



ZERO BEAT

<http://hcra.org>

May 2017

Special points of interest:

Next Meeting:

June 2nd

Elections & Field Day

- [Visit the HCRA facebook page.](#)
- Don't forget to check out hcra.org
- [Visit Summits on the Air](#)
- [Visit POTA413 facebook page](#)

May's Meeting

Join us Friday May 5th at 7:30, in the Holyoke Medical Center Auxiliary Conference Center .

BUILDING A HAM RADIO "GO BOX"

K1SMD, Steve Davidson Manager of HRO in Salem, NH will be speaking on go boxes of which he is known as the master of as he has built many and helped other build them too.



For directions to The Holyoke Medical Center Auxiliary Conference Center:

<http://www.hcra.org/meeting-location/>

HELP WANTED!

We need help for Field Day
Visit
hcra.org/field-day-2017
for more information

Inside this issue:

30 Days-30 Contesting Tips	2 & 3
Articles link Amateur Radio Growth to EmComm's	3
Boxboro 2017	4
From The Shack	5
That's Not Real Ham Radio	6
Military/Amateur Crossband Radio Tests	7
Dots & Dashes, Contests Contacts/Local Happenings	8 & 9

HELP NEEDED!

OFFICERS AND BOARD OF DIRECTORS

FIELD DAY

2017/2018 RAFFLE IDEAS

IF YOU WOULD LIKE TO VOLUNTEER TO BE AN OFFICER, MEMBER OF THE BOARD OF DIRECTOR'S, HELP OUT AT FIELD DAY, OR HAVE AN IDEA FOR NEXT YEAR'S RAFFLE CONTACT ANY MEMBER OF THE BOARD OF DIRECTORS

30 DAYS—30 HAM RADIO CONTESTING TIPS

SCOT HERRICK K9JY

Found this article on QRZ, thought with the New England QSO Party coming up, that it might help some operators.

For September, I gave myself a challenge: post one ham radio contesting tip a day to kick off the fall contesting season. The subject matter was easy as I love contesting. The challenge was in writing thirty articles, as well as a few others, during the month instead of my normal 20-25.

What I didn't want to do was have one article with a simple listing of 30-tips. I wanted to go into a little more depth with each of the tips so that some reasoning and explanation could take place.

But, it's tough to scroll through the entire month of September to find those tips, so I'm consolidating them here.

Thanks for all of your comments and writing references to these articles; I really appreciate it.

30 Ham Radio Contesting Tips:

1. [Schedule your Contests](#). The really great thing about contesting is they are regularly scheduled — regardless of great propagation, DXpeditions or the mood of the sun.
2. [Create a contest goal](#). Goals are good and help motivate you while participating.
3. [Contest on your terms](#). Contest for and be motivated by your reasons. Not everyone is out to win the contest; it could be you want to learn a new mode.
4. [Have an operating plan](#). Having a plan provides you guidance for the contest and a baseline to compare against reality in the midst of battle.
5. [Test equipment before the contest](#). You do want your stuff to work, right?
6. [Update Multiplier Files](#). Downloading the latest ensures you won't miss a juicy multiplier during the contest.
7. [Read the contest rules](#). You'd be surprised how often this bites you — even experienced testers.
8. [Work a contest one month before the real contest](#). The sun rotates once a month (27 days)...so work a contest the month before to experience the propagation you will have before the one you really want to concentrate on later.
9. [Test ergonomics](#). Sitting in a chair contesting a long while will test how well your station is laid out for operating.
10. [Have a guest op checklist](#). What should you bring as a guest op?
11. [Compete with a partner](#). Work a contest with someone in your club (together or at your individual stations). Discuss what worked and what didn't about the contest.
12. [Review Newsletter for Contest DXpeditions](#). Lots of people travel for contests. Make sure you take a look at the list from your favorite ham radio newsletter.
13. [Have propagation plan](#). Propagation programs can suggest what will be open where. Having a propagation plan can give you a guide while contesting.
14. [Filter your packet connection](#). If the contest allows packet, filter the connection to match up with your station.
15. [Accurate logging](#). A contest is about working stations — and logging them accurately. If you don't you get penalized.
16. [Send in your log](#). Even if you didn't work many stations, you can help the contest by sending in your log to help enable log checking.
17. [Logbook of The World](#). Want to reduce your QSL'ing chores for contests? Submit your log to Logbook of The World for instant confirmations for you and the people you contact.
18. [Review UBN's](#). Uniques, Busted, and Not in the Log. It's how your log is viewed for accuracy.
19. [Have a QSL System](#). Even if you use Log of the World, testers get a lot of QSL card requests. Have a system for processing them.

20. [Use a grey line map](#). Grey line propagation is the cat's meow. Having a visual representation of where the grey line is right now can help you point your antennas the right way.
21. [Learn a single band](#). Want to learn propagation on a band fast? Do a contest on a single band. You'll learn.
22. [Challenge your operating skill with QRP](#). Get frustrated fast. Operate a contest QRP from your station. Then learn how to get through the mess for points. It will make you a better operator.
23. [Do an After Action Review](#). Did we achieve our goal, what went right, what could be improved. Record the results for the next contest.
24. [Join a contesting club](#). Amp up your contesting knowledge and motivation.
25. [Learn from contesting pros](#). They are out there. They can teach you a lot.
26. [Leverage your strengths](#). Great CW operator? Great antennas? Whatever your strength, leverage it for the contest.
27. [Go on a contesting DXpedition](#). Even if it is to a different state. It's a very different experience and will teach you a lot.
28. [Practice CW before contests](#). Notice how much better you are at CW at the end of the contest compared to the start? You need to practice before the contest.
29. [Participate on a contesting team](#). Many contests offer team (versus club) entries. Join a team to up your motivation for the contest.
30. [Find joy in contesting](#). It's there. You know it. Go find it.

There are many more contesting tips, of course. But thirty to start out the fall contesting season seemed like the right number for me.

I had great fun writing these. Enjoy the resource.

ARTICLE LINKS AMATEUR RADIO GROWTH TO EMERGENCY COMMUNICATIONS

An April 11 [article](#), "Emergency Communications Driving Increase in Amateur Radio Operators," in [Emergency Management magazine](#) links the growth in Amateur Radio numbers to interest in emergency communications.

"There has been a tremendous amount of interest in emergency preparedness since 9/11 and Katrina, and this is true for the Amateur Radio community as well," ARRL Emergency Preparedness Manager Mike Corey, KI1U, told the publication. "Emergency communications is a gateway into Amateur Radio, and many join our ranks through an interest in being better prepared themselves and as a way to serve their community."

The article cites numbers from ARRL VEC Manager Maria Somma, AB1FM, who notes that 2016 was the third year in a row that the total number of new licenses exceeded 30,000.

The article also cites ARRL Colorado Section Manager Jack Ciaccia, WM0G, who agreed with the premise that the uptick in new licenses is due to Amateur Radio's emergency capabilities.

"Interest really peaks after a large-scale event where ham radio has been utilized," Ciaccia said. "When regular phone service fails, Amateur Radio operators fill the communications gap with their independent transceivers and battery power backups," said the article, which also discusses the ARES program.

Hands-Only™ CPR **1** **Call 911** **2** **Push hard and fast in the center of the chest.** **American Heart Association** **Learn more at handsonlycpr.org** **Learn and Live**

Boxboro

2017

September 8: Special Programs

September 9 & 10: Flea Market, Exhibitors, All Activities

The ARRL New England Division Convention
*at the Boxboro Regency Hotel and Conference Center
off I-495 at exit 28A in Boxborough, Massachusetts*



**LARGE FLEA MARKET
MAJOR EXHIBITORS
LICENSE-IN-A-WEEKEND
VE EXAMS
DXCC CARD CHECKING
DOZENS OF SEMINARS
YOUTH PROGRAM**

FRIDAY DX/CONTESTING DINNER

SATURDAY GRAND BANQUET

Featuring Paul Stoetzer N8HM of AMSAT

Effective DX and Satellite Operation with Minimal Antennas

GENERAL ADMISSION (Good for the full weekend) \$15

FREE for full time student with Student ID

9' x 21' Flea Spaces \$10 (good for full weekend)

Friday and Saturday Dinner \$40 ea.

Whole Convention Package – Admission + both Banquets \$90

Tickets Available Online at www.Boxboro.org

FROM THE SHACK

JEFFERY BAIL NT1K



After a couple years as serving as president of HCRA, I regret to report that I will be not be seeking re-election for the 2017-2018 term. I announced it to the board on April 6th and again to those in attendance at the April 7th meeting. Things have changed in my personal life to where I can no longer dedicate the time needed to help run the club. I feel that by staying on the board, I will be doing more harm than good and I would prefer to see someone else who will be more dedicated to help run the club.

When I was asked to run for president. I was a bit reluctant because I didn't have any experience working with a club and I'm not very good at public speaking. I accepted because I wanted to see this club stay alive. I care very much about the club and I really care about promoting not only HCRA, but amateur radio to the public here in the county/valley. My goal was to encourage members to get on the air, try new things out, get some new faces and ideas in the

mix. I also wanted to unite with other clubs in the area. We need to be working together and to help each other out. Not the other way around.

I took on this role not really knowing what to do but felt that I could give it a good effort. However, it's not up to one person to run the club. It takes the entire club working together to make it run. I'm lucky to have mentors like past president Jim Mullen to be there when I needed help. I was also lucky to have a board of officers and directors that also care very much about the club. They are the ones that help keep the club going along with the membership.

Now that I look back, I don't think I thanked the officers and directors enough. Time in this day and age is considered to be very precious and they took the time to help their club. I like to thank Harold Woering (N1FTP) and David Fant (WM1B) for being the VP and secretary. They've helped with filing the proper paperwork and keeping things organized. Juergen Malner (NV1Q) makes sure we didn't spend too much and keeps track of our expenses. No more boxes of paper. A big thanks goes out to Larry Krainson (W1AST). He books very excellent speakers and he is a good listener as I've vented on him on more than one occasion. I don't think we would have as many excellent guest speakers without him. John (K1VOI) processes hundreds of membership applications and keeps the database up to date. We've managed to have one centralized DB that allows for no more confusion. Bob Meneguzzo (K1YO) is an excellent technical advisor. His knowledge about a lot of the technical aspects of amateur radio is an asset and we're lucky to have him on board helping. Karl Krassler (KB1RXO) is new to the board but I think he will fill the at-large position quite well. He was been helping out with some of the aspects of field day. Gary Fields (WA1MOW), our ZeroBeat editor, has to put in the most time compared to the rest of the board with putting together the issues of Zerobeat every month. It's not easy at times but yet he manages to pull through. Gary also suggested and helped make the "Share The Knowledge" classes a success.

Of course there is more than just the officers and directors to thank. There are many members who are not on the board that help out in many ways. Bruce Fuller (KB1TLX) spends time getting donuts and coffee for each meeting which to a lot of people is a very important job. Dave Cain (AA1YW) allows us to use his property. Jim mullen (KK1W) helps with the website and fills in when needed. Doug Henrichon (KB1JC) helps us out with obtaining the conference center at Holyoke Medical Center for our meetings and classes. Dave Cote (W1FAB) and Steve Rodowicz (N1SR) provide monthly VE sessions to those in the area wishing to obtain or upgrade their license. John Balboni (AC1T) and David Isham (KB1MU) for providing digitized copies of past Zerobeats and other history. Recently George (KC1V) and Paul Kelliher (NF1G) stepped up to help run the Swap and Sell tables. There are also the previous officers, directors and those who've helped with making field day and other HCRA related events possible. It's not just one, two or nine people running the club. It takes the entire membership working together to make it better. This why I stress volunteering your time to help. There are many great ideas but without the volunteers to help make it become reality, this club could be a thing of the past and not of the future.

With my parting, there will be a position available and possibly some shifting of the directors. If you feel that you can add something to HCRA, please step up and help. This is your club and becoming an officer or director will help move HCRA forward. If you would like to volunteer as a director, please contact either myself or any other officer.

Thank you for letting me serve as your president. I hope to return to board in the future.

THAT'S NOT REAL HAM RADIO.

BOB WITTE K0NR

Things had been pretty quiet on the ham front lately but then I ran into a string of “That’s Not Real Ham Radio” discussions. This happens from time to time...I usually ignore it...but this time I got sucked into the topic.

It started with some HF enthusiasts I know talking about how “digital modes” are just not very satisfying. Their point is that with CW and SSB, there is an audio connection to your ear that makes you an integral part of the radio communication. The extreme-DSP modes such as JT65 insert serious signal processing that essentially removes the human connection. This can quickly lead to the generalization that these digital modes “aren’t real ham radio.”

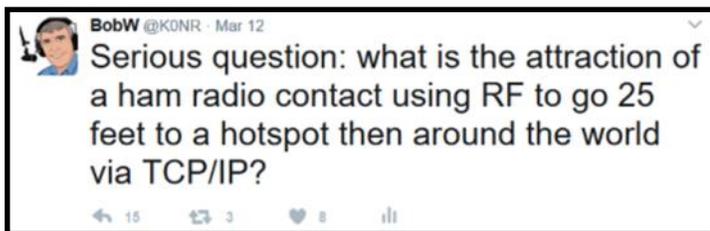
I think its fair to say that most hams think of the HF bands as the center of the hobby...getting on the air, bouncing signals off the ionosphere to talk to someone over the horizon. Some hams will go even further and say that CW is the only way to go. Anything less is just phone. FM and repeaters? Forget that stuff...not enough skill required. And certainly, don’t get stuck on 2 meters.

In a previous post, I argued we should not confuse religion with modulation. I do occasionally make snarky comments about the continued use of AM (AKA Ancient Modulation), but I’ve tried to tone that down in recent years.

What About DMR?

Just last week, I was playing around with a DMR hotspot on the Brandmeister network. It really struck me that people on the system were having a blast talking to each other across North America and around the world. But then that nagging little voice in the back of my head said “hey, wait a minute...this is not real DX...the RF signal might only be traveling 20 feet or so from an HT to a hotspot.”

This caused me to put out a plea for insight on twitter:



I received a lot of good replies with the answers tending to clump into these three categories:

- I don’t know (“That’s Not Real Ham Radio”)
- It’s fun, new technology
- It’s a digital network that brings ham radio operators together

My interest seems to fall into the second category: *this is fun, new technology*. Which does make me wonder how long this new technology will remain interesting to me. Well, that is difficult to predict but I’ll invoke the principle of *try not to overthink it*. The idea that DMR is a *digital network that brings ham radio operators together* makes some sense. In the past, I have argued that amateur radio is not for talking. In other words, if you just want to talk someone, there are much more convenient ways of doing that. Still, there is something attractive about this ham-radio-only digital network.

It really is important to not overthink this kind of stuff. Ham radio is supposed to be fun, so if you are having fun, you are probably doing it right. If you are not having fun, then you might want to examine what you are doing. See my post on the Universal Purpose of Amateur Radio.

Sometimes hams can get a little spun up about those other guys that don’t appreciate our way of doing ham radio. What the heck is wrong with them anyway? I’ve always been inspired by the Noise Blankers Mission Statement:

Do radio stuff.

Have fun doing it.

Show people just how fun it is.

If your preferred form of ham radio is so superior, it ought to be easy to show other hams how cool it is. If not, then maybe you aren’t doing it right. Conversely, as long as other hams are having fun and operating legally, don’t knock what they are doing. In fact, encourage them. We need more people having fun with ham radio, even if it’s not your favorite kind of fun.

That’s my opinion. What do you think?

73, Bob K0NR

This article was originally posted on eham.net. It is being reprinted here with the author’s permission.

ARMED FORCES DAY CROSSBAND MILITARY/AMATEUR RADIO COMMUNICATIONS TEST IS MAY 13

ARRL BULLETIN 4 ARLX004



QST de W1AW
Special Bulletin 4 ARLX004
From ARRL Headquarters
Newington CT April 27, 2017
To all radio amateurs

The US Army, Air Force, Navy, and Coast Guard will sponsor the traditional military/amateur radio communication tests on Saturday, May 13 to mark the 66th annual Armed Forces Day (AFD). Armed Forces Day is May 20, but the AFD Crossband Military-Amateur Radio event will take place a week earlier in order to avoid schedule conflicts with those attending Hamvention.

Complete information, including military stations, modes, and frequencies, is available on the US Army MARS website at, <http://www.usarmymars.org/home/announcements>.

The annual celebration is a unique opportunity to test two-way communication between radio amateurs and military stations (authorized under Part 97.111 of the Amateur Service rules). It features traditional military-to-amateur crossband SSB voice, CW, practice using legacy interoperability waveforms, and the opportunity for participating hams to utilize more modern military modes, such as MIL-STD Serial PSK and Automatic Link Establishment (ALE). Military stations and Amateur Radio stations are authorized to communicate directly on certain 60-meter interoperability channels - 5,330.5, 5346.5, and 5,371.5 KHz.

These tests give Amateur Radio operators and shortwave listeners a chance and a challenge to demonstrate individual technical skills and to receive recognition from the appropriate military radio station. QSL cards will be available for stations successfully contacting participating military stations.

The Armed Forces Day message will be transmitted via Military Standard radioteletype modes (MIL-STD 188-110A/B). Software is available to demodulate the military serial PSK waveform, and detailed instructions can be downloaded from, http://www.n2ckh.com/MARS_ALE_FORUM/MSDMT.html. Utilizing this mode with soundcard equipment can be challenging; review the instructions carefully.

A short practice transmission will be sent at 1930 and 2330 on May 6, 7, 10, and 12 on 13.506.5 MHz USB and 17.443.0 MHz USB.

Military FSK is Baudot at 850 Hz, 75 baud, low mark, and 2000 Hz center. Most RTTY programs can be set to decode this mode. To achieve low mark while receiving in USB, select reverse shift.

QSL cards are available for individuals that receive the Armed Forces Day test message. To receive a card, copy the printed text of the test message as received from the military station, and include it in your report. No attempt should be made to correct possible errors.

Stations copying Armed Forces Day messages transmitted from US Army and US Navy stations and requesting a QSL card, can complete the QSL report form online at, <http://www.usarmymars.org/>. Stations copying the Armed Forces Day message transmitted from US Air Force stations and seeking a QSL card should send a request to Armed Forces Day Celebration, Chief, Air Force MARS, 203 W. Losey St, Scott AFB, IL 62225.

Include a transcript of the received text, time observed, frequency observed, military station call sign, your full name and Amateur Radio call sign (if applicable), full mailing address (including ZIP code).

Stations with Automatic Link Establishment (ALE) capability can contact a military station on specific half duplex crossband channels established for this purpose. ALE is a selective calling and linking method utilized by government, military, and amateur radio communications. Military stations will scan and receive certain amateur HFLINK ALE frequencies and transmit on the corresponding military ALE frequency. Military stations will also transmit ALE station identification (soundings) on each military frequency at 30- to 90-minute intervals. Amateur stations may scan military frequencies and monitor the soundings to build the LQA database or select the channel manually. Amateur stations will call military stations using ALE selective calling on one of the paired cross band channels.

DOTS & DASHES:

Things I can't think where to put, but are interesting.

CLUB LOG IS NOW A LOGBOOK OF THE WORLD TRUSTED PARTNER

If you participate in the HCRA's Club Log League, we got some good news. [Club Log](#) has become the first logging service to achieve Trusted Partner™ status for Logbook of The World® (LoTW), ARRL and Club Log have announced. Radio amateurs holding LoTW "[call sign certificates](#)" who have uploaded logs to Club Log now can readily cross-post them to the highly secure LoTW -- the world's largest repository for confirming Amateur Radio contacts.

NEW ENGLAND QSO PARTY

JEFFERY BAIL NT1K

The results of the 2016 New England QSO Party (NEQP) are in. The winner for Hampden County was Chris Scibelli (NU1O). He made just over a 1000 contacts for 74,944 points. Congrats to Chris. When it comes to New England club competitions, HCRA came in 3rd place behind YCCC and CTRI. We had 189,264 whereas CTRI had 189,603. That's a difference of just 339 points. I think this year we can be CTRI and take 2nd place with just a couple more people submitting logs.

NEQP is taking place the first weekend on May. It starts on Saturday (May 6th) at 4pm local until 1am Sunday to allow for a sleep break. The contest will resume on Sunday (May 7th) at 9am until 8pm. If you are an HCRA member, please don't forget to put "Hampden County Radio Association" in the club field of your log.

For full rules, classes and other info, please check out the New England QSO Party's website.

<https://www.neqp.org/>

Good luck to all and hope to catch you on air.

FIELD DAY TRAILER CLEANING DAY

JEFFERY BAIL NT1K

There will be trailer cleanup day on Saturday May 13th. We will be clearing out the entire trailer, checking antennas, coax, mock assembly of the tower base and repair of the roof.

I know there are some action items that we need to do. It was reported that the 40m CW beam clamps need to be looked at. I am also certain that one of the TX-38 antennas (tri-bander) was taken apart the wrong way and will need to be pre-assembled to match the other beam.

Start time is 10am and hopeful departure around 12 or 1 depending on who shows.

The address is 94 South Longyard Rd in Southwick MA. If you are attending, please let me know.

INTERESTING HAM RADIO WEB SITE:

With the [New England QSO Party](#) coming up, wouldn't it be nice to have maps of all New England States that show the counties? Would make it easier to be able to label a map to keep track of counties? Well, here is a [website](#) that allows you to print maps with the counties. <http://printerprojects.com/maps/states.html>

AREA SWAP/HAMFESTS:

May 5/6	NEARFest XXI	Deerfield, NH	http://www.near-fest.com/
May 13	East Greenbush ARA Hamfest	East Greenbush, NY	https://www.egara.club/events
May 20	Southern Berkshire ARC Hamfest	Goshen, Ct	http://www.sberk.org
Jun 10	Vintage Radio & Comm Museum of CT	Windsor, Ct	http://vrcmct.org/
Jun 18	Flea at MIT	Cambridge, Ma	http://www.swapfest.us
July 16	Flea at MIT	Cambridge, Ma	http://www.seapfest.us
Aug 27	NoBarc Hamfest	Adams, Ma	http://www.nobarc.org/hamfest.htm
Aug 27	Western Connecticut Hamfest	Newtown, Ct	http://www.cararadioclub.org
Sep 10	Saratoga County ARA Hamfest	Ballston Spa, NY	http://k2dll.org
Sep 8/10	New England Convention	Boxborough, Ma	http://www.boxboro.org/
Oct 13/14	NEARFest XXII	Deerfield, NH	http://www.near-fest.com/

MAY'S CONTESTS:

May 6	10-10 International Spring CW Contest	www.ten-ten.org	CW
6	7th Call Area QSO Party	www.ws7n.net/7qp	CW, Ph, Dig.
6	Indiana QSO Party	www.hdxcc.org/inqp/rules.html	CW, Ph
6	Delaware QSO Party	www.fsarc.org/qsoparty	CW, Ph
6	New England QSO Party	www.neqp.org/rules.html	CW, Ph, Dig
13	Arkansas QSO Party	www.arkqp.com	CW, Ph, Dig
13	Portuguese Navy Day Contest	www.nra.pt	CW, Ph
13	MARAC County Hunters CW Contest	www.marac.org	CW
15	Four States QRP Group 2nd Sunday Sprint	www.4sqr.com	CW, Ph
20	Portuguese Navy Day Digital Contest	www.nra.pt	Digital
20	His Majesty King of Spain CW Contest	www.concursos.ure.es	CW
20	Run For The Bacon CW QRP Contest	www.qrpcontest.com/pigrun	CW

Local happenings

Sundays: 0845: Western Mass Emergency Net 146.94, PL 127.3 - W1TOM/R

First Monday: Southwick Regional RACES Drill, 1845, 146.49 Simplex

Mondays: 1930: HCRA 10m Net 28.375

Tuesdays: 1930-2000: 146.94, PL 127.3 - W1TOM/R - Hampshire County Emergency Net

Wednesdays: 1930: MTARA Info net 146.94, PL 127.3 - W1TOM/R - includes NTS Net

2000: MTARA Swap net: 146.94, PL 127.3 - W1TOM/R

2000: MTARA Simplex Net - starts on 146.94 - PL 127.3, then goes to 146.42 direct (simplex) Usually starts immediately following the swap net.

Thursdays: 2100: Weather Net (Roger, K1PAI Net Control), 1st Thursday of every month: 147.090 MHz, All other Thursdays: 147.000, PL 127.3 - W1TOM/R

Fridays: 1200: BB's (Brown Baggers Luncheon)
Munich House
13 Center Street
Chicopee, MA 01013

Expect between 6 and 12 attendees every Friday. Good food, great company!

Club meetings & VE sessions

1st Friday of the month 7:30 PM, HCRA Club Meeting, Holyoke Hospital Auxiliary Conference Center, 575 Beech St. Holyoke MA 01040 (no meetings held in July or August.)

<http://www.hcra.org/meeting-location/>

3rd Friday of the month 7:30 PM, MTARA Club meeting, Red Cross building, [150 Brookdale Dr. Springfield, Mass.](#) (no meetings held in July or August)

4th Friday of the month 6:00 PM, Technician, General, and Extra Class License Exams, Holyoke Hospital Auxiliary Conference Center, 575 Beech Street, Holyoke, Mass. Hosted by the Western Mass VE Team (WMVET). Contact: David Cote, w1fab@arrl.net

Third Monday of the month 7:00 PM, Franklin County Amateur Radio Club meeting, Greenfield Community College. (no meetings held in July or August)

<http://www.fcarc.org/>

4th Monday of February, May, August, November 7:00 PM, FCARC VE Exams, Unitarian Church, Main Street, Northfield <http://www.fcarc.org/>

Join the ARRL or renew your membership!

ARRL members enjoy:

- QST Magazine
- Members-Only Web Services
- Technical Information Service
- Member Discounts
- Outgoing QSL Service
- Continuing Education
- ARRL as an Advocate
- Regulatory Information Branch
- Public Relations for Amateur Radio
- ARRL Field Organization
- ARRL-sponsored contests
- Operating Awards
- Local Clubs
- Amateur Radio Emergency Service
- Hamfests and Conventions
- Volunteer Examiner Coordinator Program



<http://www.arrl.org/membership>

HCRA contact list

President, Jeff Bail NT1K
nt1k@nt1k.com
Vice-President, Dave Fant WM1B
wm1b@arrl.net
Treasurer, Juergen Malner NV1Q
nv1q@arrl.net
Secretary, Harold Woering N1FTP
n1ftp@yahoo.com
At Large, Karl Krassler KB1RXO

Newsletter, Gary Fields WA1MOW
wa1mow@arrl.net
Programs, Larry Krainson W1AST
wb1dby@comcast.net
Membership, John Plaster K1VOI
k1voi_jp@charter.net
Technical, Bob Meneguzzo K1YO
k1yo@comcast.net
Skywarn Liaison, Eric Tuller N1QKO
et-n1qko@juno.com
VE Session Liaison, Dave Cote W1FAB
w1fab@arrl.net



**Here is your exciting copy
of Zero Beat!**

**Hampden County Radio Association
P.O. Box 562
Agawam, MA 01030-0562**