



DIGITAL DISPATCH

A publication of the
West River Radio Club



November—2010

Volume VII—#XI

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 52 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

Today vs. Old School

Happy November folks! We are just that much closer to the end of 2010 and turning over another page of the West River Radio Club. While looking back at our past year, we (partnering with CERT and RACES) continued with the Girl's on the Run, Entergy VY Drills, Wilmington Fireworks, a couple of parades, Grace Cottage Hospital events and much more. I personally would like to send out a huge **"THANK YOU"** to each and every one of you who deployed and assisted at these events. Without you, we would not be as large of an impact to our local towns and organizations as we are today. This dedication and focus on the task at hand is shining all over the place and is noticed by many as our group continues to promote amateur radio and individual safety at the events we take care of.

In October, Chas Baker - W1CWB, Bro. Frank Hagerty - WK1L, and I went to Waterbury to participate in the VEM-CATEX. This was a simulated event which depicted Hurricane Zachary traveling through the area, mostly east of the Connecticut River, which caused a lot of damage to Vermont towns via floods, broken dams, downed trees, houses destroyed, and much more. This simulated event just devastated the State of Vermont and emergency measures were put into place where VEM RACES Members, and many other organizations, were put through their paces providing the top level emergency communications as we all have practiced for, and very similar to, the Entergy VY Drills we do every year. Simulated towns

were setup at Camp Ethan Allen in Underhill, Camp Johnson, VEM RACES Radio Room and many more locations around the northern part of the state. This was a great exercise for the State of Vermont to exercise and test out the strategies which are in place and see how they would work out. But in true VEM fashion, this simulated emergency turned into a real life emergency as the State of Vermont actually became a target for a real tropical depression, Nicole, as she came to visit us! While the devastation was not as great as in the simulated CATEX, we were ready!

So today, as we practice drills and deployments, you never know what will be next. With the newest radar and computer technologies used at the National Weather Service today, we can predict the future with reasonable accuracy and be prepared. This allows us the plan the deployments 3 to 5 days in advance should the need come up.

Over the past years of being an amateur radio operator, I have seen many improvements in the technology. I have run many solid state devices, remote controlled units over the web, and even amazed myself on where the art of amateur radio has gone since I obtained my license in 1994. But I have recently been given the great opportunity to learn about the older rigs from Bro. Frank Hagerty - WK1L. Yes, I'm talking Tubes!! Again, working with many of today's units, one does not have to worry about frequency drifts as the finals warm up, the plates in the tube glowing too much, or whatever. All you have to do today's units is set it and forget it. But I'm turning the pages of time (I wish I could do that with life) and going *"Old School"* and using a tube rig. Why, because I want to know what it was like to use tube equipment and understand how it works. This will also assist me in the learning process for my Extra License which I hope to get real soon. So with the use of an FT-901DM system, I will be able to explore the old times and learn more as I use it.

Another unique opportunity I will be exploring is the use of (what I believe was) the first PC Controlled radio. It is the Kachina 505DSP Computer Controlled Transceiver. This radio was first introduced at the Dayton Ham show in 1997 and produced through 2001 when it was deemed too expensive to build and compete with others here in the USA. It is software based, and is totally controlled by your PC. While we do drive our radios today with PC via many adapters and accessories, this unit is self-

contained and has many of the options built in for use. As I have just started to use these fine pieces of equipment, I will be writing about my experiences in the months to come.

I invite you also to take a step back in time and explore the way things "use to be". Not only for your enjoyment but to further your knowledge of amateur radio operations of yesteryear and today. Who knows, there just might be a piece of equipment that will make you stop and think about why my frequency moved, how did they think of that item, or maybe allow you to see the progression of the art as we know it today.

Until next month!
73

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de N1TOX

John Borichevsky – President WRRC



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 November follows:

- Nov 8 Chas—W1CWB
- Nov 15 Rich—KB1J
- Nov 22 Ed—KB1KSR
- Nov 29 John—N1TOX

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

QUOTE OF THE MONTH

"What lies behind us and lies before us are small matters compared to what lies within us."

Ralph Waldo Emerson

RUNNIN' ON EMPTY

Alaska, continued

If I remember correctly at the end of the last thrilling episode of Runnin' On Empty I left you with the promised to fill you in a bit on Ham Radio in the Great Land.

Now the statement above is, *If I remember correctly*. As Chuck Yeager once said in an interview, "I tell things the way I remember them. That's not necessarily the way they happened."

Getting back to the story—Ham Radio in Alaska is alive and well. With a few exceptions it's pretty much like Ham Radio in the *Lower 48*.

One of those exceptions is the vastness of the state and its true wilderness quality. Many times I have flown in our ex neighbor and friend's PA-12 and now Cessna 180 into his "bush" camp on the other side of the Alaska Range. To be more specific: 61° - 58 min north latitude and 154° - 27 min west longitude. Look it up and you should be pretty close to the North Fork of the Big River. Use Google maps and you even might see Bob sitting on his rustic front porch feeding the camp robbers, AKA Gray Jays.

Like so much of Alaska there is no cell coverage where Bob's camp is located. Even VHF/UHF radio communications is out of the question. Prior to landing Bob always had to close his flight plan in the air, as once he has landed on the gravel strip that he optimistically calls a runway, radio contact is non existent.

This is not good protocol because when you "close" a flight plan the FAA thinks that you're safely landed. Bob now has a satellite phone and closes his flight plan in the proper way after a safe landing.

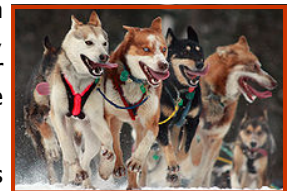
This remote aspect of the Great Land allows Ham Radio to assume special significance. There are many "bush" nets during which a doctor and/or nurse sits by with a Ham and takes check ins from remote villages to diagnose medical problems over the air, or, if needed, call for evacuation to the nearest medical facility.

I've taken a rig and antenna out to Bob's camp many times and checked in with:

- The Alaska Bush Net on 7.091—20:00L/05:00Z
- Sniper's Net on 3.920 on 3.920—22:00L/03:00Z
- Motley Group on 3.933—21:00L/06:00Z

The trees this far north are not all that tall, but I've strung my favorite Field Day Windom at 25' - 30' on each end and once used my 40 meter and up home brew vertical to good advantage.

Hams also do a great service for the *Last Great Race*. That would be the Iditarod sled dog race. Began in 1973 to celebrate the relay of diphtheria serum to Nome, Alaska in 1926, it's 1,161 miles of rough going for the dogs and the mushers all the way from Willow to Nome.



Hams are stationed at check points along the route and relay info via HF back to headquarters in Anchorage. Our veterinarian back when we had a pooch had volunteered for trail duty many times. He was once stationed in Nome and talking to the Ham at that checkpoint. As his Dad was a Ham he mentioned my call to the operator and soon they were reading about me on QRZ.COM.

OK, enough is enough. Maybe the above might whet your appetite to do some operating in the land of the midnight sun. Let me know if you ever head that way and I'll put you in touch with some pilots who, for a price, of course,

will fly you out to where there are no roads, no 7-11 stores, no nothing but quiet, fantastic scenery and a few moose and grizzlies to keep you company and wolf howls to keep you awake at night.



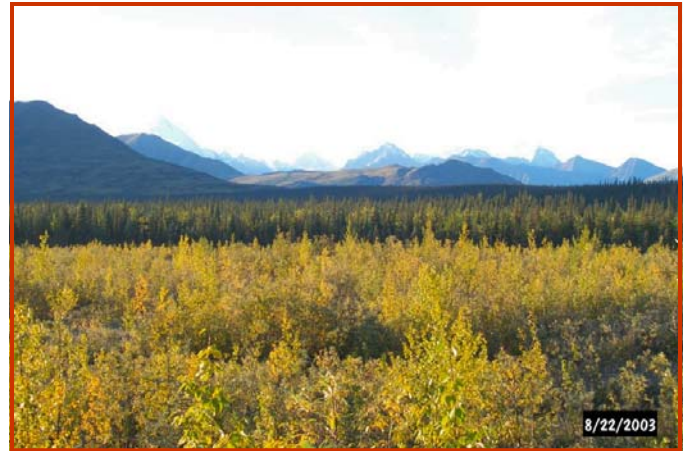
Bob closes his flight plan on a satellite radio



Flying over the Alaska Range in July



Yours truly enjoying the good life



A view from the deck

Me again taming a wild critter



The Kitchen



Rustic comfort



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

UPCOMING EVENTS & LOOKING AHEAD

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

October 12: Regularly scheduled meeting of the WRRRC in the EMT room of Grace Cottage Hospital at 19:00L.

October 30: The monthly Board Meeting will be held at the House of Pizza in Brattleboro next to Staples. Gather at 11:30

November 6: RACES conference at the Vermont Police Academy in Pittsfield, VT.

November 9: Regularly scheduled meeting of the WRRRC in the EMT room of Grace Cottage Hospital at 19:00L.

November 27: There will be NO monthly Board meeting because of the Thanksgiving weekend. A word of advice—masticate thoroughly and don't overdo it.

December 5: CVARC VE session in the community room of the Sugar River Savings Bank in Claremont, NH. Time is 08:30 AM. For further information contact N1RX, Bruce—n1rx@arri.net

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

AQR & AKF

I'm warning you right up front that the below is only remotely related to Amateur Radio. But read on anyway. You just might be enlightened a bit.

I worked at a veterinarian clinic for a few months several eons ago. In perusing the "day book" I would often see the initials AQR or AKF. Being the curious sort and wanting to look like I was willing to learn something I asked the meaning of AQR and AKF. I was informed that many times when a client called and was asked what was wrong with their pet a silence would ensue, followed by, "He's actin' kinda funny" or "He aint quite right."

I used to admire those vets, and still do. Human docs can listen to our tale of woes and at least learn that it hurts here, or I'm throwing up a lot, etc. I have yet to hear any animal say, "I feel nauseous."

So where is this is leading?.....We were informed that our neighbor and dear friend was driven up to Dartmouth Hitchcock in a hurry. It turns out that he has a tumor on the brain, probably cancerous, and that they're going to go in and cut it out.

Us and eight of our neighbors had very recently had a dinner gathering. Afterwards some had remarked that, we'll call him *whathisname*, didn't seem right. I.e., he was AKF. Well, we know now why that was. If I had a tumor on my brain I'd sure be AKF and not seem *right* to my friends.

I've had a book highly recommended to me. It's named, "Why Do Bad Things Happen to Good People?" Now if our neighbor was one of those people that you love to hate, well, that's one thing, but he's just the opposite. This is the kindest, most helpful person you'd ever want to meet—always there with a helping hand, etc. So, when you find the answer to the book's question, give me a shout. Better yet, maybe I should read the book.

Situations like this raise a lot of questions, at least for me. Why am I still here and feeling pretty darned good while others I've known are not? I may have to wait until I'm not here to find out, but I'm not looking forward to getting the answer. In the meantime I pray that this neighbor will soon be able to ask the same question, "Why am I here and others are not?" If you know the answer email me ASAP.

As long as I AM still here, though, I'll try to remind myself of the numerous and rich blessings that I enjoy on a daily, hourly, and minute by minute basis:

- A loving wife
- Good friends
- Food to eat
- To live in a free country where I enjoy free speech and the right to vote in secret.
- Good transportation
- A good bed to sleep in
- The ability to sleep like a baby
- A great hobby to enjoy where I meet a lot of those friends. (There, that satisfies the Ham Radio part.)

I have my own list and it goes on and on. Sometimes when I feel myself getting into one of those *Gee, it's fun to feel sorry for myself* mood, I read it over and realize that I don't have anything to whine about. May I suggest that you make your own list? I can almost promise that it will make a difference in your life.



(Ed note: I'm indebted to Bro Frank for comminuting with this series of articles on antennas. If anyone else out there wishes to contribute something on any aspect of Ham radio, well, shoot your copy to me.)

The Inverted-V Antenna

Bro. Frank Hagerty, SSE - WK1L

In last month's Digital Dispatch, I went over center-fed dipole calculations, and, for an **Inverted-V** dipole antenna, came up with the formula, **length (in ft.) = 492/f (in MHz)**. This gives the over-all length of the half-wave dipole, with some extra length for trimming to resonance. This month I would like to discuss the Inverted-V—which can be a great antenna at home or in the field.



The Inverted-V is one of the simplest antennas to erect. You need only one support up high for the center of the antenna, and the antenna takes up less horizontal space than a flat-top dipole. The radiation angle of the Inverted-V is similar to that of a flat-top at $\frac{1}{2} \lambda$ high—fairly low toward the horizon, but, unlike the flat-top, the Inverted-V is almost omni directional. The center support could be a mast; or it could be a tree limb. The best thing is that the center does not have to be $\frac{1}{2} \lambda$ high to be effective.

To be effective, the included angle should be between 90—120° degrees. An 80 meter Inverted-V with an included angle of 120° could be erected with the center insulator at only 45 ft. and still have the ends of each leg 10' above ground for safety. A 40 meter antenna could be raised to 25' and have the ends at least 8' high—and be an effective antenna for DX. The Inverted-V will have an impedance of around 50 Ω at its feed point—a great match for coax. Use a choke balun to prevent radiation on the coax shield and you're in business.

You can put up Inverted-V's for two bands using the same center support. If you cross the two dipoles at right angles, you can feed both with one coaxial cable and choke balun. The two antennas will not interact with each other; the SWR of each will not be thrown off by the other. In the field, the four legs of two dipoles can act as guys for a mast. The Inverted-V is an inexpensive but effective antenna. You might want to give it a try.



Nine of your fellow club members enjoyed a fun filled and educational day at the seventh annual State of Vermont RACES conference at the Police Academy in Pittsford, VT.

They were:

- * KB1NWT, John
- * NQTOX, John
- * KB1HCG, Mark
- * KA1CYZ, Jenifer
- * N1HOS, Jack
- * K1KU, Darrel
- * W1CWB, Chas
- * W2NH, Gordon
- * WK1L, Frank

The featured speaker was Bill Murtaugh from the NOAA Space Weather Prediction Center in Colorado. It was a truly great presentation.

After a tummy filling lunch we learned all about the workings of Vermont's E911 system from Bob Brown, W4YFJ.

The rest of the afternoon was spent in short sessions on covering:

- ◆ NOAA Space Weather Alert System
- ◆ VEM RACES Alert System
- ◆ RACES communications trailer
- ◆ Cross Band Repeater Operations

This latter session was done by our own WK1L, Bro Frank and also included a demo of the new RACES simplex repeater.

Our thanks to John, N1TOX, State RACES Coordinator, Rob Schell, W1RVT, Chief of Field Operations, and all others who had a hand in setting up this fine program.

Not a RACES member? Get in touch with John, N1TOX, and he can have an application in your hands muy pronto. We not only have fun, but perform a worthwhile public service at the same time.

Want to learn more? Go to <http://vem.vermont.gov/programs/races> and check it out.



That's about our show for this month, folks. I hope that you liked it.

Turn the page for some pictures of the RACES Conference.

CUL es 73 de K1KU SK





Rob, W1RVT, shows off the new RACES communications trailer



Frank, WK1L, enlightens his audience on the art of cross band repeating



State of Vermont RACES trailer... I can already picture this at our 2011 Field Day operation



John, N1TOX, explains aspects of the RACES program



Ask one of the attendee and he/she will let you know why pigeons have a stake in knowing about space weather. (Photo courtesy of Jen, KA1CYZ)