DIGITAL DISPATCH

A publication of the West River Radio Club

August—2011 **Volume VIII—#VIII**

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 48 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
KB1J, Rich Austin; VP
KD6MPY, Sean Sanderson/WK1L, Bro Frank Hagerty ED/VE Liaison
K1KU, Darrel Daley; Secretary/Treasurer
KA1ZQX, Tim Bell; Public Relations/ARES

PREZ KORNER

Contesting and Amateur Radio

Radio contesting was started in the early 1920's when people were trying to be the first to make a communication across the Atlantic Ocean. During this time, it was unheard of making such a long distance communication and the technology was not known at that time. Today, it is easy to tune up a transceiver and make that connection to Europe or beyond. As this contest became an annual event as more people became interested, it grew from just a few contests per year to having multiple events almost every weekend around the year as we know contesting today.

Let me make one thing clear right off the bat, contesting is not for everyone, but many of us love it. Let me expand on that statement. If you are participating in a contest, you make real quick contacts. During your QSO, you will exchange you call sign, name, signal report and location (state or district), wait for the reply back to finish the QSO and move onto the next caller. For the non-contester, you prefer to have a casual conversation with another radio operator, local or around the world, chat about the weather, family, upcoming hobby events, or whatever. It all depends on if you like the fast pace or want to take your time and chat. Either way these can be done by CW, RTTY, PSK31, phone, SSTV or whatever mode you enjoy using. It's totally up to you!

Contests are usually organized by a club, or group of individual hams who enjoy contesting. Our local venture was the Vermont QSO Party we hosted in February over the past 2 years. We took over hosting the party to keep it running. We wrote the contest rules, set the date of operation, created a web page, setup advertising, received the logs, sent out certificates and QSL cards. I know there were many other things we had to do to make this event run, but you get the idea. The most rewarding thing about contesting is reviewing the number of contacts in the logs.

An example of a group of individual hams putting together a contest was the 13 Colonies Contest during the 4th of July weekend. This contest was to see if you could reach each of the Original 13 US Colonies and make a contact with one of up to 3 designated hams from that area. Please see the details of this contest in another article in this issue of the *WRRC Digital Dispatch.*

Contest are not just in the United States, but ran worldwide. As noted above, there is a contest for all modes of operation so you won't be left out. Many contests offer multiple mode operations which mean that you can use any combination of modes they advertise to make the contact. It is up to you to select and enjoy a particular mode of operation. Many contests are just for phone operation. But there are others that are dedicated to the operation of RTTY, SSTV, CW, PSK, or whatever you enjoy using.

What do you do after the contest is over, review your logs. Make sure you have all of your contact in the logs and submit it to the organization per their rules. Why you might ask? Some contests have awards for specific categories. While others will send you a certificate of participation or a QSL card in exchange to celebrate the QSO.

So give contesting a chance. It is fun and you will learn more about your rig than I care to think about. By shaping your sound to get through the pile up by getting slightly off the center frequency or changing microphones, moving your antenna to make it work better, notching the frequency to hear them better, working a contest where the hunted is "Listening 5Khz Up" and running 2 VFO's. It is a good process to experiment to see what works best for you. I know I have learned what the Notch Filter has done for me during contest and hearing the station calling CQ.

On another quick note, the new VEM headquarters renovation is almost done. This will mean that N1VEM will be back on the air soon. As I know right

now, the move in date is early August. The radio room is close behind that date as we will still need to get into the new (and larger) radio room and hook up the radios, program them, and test them for operation. So it is our hopes that N1VEM will be 100% functional by the end of August. Now, this is not to say the N1VEM is off the air today. N1VEM has been spread across the state to handle any All Hazards event that might come up. With locations in Brattleboro, Guilford, Stowe, S. Barre, Williston, Camp Johnson and Rutland, we were still there to assist as any event as needed.

And also for the RACES members, make sure you mark your calendars for the *2011 VEM RACES Operations and Training Conference* which will be held Saturday, October 1st, 2011. The location will be announced soon.

Until next month!
73
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de N1TOX
John Borichevsky – President WRRC

FINANCES

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

44 Full members—4 Associate members
60% of the full members belong to the ARRL

Checking = $1,712.29/Cash on hand = $66.57

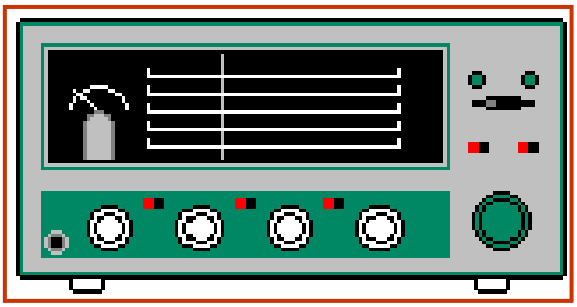
HAPPY BIRTHDAY

Happy birthday wishes for the month of August go out to:

WB1CZA, Wil—01
KB1NWT, John—18
W2NH, Gordon—31

QUOTE OF THE MONTH

Journalism largely consists of saying 'Lord Jones is Dead' to people who never knew that Lord Jones was alive. - G. K. Chesterton



RUNNIN' ON EMPTY

Musings of a Septuagenarian

From the American Heritage Dictionary I learned that "septuagenarian" is a noun that refers to a *person who is 70 years old or between the ages of 70 and 80.* Because on June 24th of 2011 I turned 75 that would be me. I'm even halfway to becoming an octogenarian. As my souvenir t-shirt from Hawaii says, "I'm older than dirt." Now I realize that some of you are older than me and even octogenarians. Good for you and keep up the good work. In fact, send me your musings (You do muse, don't you?) and I'll publish them.

In one sense, though, I think of myself as a two year old. On July 2, 2009 Doctor Anthony DiSipio and his crack team of plumbers up at Dartmouth Hitchcock Medical Center successfully split my sternum apart, ventured inside, and opened up four arteries in my pump. They must have gotten all the parts re-connected properly because I'm still viewing the sod from the proper side.

Some of you older folks out there might be saying something to the effect of *BIG DEAL* – I'm older than that. That's simply great and I applaud you on your antiquity. I hereby encourage you, also, to ruminate on that accomplishment. In fact, I'd even guarantee you that your deliberations will be published in this rag if you send them along to me. But hurry up. I'm not getting any younger. By the way, neither are you.

Herewith, then, follows some of my cogitations on growing older:
It's true! As the magnet sign on our refrigerator says, "If I'd known that I was going to live this long I'd have taken better care of myself." For those of you reading this, well, hurry up.

Being addicted to record keeping I know that, up until the end of this June, I've walked 921.77 miles in 343.18 hours and I did it all at an average speed of 2.83 MPH. Wasn't the GPS a wonderful invention? Not to mention sliced bread, beer, power steering, saran wrap, Morse code, the printing press, mute buttons, solid state radios, and spreadsheets.

I knew it before my 75th birthday, but I've had the truth reinforced many times over the years that *a good woman is hard to find.* It helps to have a wife who took seriously that part of the marriage vow that said, "In sickness and in health." Do people still say those lines anymore? They should. In fact, more people should just plain get married instead of cohabitating.

Don't worry about your age! What can you do to change it? It I like to think of my age as a blessing conferred upon me by my parent's timing. And they didn't even bother to check with me. If you're fat you can lose some weight. Got a bad habit? Dig up some will power and break it. Is there something

you don't know? Get hopping and learn about it. You don't even have to go to school or a library. Thanks to Mr. Gore you have an internet that is loaded with knowledge – maybe not wisdom, but knowledge.

Stop complaining that you don't have enough money. It's been proven over and over again that, once you can provide for life's necessities – food, clothing, shelter, acquiring more wealth has no correlation with happiness or contentment. If you don't believe me just ask Britney Spears or Charlie Sheen.

I find myself fretting less and less about what people think. Trying to change them is not in my job description. Don't we live in a free country? (I happen to believe that it could be a bit more free) If someone wants to go through their entire lives with mistaken ideas they're free to do so.

As Oscar Wilde so wisely said, "Be your self. Every one else is taken." Get used to it and revel in the fact that you're unique, just like everyone else.

Volunteer to do something for some person or a cause that you believe in – I'm sure that you want the world to be a better place after you leave it.

Get a hobby. May I suggest Ham Radio? Its positive attributes are numerous.
* In order to pass your license exams you need to learn all kinds of technical stuff
* It allows you to communicate around the world
* You develop the fine art of lying when you tell your wife how much that gear cost.
* It gives you the opportunity to perform needed services to the public
* The more stuff you buy the more you support the economy
* You meet some truly fine folks, like the ones who are reading this right now

A NEAT THINGAMAJIG

As the proud owner of a Buddipole antenna I subscribe to their reflector. Did you know that three of our members also possess this very fine portable antenna system? I knew that you didn't, so here's who they are:

N1TOX, John
WK1L, Frank
K1KU, Darrel

If your name belongs on this list give me a shout. Come to think of it, a demonstration of the versatility of the Buddiple system would make an great summer program for one of our meetings. You can learn all about 'em at www.buddipole.com

Back to the story line – A recent item on the reflector told of a "battery estimator" spreadsheet. Since I love free stuff I went to the site (http://w1pns.wordpress.com/2011/06/06/battery-capacity-estimator-revisited/) and downloaded it. Guess what? It works.

A test of the software would have been useful at this last Field Day event. To my knowledge we've never run out of juice on any of our FD batteries. I'm not sure what the other guys use, but I get my marine/deep cycles off of the Wally World battery shelf

THOUGHTS ON A MOTTO CHANGE

(Ed: Gordon, W2NH, sent me the following, which he found in the ARRL *ARES Letter*. I hereby enclose it as food for thought.)

As someone who has been both a provider and a consumer of Amateur Radio resources in disasters, I've never been fond of the catch phrase "when all else fails." It may alienate the public safety telecom professionals who should be our natural allies. Sure, some disaster scenarios are characterized by extensive telecommunications infrastructure damage. But modern public safety infrastructure is very robust in many jurisdictions. When failures occur, it has been my experience that they affect Amateur Radio *infrastructure* as well as commercial and public safety infrastructure -- our repeaters tend to be located on the same towers and rooftops as our public safety counterparts! I've seen many instances in which Amateur Radio resources (including my own) failed miserably to perform when needed -- and a few in which well-meaning amateurs who had intended to be a part of the solution became part of the problem instead. So, why the focus on failure?

A more sophisticated view of the matter is that at the same time that the community experiences infrastructure damage, the need for communications channels grows exponentially, both within and among organizations responding to the disaster. Amateur Radio can provide a surge capability to help disaster response professionals meet the exceptional communications demands of disasters, especially if Amateur Radio is included in the planning and training for such events. I'd like to see ARRL marketing us as a competent force multiplier rather than a last-ditch fallback. Amateur Radio has a number of characteristics that are well-suited to this role as a provider of surge capacity. First, our assets are embedded in the served community, decentralized, and geographically dispersed. In many cases, we don't need to respond. We're already there!

Second, most of our communications assets employ relatively simple technology that is less capable, but also inherently less dependent on infrastructure and more survivable than complex interconnected networks that public safety agencies commonly employ nowadays. So while the public safety pros scramble to mobilize and reconfigure their surviving communications assets, we are doing the same with ours. And there are more of us than there are of them.

Our technology is heavily labor-dependent, but since we volunteer our services, the cost to served agencies is low. (Low, but not zero: Served agencies do

typically need to invest in recruitment, training, and credentialing of volunteers, as well as pre-positioning basic Amateur Radio equipment in key locations-- especially antennas and feed-lines.) (Something we as RACES have done)

By default, our channels tend to be low-bandwidth, but our supply of such channels is almost limitless, and just one noisy channel serving a key location at a critical time can make an enormous difference in outcomes. With planning and the support of served agencies, there is no limit to the creativity and sophistication of the systems we can devise to augment their capabilities.

Last but not least, the Amateur Radio community includes many individuals with technical skills who can rapidly reconfigure basic communications equipment to improvise solutions to emergent needs. The public safety telecom pros also possess these technical skills, of course, but to the extent that we can provide interim solutions meeting the surge in demand, we free them to focus on restoration of their critical infrastructure.

In short, we should be offering to partner with our professional counterparts, instead of telling their bosses and the public that we'll be there to pick up the pieces when they fail. -- Al Taylor, KN3U, Rockville, Maryland

UPCOMING EVENTS & LOOKING AHEAD

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

August 9: Monthly meeting of the WRRC in the EMT room at Grace Cottage Hospital. The meeting begins at 19:00L

August 30: Monthly luncheon meeting at the Panasian restaurant in Brattleboro. Things start up at 11:30

August 30: Manufacturer's Day at HRO in Salem, NH—10 AM to 5:30 PM

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

GEE, WE GOTTA BRAG TIME

The 13 American Colonies special event is over until 2012. Were you there? Five members of the WRRC were:
WK1L Frank
N1TOX, John
W1IRA, Ira
W1ZS, Burt
K1KU, Darrel

Not only were we there, but we ALL (did you read that correctly?) **ALL** of us did a clean sweep by working all 13 colonies.

From a numbers standpoint that means that 11.4% of our licensed members took part and beat the odds to work all 13 colonies. Maybe next year we can get a few more bodies involved.

Tree-Mounted Ground Plane Vertical Antennas

Bro. Frank Hagerty, S.S.E. WK1L

At Field Day 2009, which we celebrated at the QTH of Paul Blais KB1OQH in Halifax, Darrel Daley K1KU had a 40 meter vertical wire antenna that was suspended from the branch of a tree. The antenna had a quarter-wavelength vertical section and two quarter-wavelength radials that were suspended more or less horizontally about 10 feet above the ground. Because we had several antennas in close proximity, interference with other stations was a problem; but the vertical antenna was quite effective. This month, I'd like to look at this type of antenna.

Typically, 1/4 wave verticals are built from tubing, need guy wires, and need an extensive array of ground radials to be effective. The tree-mounted wire vertical is simple to build, inexpensive, gives a low angle of radiation, and lends itself to portable operations; but it could very well serve as a permanent antenna for the home shack.

Construction: If you recall, in the article on NVIS antennas, I used the formula for a half –wavelength dipole of: Length (in ft.) = 468/frequency (in MHz). Well **the formula for a 1/4 wavelength wire** is exactly half of that: **Length (in ft.) = 234/frequency (in MHz).** So all you have to do to build this antenna is cut 3 pieces of wire that are 1/4 wavelength long (plus a few inches extra for attaching the ends of the wires to insulators). **Figure 1** shows the layout and lengths for a 30 meter version of this antenna (for 10.12 MHz). The shield of the coax feed is connected to the two radials, and the center conductor is connected to the vertical wire. Then, with a rope attached to the end insulator, you suspend the vertical element from an appropriate tree limb. The tree limb needs to be tall enough so that the radials will be high enough for safety of people walking underneath. The vertical wire should be a few feet away from the trunk of the tree, if possible, to avoid signal loss. The next step is to attach ropes from the end insulators on the radials to appropriate supports. You can have the radials horizontal or angling down slightly. Run the coax to the shack and you're all set.

The bands for which you can build this antenna are only limited by the height of your trees. The following table gives leg lengths for other bands:

FREQUENCY (MHz)	LEG LENGTHS (FT / IN)
3.50	66 FT. 10 IN.
3.75	62 FT. 5 IN.
4.00	58 FT. 6 IN.
7.00	33 FT. 5 IN.
7.20	32 FT. 6 IN.
14.00	16 FT. 9 IN.
14.25	16.FT. 5 IN.
18.11	12 FT. 11 IN.
21.00	11 FT. 2 IN.
21.30	11 FT.
24.93	9 FT. 5 IN.
28.00	8 FT. 4 IN.
28.40	8 FT. 3 IN.

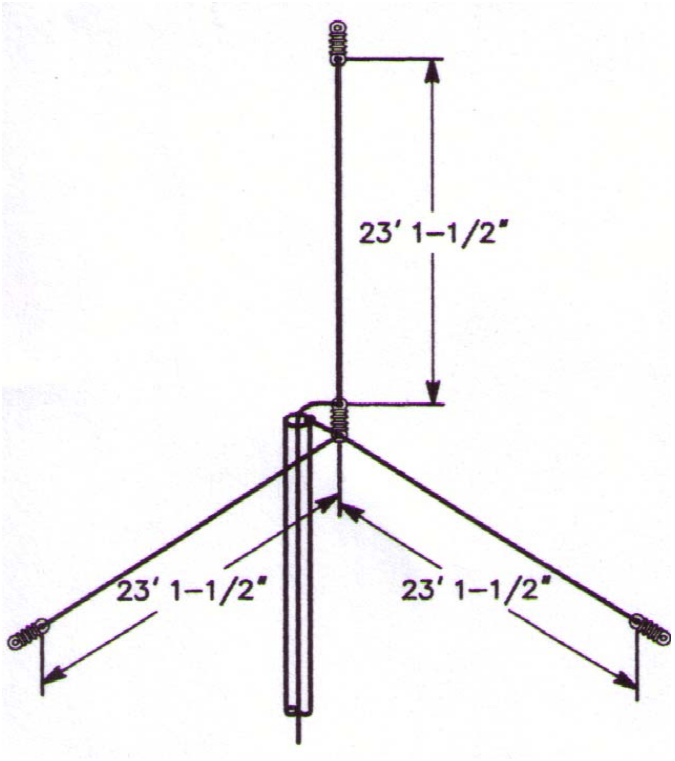
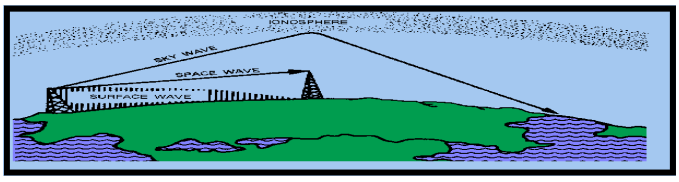


FIG #1



AND SOME SILLINESS TO CLOSE OFF THIS ISSUE

Two antennas met on a roof, fell in love and got married. The ceremony wasn't much, but the reception was excellent.

Since they were a perfect match, soon they generated harmonics. Wrapped the harmonics in dipoles.

But later the harmonics turned out to be parasitic elements.

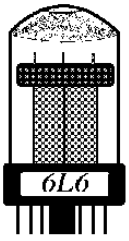
The true story-- she was a tribander and he felt trapped, so they went on separate beam headings.

Old radio nuts never die, they just fade into the noise.

Why did the DX'er cross the road?
To get to the next grid square!

There's nothing to fear but fear itself, except maybe a high SWR reading...

There's nothing to fear but fear itself, well that and poor propagation and a high K index.



CUL es 73 de K1KU SK