



WEST RIVER RADIO CLUB

DIGITAL DISPATCH

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Volume 1

Issue #7

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 three 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

PRESIDENT'S CORNER

August 2006

School Time

As we enter the month of August, we are entering the end of summer and will be looking toward the beginning of fall. In August we have local and state fairs, the family get together, and the never ending panic of getting the kid's ready for school. Grace Cottage Fair Day is during the day on August 5, 2006. Then there is also the BF Old Home Day, that same day, with fire works in the evening. And beyond that there is the Big "E" in Massachusetts and the Vermont State Fair in Rutland. I am sure there are many more things going on in your local area. Check the papers for times and dates.

Another thought about school time is our New Technician Class starting in August. This is a 2 day "Crash Course" for those who want their

license fast. The dates right now are August 19 and 20, 2006. Probably at BMH, but we are still working out the details. So if you know someone who would like to get their license please let them know about the class. For more information, contact Sean, KD6MPY@arrl.net.

Get your antennas ready for winter. Yes, that cold season will be coming around the corner too. It's time to check your mast, wire connections, grounding and most of all, rope holding them up in the air for decay or weak spots. What could be worse than stringing up and antenna in the winter months? Not operating at all!!

One last thought about school and education..... If you are excited about a special interest in Ham Radio, please write a short story about it. Maybe it might be about your first QSO across the pond, or across the country. How about some new technique or piece of equipment you have. Share your knowledge so we all will learn from your experiences and who knows, we might have a "Letters to the Editor" Section in the Digital Dispatch going! This is our hobby to preserve for others to enjoy. If we get your experiences in writing, then history will be in the making!

Until our next meeting

73

John Borichevsky - N1TOX
President - West River Radio Club

RECYCLE NOTICE

This is a request for all you folks with old copies of QST, WorldRadio, or any ham related magazines. The request is - **DON'T TOSS 'EM!**

Our 3rd Grace Cottage Hospital Days special event is coming up on Saturday, August 5. It would be nice to have a stack of magazines available for visitors to haul off with them. Who knows, someone just might get bitten with the bug.

I'll bring along a lot of 2X4" labels with club information to stick on each issue.



AUGUST DOINGS (Es looking ahead)

- ♦ **August 5** – Grace Cottage Hospital Fair Day special event
- ♦ **August 8** – Regular scheduled WRRC meeting; 7 PM in the EMT room at Grace Cottage Hospital – Townshend, VT.
- ♦ **August 25-27** – New England Division convention in Boxboro, MA. Check out the details at where you can also register. www.boxboro.org
- ♦ **August 26** – BOD meeting; 11:30 AM at Brattleboro House of Pizza restaurant by Staples in Brattleboro.
- ♦ **September 17** – EPOE (See Sept issue)
- ♦ **October 6 & 7** – Hosstraders at the Hopkinton Fair Grounds. Check it all out at www.hosstraders.com
- ♦ **October** – 3rd weekend. KB1MUF, Peter is setting things up for WRRC participation in JOTA

THE WOUFF HONG

(Editor's note: In last month's exciting issue you were challenged with a question on what the Wouff Hong was. For those who didn't Google it you'll find the answer below.)

Every amateur should know and



tremble at the history and origins of this fearsome instrument for the punishment of amateurs who cultivate bad operating habits and who nourish and culture their meaner instincts on the air.

It was invented--or at any rate, discovered-by "The Old Man" himself, just as amateurs were getting back on the air after World War One. "The Old Man" (who later turned out to be Hiram Percy Maxim, W1AW, co-founder and first president of ARRL) first heard the Wouff Hong described amid the howls and garble of QRM as he tuned across a band filled with signals which exemplified all the rotten operating practices then available to amateurs, considering the state of the art as they knew it. As amateur technology and ingenuity have advanced, we have discovered many new and improved techniques of rotten operating, but we're ahead of our story.

As The Old Man heard it, the Wouff Hong was being used on some hapless offender so effectively that he investigated. After further effort, "T.O.M." was able to locate and identify a Wouff Hong. He wrote a number of QST articles about contemporary rotten operating practices and the use of the Wouff Hong to discipline the offenders.

Early in 1919, The Old Man wrote in QST "I am sending you a specimen of a real live Wouff Hong which came to light out here. Keep it in the editorial sanctum where you can lay hands on it quickly in an emergency." The "specimen of a real live Wouff Hong" was presented to a meeting of the ARRL Board and QST reported later that "each face noticeably blanched when the awful Wouff Hong was .laid upon the table."

The Board voted that the Wouff Hong be framed and hung in the office of the Secretary of the League and there it remains to this day, a sobering influence on every visitor to League Headquarters who has ever swooshed a carrier across a crowded band.

The Old Man never prescribed the exact manner in which the Wouff Hong was to be used, but amateurs need only a little imagination to surmise how painful punishments were inflicted on those who stoop to liddish behavior on the air.

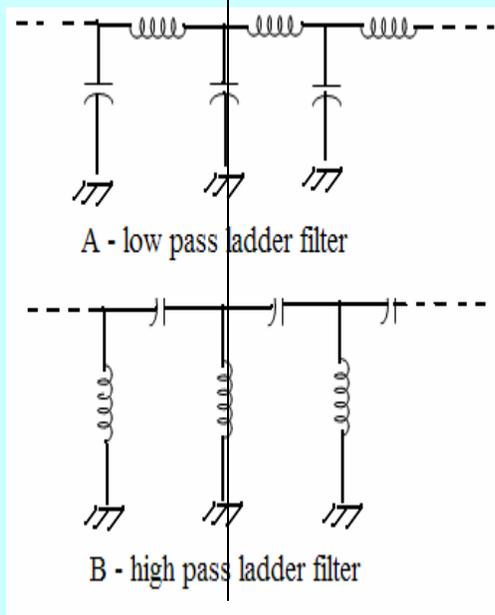


FILTERS

(Editor's note: You're in for a treat. This issue begins a monthly technical article by AAIT, Grant. So, whether you need some new knowledge for an upgrade, or need to brush up on material that has gone astray or completely disappeared in the gray matter, read on.)

When we adjust the antenna matching device attached to our transmitters we are doing more than just bringing the impedance present at the input end of the feed line to $50 + j0$ Ohms. We are also helping to ensure that the radio emissions are of the requisite purity as well as supplying the proper impedance to the final amplifying devices of our transmitter.

Filters may be classified in several ways. We are all familiar with the high pass, low pass, and all pass networks. Another classification is the mathematical basis for the design such as Butterworth, Chebychev, elliptic, Gaussian and so forth. Still a third classification is by the type of network or device used in the filter examples of which are: resonant, crystal or ladder filter. Examples of the latter are shown in figures A and B. Ladder filters themselves are classified



as singly or doubly terminated filters. Far and away the most common filter used in the output of amateur transmitters is the low pass doubly terminated ladder network.

It is the “terminated” part of the name that is the reason that the impedance presented by load, the input end of the transmission line, and the impedance presented by the final amplifying device at the network source must be proper.

Ladder networks are designed under one of two scenarios. Either the network is designed under the assumption that the filter will operate with a specified impedance at both ends (the source and load) or the network is expected to have a defined termination at one end only, the singly terminated network. Singly terminated networks are very commonly used for impedance matching.

The properties of filters are highly dependent on the impedance at the source and load being those for which the network was designed. For this reason the load presented to the filter by the transmission line must be of the correct value and thus the need to provide a means of adjusting the impedance presented to the filter. Since designers have no idea what the impedance of our antenna system will be, they design for a termination of $50 + j0$ Ohms and leave it up to us to generate that value.

The typical matching networks such as the Pi, L and Tee are usually designed as singly terminated ladder networks. They are used under the assumption that if the network is adjusted properly, the impedance of the antenna system will appear as $50 + j0$ at the filter.

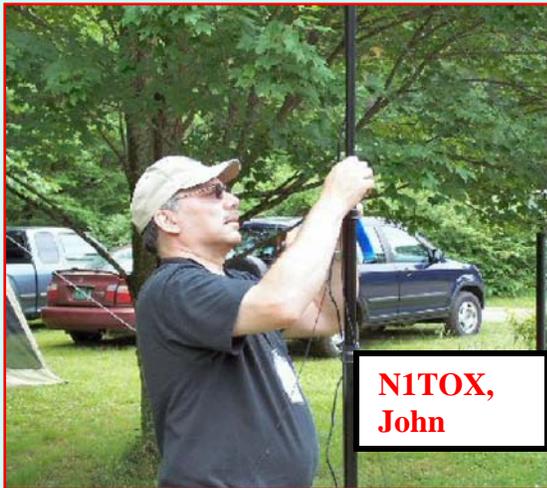
Next time around we will take a look at some of the filter networks mentioned earlier in this discussion.

FIELD DAY

You've read about it. Now here are some pictures of some of the good looking participants.



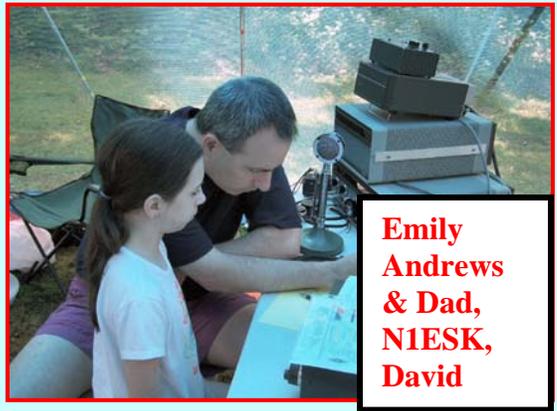
**KA1ZQX,
Tim**



**N1TOX,
John**



N1TOX, John – KD6MPY, Sean



**Emily
Andrews
& Dad,
N1ESK,
David**

NEED HELP?

We 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@adelphia.net or 802-257-5526

Membership, ARRL renewals or joining the League, and financial information: contact Darrel Daley, K1KU, k1ku@arrl.net or 802-387-5822

VE tests, club programs, or Ham classes: contact Sean Sanderson, KD6MPY, kd6mpy@arrl.net or 413-695-5133

PR ideas? Contact Tim Bell, KA1ZQX at ka1zqx@arrl.net or 802-365-7046

Also, surf to www.westriverradio.net where you'll find a wealth of information.

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