

Zero Beat



Our 55th Year

A Publication of the Hampden County Radio Association

January, 2001

<http://www.hcra.org>

Join Us as we begin a "New Year" of HCRA Club meetings with

Jody Boucher, WA1ZBL,

who will be speaking about power line interference. Jody works for Northeast Utilities and specializes in solving interference problems. This should be an interesting and informative presentation.

Friday, January 5th, 2001

Doors Open at 7:PM

Meeting Starts at 7:30 Sharp!

Hope to see you there!!!

This issue of *Zero Beat* was also sent to the general membership of the HCRA via e-mail.

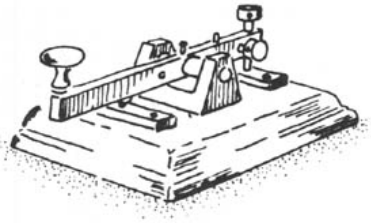
If you would like to be included in our monthly e-mailings, see page 5 for details.

Visit our new website at: <http://www.hcra.org>

in this months edition

President's Corner.....	Page 2
HCRA Contact Sheet	Page 3
On The Air	Page 3
DX Clips	Page 4
eZB	Page 5
What's Happening?	Page 5
Tips for Measuring Snowfall	Page 6
The FCC's 60 Minute License Grant.....	Page 6
HCRA Board Meeting Minutes	Page 7

President's



Corner

Happy New Year!

Well, it's time to start out another year, make those resolutions, and stick to them! What type of resolutions are on your list? Diet, schooling, occupational goals, family commitments? All good ones for sure, but here's a few ham related ones. Contests, operating awards, Field Day, license upgrade, CW, teaching, elmering, explore a new mode. How's that for a nice, *short*, list?

If you take the plunge on any of them, I wish you luck and pledge that the members of HCRA will be there to help you achieve them. That's one of the best reasons to join a club, support and encouragement while expanding your horizons. Let us know how you make out?

ARRL Cabinet Meeting

One important thing on our horizon. HCRA will be attending the ARRL's New England Division cabinet meeting this month. Is there anything you feel we should present to the cabinet? How about CW and it's continuance to be a requirement for HF licensing? What are your views on this very controversial subject? Do you think CW should be eliminated or retained as a requirement for HF operation? Why? At the last international conference concerning this matter, the ARRL was the only party voting to keep the CW requirement. Is this what you want the ARRL to do? They will (should) vote in a manner consistent with their members views. Now is your chance to make your voice heard in Newington. If you have an opinion let us know and we will relay it to the ARRL

Let's be clear on one part of this, elimination of the CW requirement for HF does not mean the death of CW on the amateur bands. CW will remain an active part of amateur radio as long as amateurs continue to use it. The proposal is for an elimination of the licensing requirement, not elimination of the mode. I enjoy my CW as many others do, but I am in favor of removing the requirement. We no longer test candidates on AM theory but I still work AM on the HF bands. Likewise, removing the CW requirement will not remove the mode. Let's be realistic here. Most CW operators use CW because they enjoy the mode, not because they were forced to learn it for their license. I believe we must move forward and change if we are to keep ham radio interesting and attractive to newcomers. One other fallacy, the idea that CW is a "filter" to keep the "riff-raff" out of the hobby. Next time you see a list of offenders caught by the FCC, count how many are Advanced or Extra class. Sure shoots holes in the idea that more difficult testing will eliminate poor operators. I've yet to see a psychological study relating CW ability to good character!

Another subject that the ARRL should have input from you is the band plans. With the new licensing structure, do you

think the Novice sections of 80, 40, and 15 meters should remain? If not, how should those segments be redefined? What about the 40 meter band. Should pressure be kept up to move the broadcasters or slightly move the band edges for amateurs so they don't have to share? I've always wondered about this "sharing" idea. One hundred watts to a dipole doesn't really share well with a megawatt to a large array, does it? What do you think?

CW Exams

Another CW note (no pun intended!). Starting in July, the CW exam will become 'fill in the blank' instead of multiple choice. If you think that multiple choice is easier (I don't, your mileage may vary), study now and do it the easy way. Five words per minute is not difficult if you put your mind to it. And that 5 WPM opens the door all the way to extra class if you want to pursue it to the limit. Also, exam fees for ARRL exams will go to \$10 starting in 2001. Looks like you got a bargain if you attend the December VE session!

New at HCRA

Check out the new look of the HCRA web page, Larry, N1URE has made a lot of exciting changes. Point your browser to <http://www.hcra.org> and see what neat things he has done. He's looking for input from you, see the message board for details.

Don't forget that Zero Beat is now available either electronically or via US Mail. If you would like electronic distribution, let myself, Dave or John know and we will see you get the next issue via email. It will save HCRA money on printing and postage, and most importantly help save a small tree or two from being ground up into paper. The electronic versions promise to have additional content also, see the web site for more information.

January Meeting

Saving the best for last, don't miss this next meeting. Jody Boucher, WA1ZBL, will be speaking about power line interference. Jody works for Northeast Utilities and specializes in solving interference problems. This should be an interesting and informative presentation.

Starting this month will be the "swap table". Have something to sell, this is a great way to do it. Bring it to the meeting, mark your name and price on it and collect the money! The HCRA asks for 10% (on you honor). I know I'm bringing a few things, how about you?

Happy New Year and best wishes for 2001,

Jim, WA1ZUH



**Computer
Care**

We Make House Calls!

Larry Krainson

100 Kenmore Drive
Longmeadow, MA 01106

Tel & Fax: (413) 567-3505
Pager: (800) 552-6606 (Pin #: 4133483289)
Email: WB1DBY@ARRL.NET

Computer Sales & Service
Training & Support

Networking
Upgrades & Repairs

*Please
Support
Our Sponsors*

HCRA CONTACTS

Questions, Comments, and Suggestions Can Be Directed To:

HCRA OFFICERS

President Jim Mullen, WA1ZUH (413) 245-3228 jmullen@rockys.com
Vice-President Jordan Koltz, W1JK (413) 532-3729 w1jk@earthlink.net
Treasurer Greg Stoddard, N1AEH(860) 668-5143 gstoddard@rcn.com
Secretary Dave Isham, KB1MU (413) 596-6605 kb1mu@mindspring.com

HCRA DIRECTORS

At Large Les Prentice, K1DNX (413) 783-6775
Program Irv Slitzky, W6IS (413) 565-5222 w6is1@juno.com
Membership Elizabeth Buller, KB1CPZ perkyzebra@aol.com
Newsletter John Pise, KX1X (413) 532-7474 kx1x@arrl.net
Technical Stan Bates, N1INB

STATION TRUSTEES

W1NY Trustee Don Johnson, W1UPH (413) 566-3560 (let it ring) w1uph2@juno.com
WB1HOF Trustee Jim Mullen, WA1ZUH (413) 245-3228 jmullen@rockys.com
WM1FD Trustee John Pise, KX1X (413) 532-7474 kx1x@arrl.net

EMERGENCY COORDINATOR

Emergency Coordinator Dave Isham, KB1MU (41) 596-6605

ON THE AIR

Please remember to join our Monday evening 10m Net

Join NCS Tom, N1MUV, On Monday nights, 7:30PM local for the

HCRA/W1NY 10m Net 28.375 +/- QRM

Kids Day Contest - 1800z to 2400z Jan 6
ARRL RTTY Roundup - 1800z Jan 6 to 2400z Jan 7
NAQSO Party (CW) -- 1800z Jan 13 to 0600z Jan14
NAQSO Party (SSB) - 1800z Jan20 to 0600z Jan 21
ARRL January VHF Sweepstakes - 1900z Jan 20 to 0400z Jan 22
ARRL International DX Contest (CW) - 0000z Feb 17 to 2400z Feb 18
CQ 160m Contest (SSB) - 2200 Feb 23 to 1600 Feb 25
ARRL International DX Contest (SSB) - 0000z Mar 3 to 2400z Mar 4



DX Clips ***de*** ***Jordy, W1JK***

How many times do we ask our fellow Hams for advise on technical issues?? I am sure we have all heard these discussions on the Bands. Occasionally, I hear incorrect answers to some very common questions. We cannot doubt the good intentions of these helpful individuals. However, there are times when I would prefer hearing - "I am not certain" or "I don't know".

Of course, the best source of technical advice is the ARRL. Our Club is most fortunate because we live in close proximity to their Headquarters in Newington. One need only place a telephone call or send an e-mail for advice. Unfortunately, many myths have established themselves as fact over the years, and it is difficult to dispel misinformation that is so well rooted in our beliefs.

I will discuss a few that rank high on the list of misconceptions and misinformation:

1. **SWR:** Some of us tend to get overly concerned if our SWR is above 1.2:1. This is a very technical area and analysis is replete with Algebraic formulas and graphs. To keep it simple - let me just say that the increased loss caused by an SWR greater than 1:1 is not serious. If it is no greater than 2:1 at the load, the additional loss caused by the standing waves as compared to a perfectly matched line is no more than 1/2 DB on HF. This is true even with long lines. In other words as a practical matter (on the HF bands) an SWR of 2:1 or less is just as good as a perfect match. The difference is undetectable.

On VHF, however, matched-line losses for commonly used coax can be fairly high. In fact at UHF, 1DB of "additional loss" might be considered quite serious. That is why low loss coax is so important on VHF long runs and for all UHF use.

The moral here: don't worry as long as the SWR is under 2:1.

2. **How far apart should beams be stacked?**

20 and 15M beams should be "at least" 9 feet apart.

15 and 10M beams should be "at least" 7 feet apart.

10 and 6M beams should be "at least" 5 feet apart.

6 and 2M beams should be "at least" 4 feet apart.

Phased antennas on the same band should be at least 1/2 wavelength apart and further for more gain. Do not stack antennas unless your lowest antenna is at least 1/2 wavelength above ground. Above all - do not stack antennas that are not within these guidelines. You will be disappointed with the pattern and they will interact with each other and compromise the results. Bottom line - it will not be worth the time and expense! I have conducted many tests over the years with Hams that have compromised their stacks and have observed degraded performance in some cases. Stacking is not for most of us. It is only practical, in my opinion, for contest stations.

3. **Are radials necessary on a Vertical antenna?**

Some antennas require only the "Radials" that came with the kit. They don't need additional radials because they are designed to operate as a half-wave radiator. In fact, attaching additional wires to them will detune it. Most verticals, however, are based on 1/4 wave design and require either ground rods or radials to work effectively. If you mount your 1/4 wave vertical on the ground, just ground rods can be used. This provides a good SWR and allows the antenna to radiate, but its efficiency will depend on the ground conductivity. Wet areas are good and raise the efficiency. Rocky and dry locations require radials. A good radial system can improve 1/4 wave vertical gain by as much as 6 DB. It takes lots of radials - 16 radials with a length of 0.1 wavelength increase gain by 3 DB. That is a sensible goal. 120 radials at 0.4 wavelength are required to give you 6 DB gain. Finally, if you mount your 1/4 wave vertical on the roof or a mast, resonant radials are needed for "each band". You will need 2 or 3 1/4 wave radials for each band. Slope them down towards the ground. Roof mounted verticals generally outperform ground-mounted units because there are no ground losses and there are fewer signal blocking obstacles.

I wish a Healthy and a happy New Year to all.

LOOK FOR:

3Y0 - Bouvet - Astronaut Chuck Brady, N4BQW, is active daily from this rare one - mostly on 20-15-10M SSB. QSL via WA4FFW.

4U1UN - United Nations - active again with different operators. Mostly observed on 20M SSB.

5X - Uganda - Graham, 5X1GS active on 21290 & 28450 after 1200Z & again after 1800Z. QSL JA2LZF.

A5 - Bhutan - Glenn, W06J, & son Mark, N0MJ again active from Dec 29 to early February.

C5 - The Gambia - Mike, DL2OE and Hans, DL7CM, will be active Feb 20 thru Mar 5 as C56/homecall 160 -6M CW, SSB & RTTY. QSL home calls.

Fo & FO0/M - Fr. Polynesia & Marquesas - Wolf, DL1ANI & others from Jan 27 thru Feb 10.

JD - Minami Torishima - Katsumi, JD1BCK operating on 15M SSB after 2330Z. QSL via JM1TUK.

JY - Jordan - Ali, JY4NE active on 10M 28400-420 between 1230 & 1530Z. Then on 20M after 2300Z. QSL via KB6NAN.

P5 - No. Korea - The hoped for Jan 7th operation will not happen. No. Korea has withdrawn its approval. Hang in there...it will happen in 2001.

See you next month.

de Jordy - W1JK wijk@earthlink.net

Get Your *Zero Beat* Electronically each month
 HCRA members can receive their monthly club newsletter in any or all of three ways!

- 1) *First Class Mail, just like you always have. This costs HCRA approximately 75 cents per copy. This is one of the benefits of your membership with HCRA.*
- 2) *E-mail. If you would like to get on our e-mail list, just write eZB@hcra.org from the account that you wish to receive your copy from, and request that you join our list. HCRA respects your privacy and will not under any circumstances give your e-mail address to ANYONE.*
- 3) WWW.HCRA.ORG. *Our new web site carries the latest copies of *Zero Beat*. Just click and read.*

*NOTE 1: You will need Adobe Acrobat ® installed on your computer to read electronic copies of *Zero Beat*. Just click the button on the WWW.HCRA.ORG website, and follow the directions to get your FREE copy of Adobe Acrobat ®.*

*NOTE 2: There is a cost savings to the HCRA if you receive your *Zero Beat* electronically only. If you prefer to NOT receive your newsletter by First Class Mail, please contact John, Kx1x, Dave, KB1MU, or Jim, WA1ZUH to be added to the eZB only list.*



***Please Support
 Our Sponsors With Your Business***

Wear it Proudly!
 HCRA Name Badges



Only \$6.00. Available for order at any club meeting, or call or drop an e-mail for immediate service!
 Show the world you belong to the oldest club in the Pioneer Valley.

Jim, WA1ZUH: jmullen@rockys.com or (413) 245-3228

What's Happening???
 On The Air

Mon., Tues, Thur, Fri	19:00	National Traffic System (NTS) Net	146.94
Sundays	08:45	Western Mass Emergency Net	146.94
Mondays	19:30	HCRA 10m Net	28.375
Wednesdays	19:30	MTARA Info net	146.94 and 147.000 (link)
	20:00	MTARA Swap net	
	20:30	MTARA Tech net	
Thursdays	21:00	Weather Net (ncs K1PAI Roger)	1 st Week of the Month 147.09 Every other week 147.000

Club Meetings & Testing Sessions

1 st Friday of the month	19:30	HCRA Club Meeting	Feeding Hills Congregational Church 21 N. Westfield St., Feeding Hills
3 rd Friday of the month	19:30	MTARA Club meeting	Red Cross building 506 Cottage St, SPFLD, MA
4 th Friday of the month	18:00	License Exams	Holyoke Hospital Auditorium Beech St., Holyoke
4 th Sunday of the month	19:00	NOBARC club meeting	Pittsfield MA (146.91 for talk-in)

Please forward additions and suggestions to: Stan Bates, n1inb seb@wca.com (All times Local)



TIPS FOR MEASURING SNOWFALL

de *Eric Tuller* *NIQKO*

During a snow storm, please report every 2 inches of new snowfall and if an inch of snow falls in an hour time span. Please pass on a final report on any snow / sleet / freezing rain if not in NWS forecast.

The following are a few pointers and hints for accurately measuring snowfall.

First, you will need a measuring device. A simple 12 inch plastic ruler is fine. (Hopefully, you will not need to use a yard stick this year!)

The next step is to find a location in which the snow is least affected by drifting. A good place is the side of the house that is sheltered from the wind. The last step is to simply stick the stick in the ground and take a reading. Please measure the snow to the nearest quarter of an inch.

A couple of other suggestions are to take the average of a couple of readings since snowfall depths can vary greatly. Also, it is best to measure snow on a flat surface such as a patio or a board rather than the grass. The grassy surface can yield inaccurate readings, since it can hinder the snow from actually settling to the ground, especially if the flakes are large.

Extracted from the web from Diane Innes

Happy Holidays to All, de Eric, NIQKO



New FCC System Yields License Grants in Less Than One Hour



NEWINGTON, CT, Dec 28, 2000--The FCC's new system to handle batch filed amateur applications from Volunteer Examiner Coordinators has cut processing time from hours to minutes. The FCC inaugurated the more rapid amateur license application processing system today.

"Way to go, FCC!" said an enthusiastic ARRL-VEC Manager Bart Jahnke, W9JJ, after his office fed its first batch of license applications into the system. Jahnke says five dozen ARRL-VEC applications transmitted just after 10 o'clock this morning resulted in license grants about 52 minutes later. The W4VEC in North Carolina and Central America VEC also took advantage of the new system for the first time.

The FCC announced last week that it would implement a "more rapid processing" system for VEC-filed FCC license applications today--slightly ahead of its original schedule. Except for a two-hour window right after midnight each day, the speedy new system looks for VEC submissions each hour on the half hour. With FCC license grant processing now measured in terms of hours instead of days, the major factor determining the time from exam to license grant now is how quickly VE teams get their test results to their VECs.

Jahnke says it used to take the FCC eight weeks or more to manually process amateur license applications. The turnaround was cut to a few days when the FCC began accepting electronic files from VECs in early 1995. The FCC has been estimating a processing window of up to 90 minutes, depending on volume and arrival time. License grant results should be available immediately on the Universal Licensing System Web site, using the license search option. Once a grant is in the FCC database, the licensee has operating privileges.

Applications processed by the FCC one day will appear in the public update ("zip") files the following morning. Public call sign servers on the Internet should be able to update within 24 hours after FCC action--rather than the 48 hours that's now typical.

On-line filings from individuals, weekend filings and FCC-manually processed applications put into the hopper during weekdays at Gettysburg will continue to be handled as they are now. These are batched for midnight processing, and weekend filings will not queue up until Monday midnight.

From ARRL News, www.arrl.org

HAMPDEN COUNTY RADIO ASSOCIATION

HCRA Board - December 7th, 2000

Held at Greg Stoddard's home

Present: Jim WA1ZUH, Greg N1AEH, Dave KB1MU, John KX1X, Irv W6IS, and Les K1DNX

Member Reports:

Vice President: (Not present) Holiday Party Raffle Results, The raffle earned just slightly more than the cost of the prizes. In the future it would be nice if we could cover the cost of the hall rental. The cost of the raffle prizes relative to tickets sold was discussed. Will a more expensive prize sell more tickets? No firm conclusion was found on this item.

Treasurer: Financial Report Our current balance is \$3403.00. This amount would allow the club purchase some small items, like a wireless mike for use at the meetings. Greg reminded the board that about 50% of this current balance should be retained for a possible future decline in membership. This year has been a very great year financially.

Secretary: A copy of the current membership roster was given to all board members present. The current membership, including family and "life" members is a 97. A summary report from the membership database was also made available. This report included data summarized from the membership application checkboxes.

Zero Beat: The e-mail version of Zero-Beat appears to be well accepted. In January an e-mail copy will be sent to all members who have an e-mail address on file with the club. A note will be included suggesting that ZeroBeat could be sent that way each month. An attempt will be made to include additional features in the e-mail version. For instance the current e-mail version is in color. The deadline for the Jan issue of ZeroBeat will be Dec 29.

Membership: (not present) The handout for new and upgrading amateurs has not yet been finalized. Currently neither club (HCRA and MTARA) provides any info to these new Hams. Many are not made aware of details like the free first year membership in HCRA.

Program: Speakers for both Jan and Feb have been lined up.

At large: Les will proceed with the purchase of QSL cards for the W1NY operation (HCRA ten meter net) Les will also attempt to get prices for the eyeball QSO cards. It was decided to try a "swap & Sell" table at the monthly meetings.

Technical: Stan is looking for volunteers for tech corner.

Old Business: A thank you letter has been sent to the Basketball Hall of Fame officials. This letter mentioned that the HCRA would like to repeat this special event station next year. No response has been received. The setup of the scout is proceeding. Signatures are needed (by HCRA Directors) to proceed with this operation.

New Business: The Board of Directors appeared to be in favor of another joint field day. Some possible sites were discussed. Larry N1URE has volunteered to help with club web page. John KX1X was very pleased with this offer, and will contact Larry

<http://www.hcra.org>

The next meeting of the
Hampden County Radio Association
Will be on Friday

January 5th, 2001

At 7:30 p.m. at the
Feeding Hills Congregational Church
Doors open at 7:00 PM

Hope to see you there!

*In case of inclement weather, tune to TV Channels 22 or 40, or on the
146.94 and 147.105 repeaters.*

Meeting cancellation information will be given out by 6:00 PM.

HCRA
P.O. Box 562
Agawam, Massachusetts
01001

PLEASE HAND CANCEL

Power Line Intereference
A presentation by
WA1ZBL, Jody Boucher
This Friday, January 5th, 2001

