ
WK1L, Frank
W1CWB, Chas
K1EGL, Chuck
K1KU, Darrel

The above made relatively short work of hanging four

antennas and erecting four screen houses.

OPERATORS: (Bold means that this person also helped with the Sunday tear down.)

N1TOX, John
W1CWB, Chas
WK1L, Frank
KB1SPC, PJ
KD6MPY, Sean
KB1OQH, Paul
KB1J, Rich
K1KU, Darrel

I don't want to go without mentioning WK1L, Frank's contribution as our resident Chef Boyar-De and food procurer. Other than one burger I observed sliding through the grills and into the flames (were there more?) everything that came off the fire was first class fare. To accompany the grilled delights were platters of savory fare provided the guests. I think that it is called *potluck*.

Were there guests? You betcha! Tina Blais, KB1SPD and daughter Megan tagged along for the fun. Gaila, KB1OQG, and Ed, KB1KSR, had to be there to chaperone the rowdy Field Day crowd. Gaila had a house guest from the Boston and had also invited some neighbors in for the Saturday feast. W2NH, Gordon, made an appearance and brought along one heck of a tasty Shepherd's pie. Lois Phoenix, Ed's wife was also there to make sure that Ed toed the straight and narrow. Suzanne Borichevsky accompanied John, probably for the same reason as Lois. Ned Phoenix, Ed and Lois's son stopped in for some chow on Saturday, no doubt after the aroma of food wafted up to his nearby house. Let's not forget K1TEZ, BJ and his wife Ina. And I'm glad that my first wife, Marion, also put in an appearance.

The phone area at Ed's received several visitors that were given the grand tour by WK1L, Frank and John, N1TOX. Townshend's EMD, David Dezendorf, stopped in at the CW screen house and learned the ins and outs of Ham radio and Field Day.

If your name isn't on any of the above lists, then what can I say? You missed out on a lot of fun, chow, camaraderie and excitement. Not to worry, though, as #7 is only one year away. Here's your invitation to come out and join the fun the last full weekend in June, 2011.



FINANCES

The data below is valid as of the publication of this issue of the Digital Dispatch

47 Full members—4 Associate members
57.5% of the full members belong to the ARRL
Checking = \$1180.97/Cash on hand = \$85.06

THE CODE

Don't get excited. I'm not going to preach on what a wonderful mode it is. I will admit to being tempted, though.

I will mention in passing that during Field Day the CW station grabbed the majority of contacts and "got out" the furthest. There, Thus endeth the lesson.

In this case the code that I'm referring to is the Amateur Code. Whenever I end up with a blank page and am looking for fillers I often turn to this venerable document, mainly because it's holds a lot of value for us in 2010. As Hams we need to ponder the truth in it and always attempt to convert it's words into action.

Some history and analysis are in order. For what follows I'm indebted to the thoughts of K6VHP, Lloyd "Shally" Shallenberger as expressed at <http://www.radiosupplyco.com/rr/amateurscode.htm>

Some thoughts about today's Amateur Radio Operators compared to yesteryear, from Shally, K6VHP.

Pride, Integrity, Tradition – No Longer a Factor

The text of "The Amateur's Code – 2000" came about as a result of statements made and the general attitudes conveyed by amateur radio operators using the HF phone bands witnessed by the author during the past couple of years. It is, furthermore, dedicated to Dick Bash and others who subsequently supported the reduction of the standards for admission to Amateur Radio and those who believe in citizen's rights without the burden of personal responsibility to properly exercise those rights.

Mr. Paul M. Segal, W9EEA, penned the original "Amateur's Code" in 1926. What inspired him to put on paper the words he used, in the spirit in which he used them? The answer, in a word, is "Pride." He was proud of amateur radio and he was proud to be a part of it. He drew his inspiration from his fellow amateurs, the majority of whom were excited by the technology that enabled electronic communication between individuals of common interest.

The science of radio was the root motivator that gave amateur radio the level of integrity it had earned in the eyes of our armed forces and industry. Public service was the focal point for us in the eyes of the general public. The amateur radio operator was a person so dedicated to the science of radio; his relentless quest for knowledge and the practical application of his learnings were the sole purpose for enjoining the activity.

So, seventy-four years have elapsed since Mr. Segal drafted the original "Amateur's Code." Seventy-four years during which many technological advances have evolved that he would have considered only fantasy in 1926 - but how much progress has the amateur operator himself realized in that period of time? How many of us still regard the science of radio the prime motivation for being involved in amateur radio? How many of us build equipment, experiment with various technologies or develop new and exciting ways of pushing the envelope of achievement? How many of us are compelled to learn how a transmitter and a receiver function? Why do manufacturers try to tell us their multi-band quarter wave HF trap vertical is a perfect match to 50 ohm coax?? Why are new rigs always accompanied by a microphone and not a telegraph key?



THE AMATEUR'S CODE

By Paul M. Segal W9EEA (1928)

The Radio Amateur is:

- CONSIDERATE** never knowingly operating in such a way as to lessen the pleasure of others.
- LOYAL** offering loyalty, encouragement and support to other amateurs, local clubs, and the American Radio Relay League, through which Amateur Radio in the United States is represented nationally and internationally.
- PROGRESSIVE** with knowledge abreast of science, a well built and efficient station and operation beyond reproach.
- FRIENDLY** with slow and patient operation when requested, friendly advice and counsel to the beginner, kindly assistance, cooperation and consideration for the interests of others. These are the hallmarks of the amateur spirit.
- BALANCED** Radio is an avocation, never interfering with duties owed to family, job, school or community.
- PATRIOTIC** with station and skill always ready for service to country and community.

NEWS FLASH

A picnic to be held at the Townshend Dam is currently planned. It would be on either August 1 or 15. Stay tuned for further details.

CUL es 73 de K1KU SK

