



ZERO BEAT

A Publication of the
Hampden County Radio Association
<http://www.hcra.org>



OCTOBER 2007

Next Meeting: Friday, October 5, 2007
Bob Laflamme -W1SQ on VMware &
Renewal Raffle of an FT-1802 2m Mobile

Most hams have taken to using computers in the shack for quite some time now. Many of us have some favorite DOS programs that are perfect for what we want to do but won't run on our new Windows XP or Vista computer. What should we do?

How many times have you installed a new, fun application you found on the internet and **CRASH**, your computer bites the dust. Going back to a restore point or reloading software from CD is sure a pain, isn't it? Would you like a better way?

You know what, there is? Using a free program called VMware you can load and run your old DOS programs just like you were running DOS 3.0 or whatever version is your favorite. Create a virtual machine on your (or your spouse's) new PC and test your new downloads without worry. Learn this and more at our next meeting.

Bob is well versed in all things computers and will be showing live demonstrations of how you can easily do the same at home. This promises to be an informative and fun filled evening. Mark your calendar for October 5th and get ready to learn new stuff!

Meeting Location:

Meetings are held at the Feeding Hills Congregational Church, 21 North Westfield Street, Feeding Hills, MA 01030.

The church is located across from a Pride gas station.

Parking is in back of the church. Access is HP accessible.

Talk-in is available on the 146.94 repeater.

Don't forget to renew or join the HCRA by the end of this meeting. Everyone joining by that date will get entered in a drawing for a Yaesu FT-1802 FM 2 Meter transceiver. It's HCRA's way of saying thank you for participation.



www.rigpix.com

HCRA Board Meeting – September 4, 2007

Held at the home of Larry, WB1DBY, Longmeadow, MA.

Members present: Jim KB1JVF, Dave AA1YW, George KC1V, Greg N1AEH, John N1JIO, Larry, WB1DBY, Eric KB1JVI and Ed, KB1NWH.

Jim, KB1JVF, President: The Amateur Radio booth at the Wilbraham Peach Festival was conducted as a combined effort by HCRA and MTARA. Jim suggested that, for future Festivals, fewer people would be needed to man the booth, based on the attendance and interest level. It was agreed that Jim, JVF, would offer the new-style ID badges for sale and the buyer can choose any design they like. The formation of a committee, by Jim, JVF, to investigate/produce a Club Handbook Web page for the HCRA Web site was approved.

Dave, AA1YW, VP: The September raffle was successful with a \$50 profit to the club. The prizes for the October regular meeting raffle are on hand. It was agreed that a 2-meter rig, costing under \$140, would be purchased for the renewal raffle. Dave will purchase the radio; an FT-1802 was suggested.

Greg, N1AEH, Treasurer: The current account balance is \$3678. A bill from Coop Printing for ZB in the amount of \$127 was paid and a deposit of \$619 was made this month.

George, KC1V, Secretary: As of this meeting, there are 34 regular, paid members. Seven donations, totaling \$35, have been received. There had been no club correspondence since the last meeting.

Jim, KK1W, Program Director: Jim was unable to attend and sent his report and comments by e-mail. Bob, W1SQ, is confirmed as the speaker for October and will talk about VMware software. Jim requests information for the Web page about any classes John and Norm are running. He reports that the November auction is set and wanted to know if any raffle tickets have been sold. He also requested feedback on the September meeting before sending a thank you note to Steve Ford.

John, N1JIO, Technical Director: The Tech class will finish on September 8. The HCRA will have a table available at the MTARA flea market and the MTARA Web site has all the flea market details.

Eric, KB1JVI, Membership Director: Nothing to report. Eric gave Jim, JVF, the club material for the VEC sessions.

Larry, WB1DBY, Zero Beat Editor: The deadline for October ZB will be September 20. More material is needed

Ed, KB1NWH, Director at Large: Ed has not heard of any problems or concerns from the membership. He requested \$20 to initially fund the coffee and donuts. A motion was made and passed to that affect.

Old Business: Sign-up Raffle and ZB mailings – Jim, KK1W, by e-mail, expressed his feeling that the October mailing should include the sign-up wrapper and go to all non-renewed members. The Board, after discussion, voted not to do a full mailing. The October mailing will go to only those members, both renewed and non-renewed, that requested USPS mailing last year. It was agreed that the raffle would be publicized as much as possible. George and Eric volunteered to make announcements on the Wednesday info net.

New Business: The handling of HCRAware orders was discussed. Jim, JVF, will look into the possibility of a link on the HCRA Web page to the supplier's Web site, www.callsignwear.com.

Respectfully submitted,
George, KC1V, HCRA Secretary.

HCRA 10m Net

Join NCS, Tom Doyle (n1muv),
each Monday night at 7:30 PM (local) on

28.375 MHz

Get the latest local word, join good friends,
take part in good conversation each week!!!
Anyone can join in, don't be shy!!!

Have you tried IRLP yet?

IRLP is the Internet Radio Linking Project, connecting radios over the Internet. With your 2m radio, you make contacts all over the world. HCRA sponsors an IRLP node, in South Hadley, MA. It is there for your use, please give it a try (at least turn it on and listen) 146.46 simplex, 114.8hz PL Kx1x, Node #7270, S.Hadley, MA

For a list of IRLP nodes and other IRLP information, go to:
<http://www.irlp.net/>

WE NEED YOUR SUGGESTIONS

We are asking for your suggestions and ideas for future HCRA meetings. The recent success of HCRA has been, in part, because of its interesting and timely key speakers and topics.

If you can help, please contact Jim, KK1W at

Zero Beat Contributions: Anything of interest is welcome. Please submit your ideas, articles and more to wb1dby@comcast.net. Thank you, Larry, WB1DBY, Zero Beat Editor

*Questions, Comments, and Suggestions
Can Be Directed To:*

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Items For Sale & Wanted

HELP WANTED:

I Need the following Three positions and would like to " Contract " Fellow Hams.

(1) Bobcat operations in my back yard, Southwick, Ma

(2) Cabinet maker to build speaker cabinets

(3) BeeKeeper for possible hive at my location. (I know there is a fellow ham that is an expert in this area)

Thanks, GREG N1SFF@Yahoo.Com 413-977-9648

FOR SALE:

I have a very nice Collins 30L-1 linear amp (round logo) for sale. This tabletop amp can run off 120 VAC, and it puts out 600-700 W PEP. The tube complement is four 811s. I have the manual. It covers 80-10 meters, and I've been able to use it on 17 and 12 too. FYI: I have been using an Ameritron ARB-704 for T/R switching, since my PROIII cannot handle the voltage/current required to switch the 30L-1.

I'm asking \$900. If there are no takers, I'll be advertising it elsewhere for a bit more.

Also for sale:

Ten-Tec 2-meter transceiver (yes, Ten-Tec put out a 2 m xcvr kit a few years back) suitable for mobile or home. It puts out 30 W I believe, and if I'm really lucky, the manual is still around. It has tone capability, HI/LO power switch and an accessory jack for packet, etc. Asking \$30.

Zenith Transoceanic, model H500, very nice condition with some wear on the cabinet. It has the manual and a 1L6 tube (these are quite scarce and often substituted), but no spare tubes. Plays excellently! Asking \$85.

Please message this space if you're interested in any of these items. I have a few other tube-type vintage AM broadcast table radios (one with SW coverage) for sale, all working, as well as a vast assortment of radio parts and tubes.

Rick, N1RL n1rl@arrl.net

JUST TALKING - How to determine how much battery power you need ?

1. Knowing your operating habits

Easy - right? Lets start by saying that your operating habits are totally different for contest, and for casual operating. During a full week of hilltopping, I turned the radio on at 1000, and off at 1400 for a total of 4 hours per day. (This kept me out of hot water with the family.) After turning the radio on, I got a cup of coffee, organized myself, tuned the antenna, and called a station at 1020 and spoke for 20 minutes on cw. After that I got another cup of coffee, a snack, and at 1040 I made my second contact. This continued until lunch when I stopped for 30 minutes then started a similar process until 1400. Typically, I talk as much as I listen. This translates to the radio is on for 4 hours (240 minutes); I only operate for 100 minutes of which 50 minutes is talking;

Therefore, my transmitting operating duty cycle is $50/240 =$.21

2. Knowing the duty cycle of SSB, CW, FM, PSK etc.

Here is where I am going to get into trouble so - lets KISS. If you use CW or SSB, consider that your duty cycle is 50% (0.5). For all others, consider 100%(1.0). To be honest, there are many modes that I am not familiar with and may be surprised by, but this is not suppose to be a tutorial, just a primer.

<Remember the two underlined decimals above -

Keeping the values the same (Ugh!) $P = E I$ Watts = Volts x Current

Batteries are in Amp hours, transmitters are in Watts, fuses are in amps, and volts are going along for the ride. Lets start by looking at the manual's specification and find the "no-signal" current draw. This is the amount of power that your radio will consume for each hour of operation. In my case, my K1 draws <100 milliamps (1/10 amp). That was easy! Using the ammeter on my DVM, I measured my current draw during key down into a dummy load and found that my K1 draws <1000 milliamps (**1 amp**).

Amps X Volts = Watts or, (Transmit) 1 amp x 12 volts = 12.00 Watts BUT!

Total Xmit duty cycle in watts (per hour)

<u>.21</u> (above)x <u>.50</u> (cw) =	.105 x 12 watts =	1.26 watts
Plus Receive (last paragraph)	1/10amp x 12 volts =	<u>1.20 watts</u>
Total Watts used per Hour is		2.46 watts

3. Almost there - Sizing the Battery

I know that I want to operate four hours a day for five days so:

4 hours x 5 days x **2.46** watts = 49.2 watt hours is required at 12 volts

$49.2 / 12 = 4.1$ amp hours x 1.25 battery (in)-efficiency = 5.12 Amp Hour battery required.

Therefore, I should (and could) be able to operate for the full week with a 8 Amp Hour battery. I have a 8AH gel cell that fits into my backpack and it never hiccupped! Hope this made sense! 73's

WARNING - Other than handhelds, know the low voltage limit for your radio from the spec and NEVER go under it !

Here is a fun exercise with CW that helps explain duty cycle. (cw is the easiest)

---· --- ···· -·-· ·-· ·-

A dit is 1 time unit,

A dah is 3 time units

A space between a dit and a dah is 1 unit

A space between letters is 3 units

A spaces between words is (suppose to be) 9 units

The total ON time is for the above message is
3313331111313113113 which is 37 time units

The total OFF time is
113119111311131131 which is 34 time units

The total duration is 37 + 34 = 71 time units, so $37/71 = .52$ code duty cycle (52%) or just call it 50%

NearFest Update

With less than four weeks to go until the New England Amateur Radio Festival, anticipation and excitement is beginning to build all over the Northeast and Canada as radio enthusiasts are turning their thoughts towards the trek to Deerfield NH once again.

"NEAR-Fest I in May was an unqualified success, beyond our wildest dreams," reports Mister Mike, W1RC, General Chairman of the semi-annual event. We promise you NEAR-Fest II is going to be bigger and even better! if that's possible." "We have several new activities and events to offer besides the huge tailgate swap-meet. There will be something for everybody at Deerfield." The big news this time is that the proceeds from NEAR-Fest II will go to funding a fully operational amateur station at the CHRISTA McAULIFFE PLANETARIUM in Concord NH. The planetarium staff are very excited at the prospect of having a radio station they can exhibit and operate with which they can communicate directly with the International Space Station and other NASA facilities. They are currently building a new addition and have already pledged a permanent location for this purpose. A local area radio club has offered to represent NEAR-Fest and assist Planetarium staff members become licensed and proficient in the use of the equipment. A presentation to Planetarium officials will be made at the Prize Drawing ceremony at 2:00PM on Saturday October 13th.

Some of the new attractions include a number of technical symposia and workshops such as the R-390 Workshop moderated by George Rancourt, K1ANX, a fascinating lecture on the WW-II German ENGIMA machine and its derivatives presented by Professor Tom Perera W1TP and "DXing 101" hosted by Neil Kaltman, K6SMF. Neil is travelling all the way from Los Angeles California to be with us at NEAR-Fest. The current ARRL DXCC Honor Roll list shows K6SMF with 352 Confirmed contacts so he knows his subject very well.

In addition Mister Mike is pleased to announce the addition of more food vendors and washroom facilities as well as three buildings with over 30 commercial exhibitors, including several well-known ham radio equipment dealers. This promises to be the largest commercial electronics shopping mall in the Northeast!

Another new feature is overnight camping/parking facilities are available at the Fairgrounds. Join us for the pre-hamfest festivities. However this area is not located inside the tailgate area so early setup & shopping is not an option. The fee is \$20.00 per vehicle and includes hookups. The camping area opens at 3:00PM. Tickets are \$10.00 for Friday and Saturday. Admission is reduced to \$5.00 at 6:00 AM Saturday. The entry fee for vehicles entering the flea market is \$10.00 with the exception of campers, RVs and trailers who pay a \$20.00 charge which includes all hookup charges. Advance tickets are available and those holding them will be admitted first. Furthermore, there will be two special door prizes drawn exclusively for advance ticket holders. Mister Mike promises that these prizes won't be insignificant either.

See the NEAR-Fest Web site www.near-fest.com for details on how to purchase your advance tickets and passes by mail or send to W1RC at his callbook address. The Deerfield Fairgrounds is located on Route 43 ap-

proximately 15 miles NE of Manchester NH. Please note that Fair Association rules and local ordinances prohibit any alcohol and open fires anywhere on the grounds. Charcoal grills, barbeques, gas grills are okay! A "Pack it in - Pack it out" philosophy regarding garbage is highly recommended because it helps us keep down the costs of hosting this event. The now-traditional NEAR-Fest policy regarding abandoning unsold junk and trash will be strictly enforced. Offenders will be sorry! The NEAR-Fest Team looks forward to seeing you all at Deerfield on October 12th & 13th. Tentative 2008 Schedule: May 2nd/3rd and October 10th/11th.

HCRA Ham Shacks

Jim Whitehouse—K1JAW & Jimmy—KB1JXP



The Icom 736 may not look like much but it does a fine job at getting the weak signals. Typically running at 50 watts for SSB, 25 for CW. Antenna just lengthened from 40 meters and is OCD currently cut for 80 meters at 40 feet.

Presidents Corner

Welcome back to the President's corner. I want to remind everyone who has not renewed that it's that time again. The dues are still the lowest around. Renewing before or during the October HCRA meeting will get you one chance to win a Yaesu 1802 2 meter radio. It's a nice no frills radio with the power and built in ruggedness that Yaesu is famous for. If everyone signs up by the end of the October meeting your odds are 1 in 120. A \$5 lottery ticket is 1 in several million.. much better odds with us.

Now moving on, I have gotten permission from the Board to start selling the new style HCRA badges. If you came to the great September meeting you saw the color badges on display. It's going to take a little work and patience to do this but I think the end product will be worth the trouble. The whole thing with the new badge is that you can have whatever you want on your badge.(As long as there is a prominent HCRA logo of course!)

Now part II of HCRA on the move. I have asked the Board of Director's and received the go ahead to produce a web based Handbook in .pdf format. I had the pleasure of going to the NE ARRL Club meeting. We were shown a hand book that was produced by a club out east. It was 2 sided printed and many pages, with color pictures. George and I thought that that was a bit much, but we could use a handbook for new ham's and quick information, as well as being in the .pdf format it is easy to revise changes that happen along the way. I'm going to be looking for volunteers to make suggestions on what we should have in the book. You don't have to join the committee, to make a suggestion. I'll invite you to join if you want! Dave KB1MU joined to supply a history of the club. Other idea's are web sites to find antenna's you may have built and like. How about a list of repeaters and PL tone's? My information is printed in the ZB Board section.

***Next Meeting: Friday, October 5th Special Guest Speaker
Bob LaFlamme, W1SQ***


You may have met Bob at our meetings. He's an HCRA member and is going to talk on getting Dos based programs to run on Window's XP, and VISTA.

Remember it's your club. It will be whatever you make it. You can come to the meetings and meet your friends, or sit home and stare at the walls. It's your choice!

Hope to see you at the October HCRA meeting (with renewal in hand.)

Yours,

Jim, KB1JVF, President HCRA

Wear it Proudly! HCRA Name Badges
 <p>HAMPDEN COUNTY JIM WA1ZUH RADIO ASSN.</p>
<small>Only \$6.00. Available for order at any club meeting, or call or drop an email 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</small>

Grand Raffle Prize

\$250.00

HRO Gift Certificate



AUCTION

November 2nd!!!

Turn your old 'stuff' into cash!

- *Set-up at 6:30 PM*
- *Auction starts at 7:30 PM*
- *Win a \$250 Gift Certificate to HRO!*
- *Coffee & Donuts!*
- *Lots of bargains!*



Contact Jim, KK1W, for details - 413-245-3228 or kk1w@arrl.net

Auction held at:

Feeding Hills Congregational Church
21 North Westfield Street
Feeding Hills, MA 01030

Just North of the Pride station at the
intersection of routes 57 and 187



AUCTION RULES:

Amateur radio or computer related items only.
Mark all items with name/call and minimum acceptable bid.
Items without minimum will sell at any price!
10% of selling price goes to the HCRA.
Maximum fee - \$10.00
If it doesn't sell - you bring it home!

HCRA Annual Auction — November 2nd, 2007

Now is the time to mark your calendars for the November HCRA Auction. This year's date is November 2nd and the time will be as usual with a 6:30 PM setup, the auction begins at 7:30 sharp.

For those of you new to the HCRA auction let me fill you in a bit. This is, without a doubt, the most fun time you will have in ham radio. Consider it like a flea market without price tags, or eBay without the shipping hassle. Every year we get over 100 buyers and sellers together to have a great time. The auction starts promptly at 7:30 PM on November 2nd and goes until the final item is sold. Typically that has been between 11:00 AM and midnight.

What will you find there? If you're a seller you will find a large group of avid bidders waiting to close the deal on your neat stuff. If you're a buyer you will be close to overwhelmed with a smorgasbord of all things Ham Radio. From boxes of old pieces/parts to nearly new rigs, antennas to Z-matches, the HCRA auction has it all. The auction is a perfect place to pick up a new rig or get parts to stock your shop. Looking through the offerings will also give you insight into ham radios rich technological history.

If you're planning on selling at the auction we ask you follow a few very simple rules. We really only want amateur radio or some computer items. Please don't bring any computer monitors or non-functioning ancient printers. There is no market for these items and the HCRA is not in the business of disposing of items you find it difficult to dispose of normally. If you have a large amount of small, not very valuable items please combine them into one box with a single price. The auctioneers reserve the right to combine as we see necessary in order to move the auction along at a reasonable pace. Vendors with multiple items will have all their sales combined and you will be paid at the end of the auction. Ten percent (up to \$10.00 max) goes to HCRA.

Buyers, you must purchase your item when you win the bid and remove it from the table. We take cash only and there is a nearby ATM if you need more!

Please do not make deals prior to the auction. This is unfair to bidders that arrive on time. If items do not sell then it is up to the sellers if they want to negotiate a better price after the auction.

Do you have items you are too embarrassed to put on a price tag? Why not donate it to the HCRA? We will auction it off and the proceeds will help your favorite radio club create more fun events. If you have a large donation we can make arrangements to pick it up and save you the trouble. Contact Jim, KK1W for more details.



Don't forget about the great HCRA Auction Raffle. This year instead of trying to pick a prize that everyone would want we found one. A \$250 gift certificate to Ham Radio Outlet, how's that for a fantastic prize? Tickets are only \$1 each or a book of six for \$5.00. They are on sale now and will be available at the October club meeting. What could you do with a \$250 credit at HRO? I can think of many things!

So what are you waiting for? Now is the time to comb the shack and shop for items you just need to turn into cash. Then you can buy more stuff to be sold at next year's auction! It is a never ending cycle, kind of like the conservation of energy laws. There is never any ham radio equipment destroyed, it just changes hands!

For more information about the auction or how you can donate please contact Jim Mullen, KK1W either by email at kk1w@charter.net or by telephone at 413-245-3228. Remember all donations to HCRA are tax deductible. We appreciate your support and look forward to seeing you this coming November!



HAMPDEN COUNTY RADIO ASSOCIATION

P.O. Box 562
Agawam, MA 01001



Application for New or Renewal Membership

Personal Information:

NAME: _____ CALLSIGN: _____

ADDRESS: _____ LICENSE CLASS: _____

CITY: _____ STATE: _____ ZIP: _____

PHONE: Home (____) _____ - _____ BIRTHDATE: __/__/__

Work (____) _____ - _____ - ____ext ARRL Member: Yes No

Membership Information:

Type of application: New Renewal

Class of application: Regular Family

*Donations are tax deductible!
Thanks!*

Please list additional family members:

Name	Call	ARRL Member	e-mail
		<input type="checkbox"/> Yes <input type="checkbox"/> No	
		<input type="checkbox"/> Yes <input type="checkbox"/> No	
		<input type="checkbox"/> Yes <input type="checkbox"/> No	

Please choose how you want your issue of *Zero Beat* delivered:



e-mail USPS Both

Dues are \$15/year for regular membership. Additional family members are free.

Processed by: _____ Date: __/__/__

Annual Dues:	\$15.00
Donation:	\$ ____ .00
Total:	\$ ____ .00

Sign-up Raffle

You could win a 50W,
2 Meter mobile just
by renewing!



Yaesu FT-1802

Simply join or renew
TONIGHT!

Last Chance !!!

Rejoin HCRA and keep your copy of
Zero Beat coming every month.

A handy application is printed on the
back of this wrapper. Send it in, or bring
it to the HCRA Meeting on
October 5th for a chance to win a Yaesu
FT-1802E mobile rig.

Thanks for your support - Jim, KB1JVF

Club Meeting October 5th .. Bob LaFlamme - WISQ on VMware !

The Hampden County Radio Association
P.O Box 562
Agawam, MA 01001



PLEASE HAND CANCEL