



# WEST RIVER RADIO CLUB

## DIGITAL DISPATCH

April - 2007



Volume 2

Issue #4

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

Our forty seven 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  
KD6MPY, Sean Sanderson; VP  
K1KU, Darrel Daley; Secretary/Treasurer  
KA1ZQX, Tim Bell; Pubic Relations

### PRESIDENT'S CORNER

April 1, 2007

## *IP over the Air Waves*

By: Sam Wonderz  
Radio Yesterday

Salt Lake City – We have heard the FCC has a new ruling over IP traffic being heard over the air waves in the amateur bands. While this newly developed Amateur Radio Transmission has just been announced, we have found many hams scrambling to upgrade their radios to be compatible with the 21<sup>st</sup> century and beyond. A spokes person from *IP AireWavez, Inc of Skid Row*, was heard that a simple modification can be made to most radios to make it compatible with the IP interface now used with the common PC. *IP AireWavez, Inc.* (Stock symbol IPnot) is the tail dragger of the IP communications world.

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The modification converts your common voice transmission to the new “IPunderVoice” technology which makes all transmissions visible in plain text on the screen, and has exceptionally clear and audible tones. It has been reported that the audio quality is better than you can find in the newly released *Dolby WoW* technology, now in its 5<sup>th</sup> year of existence. The reports are still coming in so stay tuned.....

The cost of a simple radio conversion has a SRP of \$250.00 and takes one blow of a hammer to modify any radio. Do not try this modification at home as only trained street bums can do this highly technical modification. Once the mode is done, there will be a very brief releasing of the magical white smoke. This is common. If the unit starts to spark, you did not have a qualified bum work on it.

If you do not want this modification to be performed on your radio, there will be a fine of \$250.00 per radio which will be imposed to each licensed amateur radio station. So just get it done and save the fine money.

### *WRRC President moves to Salt Lake City*

Under a bold move, and with out the CO's permission, WRRC President John (I can't spell his last name) –N1TOX has moved to Salt Lake City, UT. He has been found lounging in the Salt Palace Convention Center with 7,000 of his geek friends. Asked why he moved to Salt Lake City, he replied, “I found myself hating the 16” of snow and had to do something crazy”.

While in SLC, he was approached by state and local officials asking him to please return home

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as they were sick and tired of him drinking all the beer from the micro breweries in town. The locals were beginning to wonder why he spent so much time in the breweries. John reply was simple; the beer was there and needed to be consumed. Before sunrise on Saturday, he was seen boarding a plane which appeared to be heading east. We assumed he was heading home and left the beer for the locals to enjoy again.

WRRC Members,

Darrel and I hope you enjoy this, our first, *April Fool's* edition of the Digital Dispatch. While we try to keep things happening in the club and to keep great things interesting, we all must remember to smile and laugh a bit. We encourage you to write an article and assist to keep the Digital Dispatch going month after month.

73

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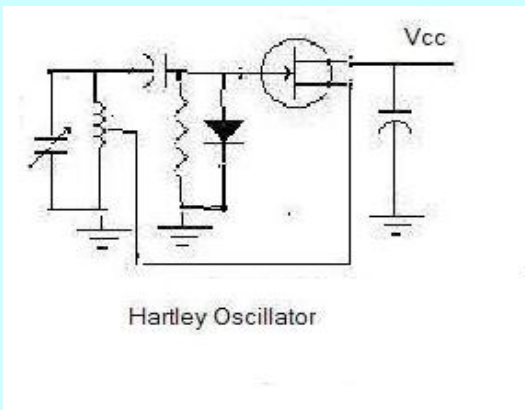
de NITOX

John Borichevsky – President WRRC



## The Hartley Oscillator

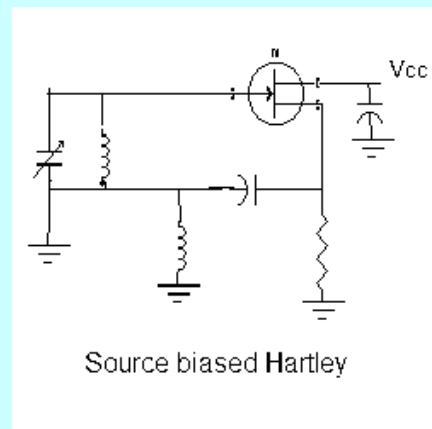
The defining characteristic of the Colpitts was the presence of feedback via a capacitive divider network. In the Hartley the feedback is via an inductive network. The classic Hartley configuration involves a tap on the inductance of the tank circuit.



The Hartley oscillator has the advantage that there are only two capacitors in the frequency determining part of the circuit. This permits the frequency range to be determined by the variable capacitor alone without additional fixed capacitors as in the Colpitts oscillator. If the only capacitance in the tank circuit is the variable capacitor and stray capacitance a frequency range of about 4:1 can often be achieved. This makes the Hartley very versatile with a wide frequency range for service as a signal generator or in a wide band receiver. For use in a ham band transmitter one often adds fixed capacitors to reduce the available frequency swing of the oscillator.

The operation of the Hartley is often depicted as requiring a transformer action involving the turns ratio of the feedback tap and the total inductance. This effect while it may well take place is not necessary for inductively induced feedback. It is possible and occasionally desirable to create the oscillator with two separate inductances. The traditional Hartley involves the construction of a tapped coil. This construction feature makes band switching a bit messy. The use of a separate inductor helps to simplify the band switching process.

Another feature often seen in amateur equipment, but far less common in professional equipment is the presence of a diode between gate and ground. The function of the diode is to provide the active device with a negative bias which is a function of the voltage swing in the tank circuit. As the oscillations build up the negative bias increases thus decreasing the gain in the circuit.



The

source biased Hartley does not need the diode since the build up of current in the source resistor as the oscillations increase provides the necessary decrease in gain to sustain the oscillations at a constant level.

There is essentially no difference in the frequency stability and noise in properly designed Corpitts and Hartley oscillators. As I said in the initial remarks on oscillators, frequency and noise are a function of quality components, sound construction practice and proper biasing.



## RUNNIN' ON EMPTY

**Y**es, Hosstraders is no longer with us. We mourn its passing and, at the same time, offer praise and gratitude to its founders and sustainers, for lo these many years.



To fill the void left by Hosstrader's demise some enterprising Hams have instituted NEAR-Fest, The New England Amateur Radio Festival. Our hearty thanks to these intrepid folks and we wish them the best in this new enterprise.

The spring festival will take place on May 4-5, 2007 at the Deerfield, NH Fair Grounds. There are other differences besides the location between Hosstraders and NEAR-Fest. To find out all about it go to <http://www.near-fest.com:80/>

What a great year this would be for us to have a CLUB presence at NEAR-Fest. Let me know if you'd be interested in attending, car pooling, or dumping some of that priceless junkie you knew you couldn't live without when acquired, but has collected dust ever since.

Before I get too winded from running here's something for those of you who like numbers.

Our club currently has 47 members, the average weight of which is.....just kidding ☺

To continue, our club has 47 members broken down by license class as follows:

◆ Novice	1
◆ Technician	12
◆ General	8
◆ Advanced	5
◆ Extra	14
◆ Non Ham	7

Coming up next month: weight, waist sizes, age, pizza preferences, and favorite libation.

73,  
Darrel – K1KU



## CONGRATULATIONS

As a result of a weekend crash course offered by the WRRRC we're proud to welcome two new Hams into the world wild fraternity/sorority of Amateur Radio operators.....drum roll, please.

Gaila Gulack, KB1OQG and Paul Blaise, KB1OQH, are now Technician Class Ham Radio operators. Hearty congratulations to you both. We look forward to seeing you at future WRRRC meetings and other club activities.



Gaila, KB1OQG – Paul, KB1OQH

We want to also congratulate W1OKO, Oliver, for passing from the rank of Technician to General Class operator.

Let's not forget to also offer up kudos to Sean, KD6MPY, who, since day one, has faithfully and competently done all the leg work for organizing classes and the accompanying VE sessions.

The instructors and VEs also deserve some recognition. Instructors for this class were:

- o K1KU, Darrel
- o KB1LQB, Chas
- o KD6MPY, Sean
- o N1TOX, John

VEs administering the test session were:

- o K1KU, Darrel
- o KA1TWV, Elaine
- o KD6MPY, Sean
- o N1TOX, John

Anyone interested in taking a Ham class, be it for an upgrade or to enter the hobby as a Technician contact Sean – [kd6mpy@arrl.net](mailto:kd6mpy@arrl.net)



**KD6MPY, Sean**



**N1TOX, John**

(Note: As your editor it is my intent that his journal should be an upbeat, educational and fun publication to read. Nevertheless, I feel compelled to bring the following email I received to your attention.)

Date: Sunday, 1 Apr 2007: 08:52:34 -0500  
From: George.Sadowsky@nyu.edu (George Sadowsky)  
Subject: A disturbing development you may want to be aware of....

**FOR IMMEDIATE RELEASE - ITU  
ANNOUNCES IMMEDIATE AUCTION OF  
ENTIRE ELECTROMAGNETIC SPECTRUM**

Geneva (April 1). - The International Telecommunications Union (ITU) today announced that it was selling the entire set of frequencies of the electromagnetic spectrum in order to provide a permanent endowment for the United Nations family of organizations for the indefinite future.

"We've learned a lot from our American colleagues at the FCC, said a spokesperson for the ITU. Their spectrum allocation auctions have convinced us that the capitalist model is superior to our established ways of allocating spectrum. We realized that we could improve on their model by extending the auction to include all frequencies, not just those for narrow communication purposes.

As might be expected, initial bidding activity has been fiercest in the visible frequency range. An anonymous source has reported that IBM has been bidding in excess of U.S. \$50 million for the rights to exclusive use of Pantone 3462, otherwise known as IBM Blue. Cosmetics manufacturers are fighting fiercely for rights to use approximately 218 different very narrow frequency ranges in the reds, ensuring uniqueness for their extensive collection of lipsticks and other cosmetics.

In a bold move to preserve financial stability, the U. S. Government immediately appropriated the U.S. dollar green part of the spectrum to protect the integrity of its money

supply. Shortly thereafter, House Majority Leader Nancy Pelosi introduced a bill that prohibited turning (that shade of) green with envy by illegal aliens. At a campaign rally in Orange (tm), Connecticut, Presidential candidate John McCain quickly endorsed the measure but added that it did not go far enough. "We'll put full frequency filters all along the wall at the Mexican border, he said, to make sure that those foreigners don't steal all-American frequency rights!" he said. The Justice Department has promised full cooperation in the event that the bill became law.

Vladimir Zhirinovsky, a leading contender for the Russian Presidency, said, "Red is our heritage, our birthright! You can auction all the other frequencies in the spectrum, but after I win the next election I shall take this matter up immediately and most forcefully with your Governing Body!"

The Ku Klux Klan registered extreme dismay when the purity of the whiteness of their costumes began to degrade as slivers of the frequencies comprising white were auctioned off and withdrawn from the market. Faced with the realization that as more and more frequencies are withdrawn from public use, the color of their robes will ultimately approach black as a limit, a spokesperson said, "It just ain't no fun here anymore," and suggested that this might be sufficient reason to cause the organization to disband.

Manufacturers of prisms for physics instruction were aghast at the thought of having to produce prisms that displayed only those specific colors for which no bid was obtained or accepted. The National Council of Scientific Instrument Manufacturers has stated its intent to petition the National Science Foundation to create an Acceptable Use Policy that would allow unrestricted use of the visible part of the spectrum for instructional purposes only.

Blue Cross/Blue Shield was ecstatic about the auction, saying that the sky was the limit for their bid for the X-ray frequencies. "Once we obtain these frequencies for our appropriate use, medical care issues in this country with respect to HMOs and PPOs can be definitively solved," a spokesperson said.

Manufacturers of sunscreen and other blocking agents bid highly for the ultra-violet part of the spectrum, vowing to place them in a public trust for public benefit, saying, "the public cannot be deprived of this valuable natural resource. By our actions, we shall preserve it for future generations."

Monochrome computer video display manufacturers expressed secret satisfaction at the sudden move.

One of them volunteered off-the-record, "Since black is the absence of any color, we'll be in business as long as we can use any other visible frequency whatsoever!"

In an ironic consequence of this new policy, representatives of the ITU were unable to sign the agreement awarding the charcoal gray frequency to Brooks Brothers because the only pen available used ink of a color that had already been auctioned off. Knowing the integrity of the UN family of organizations, the Brooks Brothers representative consummated the deal with a handshake.

A resale market for frequencies has rapidly developed. The Chicago Commodities Exchange has announced that it is making a primary market in frequency rights, and trading has begun. At press time, October yellows in the 3.34-3.50 THz range were quoted at \$2.50 bid and \$2.625 asked per angstrom, with 146 contracts already finalized. Christmas season reds and greens have quadrupled in price since the market opened, and traders are anticipating vigorous market activity later this year.

ITU officials were very pleased with the results of the auction so far, declaring that the revolution had just started. Said one ITU

representative, "With this auction we've only affected the space impacting one of the five human senses. We're currently looking into the ownership of rights to the audible frequencies and olfactory space, and we hope to proceed with another offering very soon."

The Headquarters of the International Telecommunications Union is located in Geneva, Switzerland.



## APRIL DOINGS (Es looking ahead)

**April 3:** First annual Strolling of the Hams. Sponsored by the WRRRC with financial assistance from PETA (People Eating Tasty Animals), this first ever stroll down Main Street in Halifax, VT promises to be a memory making event. Be there early in order to find parking and to beat the traffic jams. The Ham who has the most HTs strapped to his body and can walk the one block parade route without fainting will win the Grand Prize of 4 non rechargeable alkaline batteries. For details and a map to Halifax go to [www.glazedhamrus.ugh](http://www.glazedhamrus.ugh)

**April 7:** The not regularly scheduled meeting of the Board of Directors. Due to scheduling

conflicts the BOD will meet today at the PanAsian Restaurant by Staples in Brattleboro. The meeting starts at 11:30L.

**April 10:** Regularly scheduled meeting of the WRRRC in the EMT room at Grace Cottage Hospital. The festivities begin at 7 PM.

**April 18:** RACES drill

**April 3 - 16:** DXPedition to Swain's Island. See if you can match Burt, W1ZS, or your humble editor on a band/mode count of QSOs.

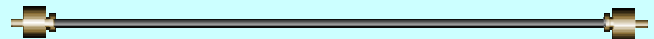
**April 28:** Regularly scheduled meeting of the Board of Directors at the Brattleboro House of Pizza by Staples in Brattleboro. All members are welcome to attend. Things start at 11:30 AM.

**April 28:** Your BOD is looking into the possibility of holding a club picnic on Onyon Field. If it takes place the BOD meeting will take place here and not as above.

**May 4-5:** NEAR-Fest at the fairgrounds in Deerfield, NH. See <http://www.near-fest.com/> for details.

**May 8:** Regularly scheduled meeting of the WRRRC. 7 PM in the EMT room at Grace Cottage Hospital.

**May 12:** FISTS Sprint. 17:00 – 21:00Z. See [www.fists.org](http://www.fists.org) for details.



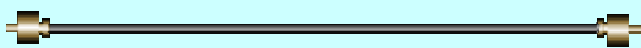
## Morse Code to return to Amateur Radio

ARRL HQ Newington, CT - On February 23, 2007, the FCC removed the 5 WPM code requirement to obtain a General class license. Because the flood of applications received for processing by the ARRL from over 300 VE Sessions on February 28, 2007 exceeded 5,000, the ARRL convinced the FCC that the last ruling passed was incorrect and that the FCC did not realize what kind of impact this would have on a Non Profit organization.

In a bold move, ARRL gave the FCC the option of (1) supplying people to help process the flood of papers now on file at ARRL headquarters, or (2) supply monetary funding to cover the overtime needed to process the paperwork

within the 1 hour time frame set by the FCC in their SOP. The FCC decided in an emergency liquid lunch joint meeting with Kernel Panic, General Fault, Darth Vader, 3CPO, and Uncle Sam, that they would reestablish the Morse Code requirement as this would save the Government \$1.02 in overall cost and would benefit nobody. After the decision was made, this reporter heard Darth Vader say “to reverse this decision would be right, as long as every licensee takes the mandatory 33 WPM code test and nobody would be exempt. If anyone failed, their license would be revoked. There would also be no grandfather clause available. We should also reestablish the forgotten Novice and Advanced license classes to while we are at it.”

As of April 1, 2007, all licensed Amateur Radio Operators will be required to take the 33 WPM code test or lose their license.



### NEED HELP?

**W**e can't solve any personal problems, but for Ham and club related matters we'll try our darndest.

- ◆ General club related matters: contact our President, John Borichevsky, N1TOX – [n1tox@comcast.net](mailto:n1tox@comcast.net) or 802-257-5526
- ◆ Membership, ARRL renewals or joining the League, and financial information: contact
- ◆ Darrel Daley, K1KU, [k1ku@arrl.net](mailto:k1ku@arrl.net) or 802-387-5822
- ◆ VE tests, club programs, or Ham classes: contact Sean Sanderson, KD6MPY, [kd6mpy@arrl.net](mailto:kd6mpy@arrl.net) or 413-695-5133
- ◆ PR or ARES ideas? Contact Tim Bell, KA1ZQX at [ka1zqx@arrl.net](mailto:ka1zqx@arrl.net) or 802-365-7046



CUL es 73 de K1KU SK



**Just in – The view from John's camera of the snowy mountains (from Salt Lake City) found in the BWI airport. He is still on the loose and thoughts are he will be returning. An APB has been issued..... Note: Squatter's Brewery is in the foreground home of Cutthroat Lager Ale (Mmmm) John's SLC Utah personal favorite!!**

It seems that after putting together each issue of the Digital Digest I have a bunch of short hunks of coax lying around (see below)

I hate to be wasteful and just toss 'em, so please feel free to use them in your shack wherever there is a need.

They're all guaranteed to be high quality Belden cable and all certified at 50Ω

