



ZERO BEAT

<http://hcra.org>

October 2015

Special points of interest:

- Next Meeting Friday, Nov 6th
Bicycle Mobile HF-Joe Chapman
- [Visit the HCRA facebook page.](#)
- Don't forget to check out
hcra.org
- [Visit Summits on the Air](#)
- [Visit POTA413 facebook page](#)

**Don't forget this year's
raffle!**



See Page 3 for details.

October's Meeting

**Join us Friday October 2nd at 7:30, in the Holyoke Medical Center
Auxiliary Conference Center .**

**An Introduction to "Digital Mobile Radio" (DMR)
Presented by: Steve Shore WA1ZEV**



Steve will be talking about DMR- Digital Mobil Radio also known here in the USA as Motorola TRBO.

Simply put it is two-way radio technology that digitizes analog voice modulation and broadcasts it over coordinated ham radio frequency repeater pairs. Many if not all of these repeaters are interconnected/networked over the internet for local, regional and worldwide two-way radio communication.

He will cover the technology, the benefits and how to get started in this new segment of amateur radio!

For directions to The Holyoke Medical Center Auxiliary Conference Center:

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

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Are Your Dues Up To Date?

Your HCRA membership dues are due during the months of September and October.

Your dues help to pay for various club sponsored activities such as: Amateur Radio classes, VE Sessions, Field Day, Speaker's expenses, and the Holiday Party. It also allows us to make donations to the Holyoke Hospital, and Agawam Parks and Recreation for use of their facilities for our meetings and Field Day.

You can use the form on page #9, bring it to a meeting, or mail along with a check for \$15.00 to:

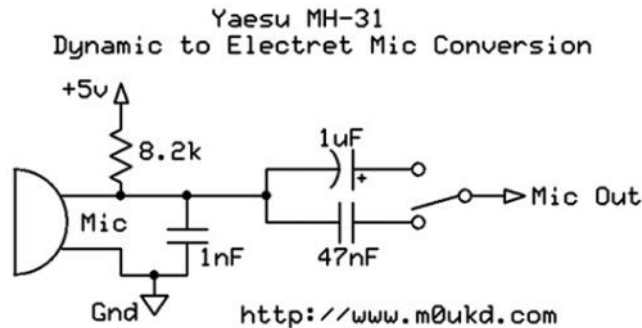
HCRA, P.O. Box 562, Agawam, Ma 01001-0562

You can also pay them online at:
<http://www.hcra.org/membership-payment/>
Or at any meeting.

YAESU MH-31 ELECTRET ELEMENT CONVERSION

HAROLD WOERING N1FTP

I have an old Yaesu FT-900 that has a MH-31 hand microphone (mic). I could key the transmitter but had no audio. The mic has a dynamic element which I assumed went bad. I browsed the internet and found an excellent article by M0UKD on replacing the dynamic element with an electret element. Electret elements can be found in cell phones, mp3 recorders, cassette tape players... the list goes on. I don't throw electronics away, I strip them for parts. You can also purchase them from various parts vendors on the internet. Electret mics require +5V which it so happens, the MH-31 has in the head of the mic.



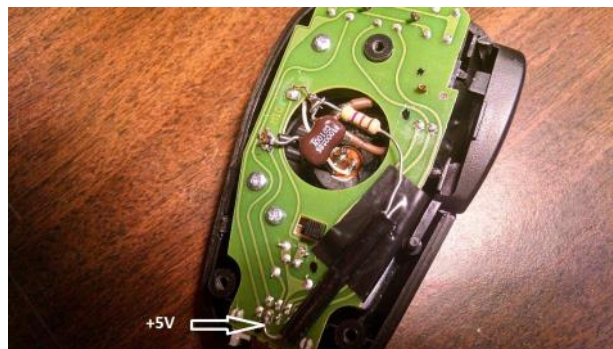
This picture is that of the M0UKD circuit diagram.



On this second picture, you can see the MH-31 after the electret element was installed.

It was easy because the original dynamic element is about 5 times larger. To the right is my next project which is inserting an electret element into some pvc piping that I had laying around. This will make a nice boom mic. I drilled a hole in one of the caps and inserted a piece of screening. In both cases, to keep the element in place, I used some hot glue. In the case of the pvc pipe mic, I will have to supply +5v from either the source or an external power supply.

N1FJ



This third picture is a close-up of the electret element inside the MH-31 mic and shows where the +5V connection is located. I saved myself about a Ulysses S. Grant on this project. The boom mic is a bonus since I had all the parts hanging around. Another plus is that the electret element has more audio gain than the stock dynamic element.

AN EL CHEAPO ANTENNA LAUNCHER

GENT LAM WA1CQF

Antenna season is rapidly approaching. By tradition this kind of activity is usually done in the rain, in 30 degree weather, or with 3 inches of snow on the ground. Presently I only have a 40 meter dipole for wire antennas. A few years ago, a big snowstorm in October knocked it to the ground and turned by tri-bander into a 1-1/2 element beam. NO.....I did not immediately go out and repair the antennas.

Over the winter I pondered the various methods I could use to get a line over a tree to bring the 40 meter dipole back to life. Sling shots, bow and arrow, and pneumatic potato cannons were considered. The amount of times that I would need an antenna erecting device is minimal. I just want to get the dipole back into the tree. It would be cool to build a potato cannon. They look neat and fun to build. However, it would spend most of its life on a shelf in the garage. It requires compressed air for use. Fortunately I have a small compressor in the garage.

When push came to shove, I decided on the same method that I used to originally install the dipole. A 8" adjustable wrench tied to a string was tossed through the tree. However, the last time I did that the wrench got caught up in the limbs. The thought of losing one of my favorite wrenches did not sit well. it was a true "Crescent" wrench—not one of the throwaway wrenches sold by Harbor Freight. It took a some tense minutes and a few choice words to return the coveted tool back to terra firma.

This time, instead of the wrench, I used a small plastic soda bottle. After consuming the contents, the bottle was filled with tap water. A string was tied around the neck of the bottle. Fluorescent string sold in hardware stores is suitable and easy to see. Depending on whether I had Wheaties for breakfast, the phase of the moon, and my throwing style, I can toss the bottle 35-40 ft high. Once the string is pulled through the tree and the antenna erected, the bottle can be emptied and recycled.

This project encompasses multiple uses of a container which is recyclable. Overall cost is minimal (CHEAP!!!!), and you can say you did it yourself.

HCRA's raffle this year is for a Kenwood TS-590SG!



It's that time for the Hampden County Radio Associations (HCRA) annual raffle. This year the board of directors wanted to raffle off a 100w base station transceiver. The Kenwood TS-590SG (\$1700 Retail) was the perfect choice because it's a very excellent radio packed with features that rival radios that cost much more. It's an HF-6M 100W with 32bit DSP that has excellent receiver according to Sherwood Engineering. Some of the features

include: Auto Tuner, On Screen CW decoding, HF and 6M Antenna Jacks, Programmable Functions, 500hz / 2.7kHz Roofing Filters, DSP AGC, USB Port, Noise Reduction, Down Conversion.

HCRA has printed 250 tickets. Due to the price of the item, HCRA has put a limit on the minimum amount of tickets that can be sold before the raffle is allowed to take place. If the minimum amount has been reached, the item will be raffled at the Mount Tom Amateur Repeater Association's Ham Fest in 2016. We're asking \$10 for each ticket.

FROM THE SHACK

JEFFERY BAIL NT1K



Even though I've been involved in amateur radio for about 20 years, I still consider myself a greenhorn when it comes to our club. There are members that have been active in this club for decades. They have been HCRA members much longer than I've been alive. Even though I am trying to focus on the future, I feel that I should also look into the history of our club and see how it has progressed throughout the years. Use the past to help look into the future.

Thanks to the efforts of John Balboni (AC1T) and John Pise (KX1X), we were able to digitize and share previous issues of Zero Beat as far back as 1976. These issues showed a lot of history of our club and what amateur radio was like back then. I've learned a lot by reading previous Zero Beats but I know our club is much older than that. I would like to share as much history as possible and showcase those who helped HCRA throughout the years and decades.

I was almost certain that we would not see anything earlier than 1976. People moved on and shacks were cleaned out. To some, it was just a pile of papers but to me, it was more. I wanted more knowing that it was out there... somewhere.

Just a week or two ago, Juergen Malner (NV1Q) reached out to David Isham (KB1MU) and asked for any HCRA history that he may have. Thankfully Dave presented Juergen with a crate full of wonderful memories. I was excited to hear about this potential treasure trove of history and couldn't wait to get my hands on it

Dave had archives of Zero Beat going back to the late 1940s. He did a wonderful job cataloging and preserving our club history. He even digitized most of the archives which must have been very time consuming and labor intensive. There were also some other items in the archive like the prepared statement for the fire that happened during the 1954 Field Day at Porteri Tower in Wilbraham. Also included were 35mm Slides of the fire that I'm in the process of digitizing for all to see. A big thanks to David Isham (KB1MU) for his work and effort.

We are currently combing and uploading the archives to our website. If you take a look at our Zero Beat archives that are available on our website, you will see some of the publications from the late 1940s and 50s. More will be added as time goes on and eventually everything that can be digitized will be available for all to see. Check back periodically for updates to the archives.

I would strongly suggest that you go back in time and read what it was like to be an amateur radio operator in Hampden County in the 40s and 50s. You will be able to experience how things were much different. What's even more interesting are the similarities of the past and present. Some things just don't change, even after 65 years.

ARTICLE FROM THE JUNE 1949 ISSUE OF ZERO BEAT

SPEAKING OF COMPLAINTS - we made the remark last month that there would be no more Zero Beat if we didn't get any more contributions. The above paragraph should be evidence enough what just a few responses can do to liven up the paper, and we sincerely appreciate the effort made by those of you who contributed - but it is still a doggone small percentage of our total membership. Keep 'em coming and we can still get the old sheet out.

From the June 1949 Edition of Zero Beat. It's interesting to see that some of the issues from the past are still here 66 years later. [Gary Fields](#) depends on you, the member for content. Please keep him and Zero beat in mind during your next project.

Text as follows

Speaking Of Complaints - we made the remark last month that there would be no more Zero Beat if we didn't get any more contributions. The above paragraph should be evidence enough what just a few responses can do to liven up the paper, and we sincerely appreciate the effort made by those of you who contributed - but it is still a doggone small percentage of our total membership. Keep'em coming and we can still get the old sheet out.

STOLEN FROM A JEFFERY BAIL POST ON FACEBOOK...IF YOU'RE NOT A MEMBER OF OUR FACEBOOK PAGE, JOIN TODAY!

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

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>

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 High School (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/>

HCRA contact list

President, Jeff Bail NT1K
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Treasurer, Juergen Mainer
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Skywarn Liaison, Eric Tuller N1QKO
et-n1qko@juno.com
VE Session Liaison, Dave Cote W1FAB
w1fab@arrl.net

DOTS & DASHES:

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

GENERATOR MAINTENANCE

With winter coming, I was going to write an article about generator safety, operation, and maintenance. This month's QST's Public Service column has a great article about the care and feeding of generators. It's a good read if you are a member of the ARRL. If not....another reason for you to join.

SHARE THE KNOWLEDGE

One of the great things about the HCRA, is the many talents of our membership. One of the things the BOD has been discussing is how do we share this knowledge. We would like to offer Saturday morning training sessions. As soon as we get 5-6 people who are interested, we will schedule the session. The topic will be setting up and using the DX Labs logging and rig control programs. If you're like me, I have always used a paper log, or a simple excel spread sheet, this is a chance to learn how to set up and use this popular logging program.

If you are interested, please RSVP to: walmow@arrl.net

Some of the other sessions we hope to offer are: An Introduction to Digital Modes, Basic Antenna Design, and Basic Tower Installation Tips. If you have suggestions, or would like to volunteer to "share your knowledge", for future session, please let us know.

INTERESTING HAM RADIO WEB SITES:

During bad weather, have you ever wondered about how many people were without power? Here are 2 websites that give you the current outages in both [Massachusetts](#) and [Connecticut](#).

AREA SWAPFESTS:

Oct 16/17	NEAR Fest XVIII	www.near-fest.org	Deerfield, NH
Oct 18	Flea at MIT	www.swapfest.us	Cambridge, Ma
	Nutmeg HamFest	www.nutmeghamfest.com/	Meriden, Ct
Dec 5	Vintage Radio Museum Swap Meet	www.vrcmct.org	Windsor, Ct
Feb 6	Connecticut Valley FM SwapFest	www.cvfma.org/	Springfield, Vt
Mar 5	MTARA HamFest	www.mtara.org	Chicopee, Ma
Mar 6	NEARC Swapmeet	www.nearc.net/swapmeetinfo.htm	Westford, Ma
Mar 12	ECARA HamFest	www.ecara.net/	Dayville, Ct
Apr 29/30	NEAR Fest XIX	www.near-fest.org	Deerfield, NH

CONTESTING:

OCTOBER'S CONTESTS:

Oct 3	California QSO Party	www.cqp.org/rules.html	CW
Oct 10	10-10 International 10-10 Day Sprint	www.ten-ten.org/index.php/activity	CW, Ph, Dig
	Pennsylvania QSO Party	www.nittany-arc.net	CW, Dig
	Arizona QSO Party	www.azqsoparty.org	CW, Dig
	Oceania CW DX Contest	www.oceaniadxcontest.com	CW
Oct 17	South Dakota QSO Party	www.kb0wsw.com/sdqp	CW, Dig
	New York QSO Party	www.nyqp.org/wordpress	CW, Ph, Dig
	Iowa QSO Party	www.wa0dx.org/iaqso	CW, Ph, Dig
	Work All Germany Contest	www.darc.de	CW, Ph
Oct 18	Illinois QSO Party	www.w9awe.org/ilqp	CW, Ph, Dig
Oct 19	ARRL School Club Round Up	www.arrl.org/school-club-roundup	CW, Ph, Dig
Oct 31	ARRL EME Contest	www.arrl.org/eme-contest	CW, Ph, Dig



FOR SALE:

If you have a piece of Ham Radio equipment to sell, send photo and details by the 20th of the month, to w1mow@arrl.net. All submissions will be screened for appropriateness, and content. The decision to publish is at the discretion of the ZB Editor

For Sale by Larry, W1AST – wb1dby@gmail.com, (413) 348-3289 (9 am to 9 pm)

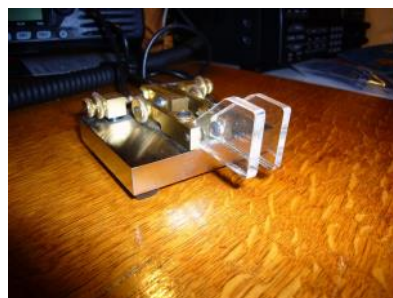
Icom IC-703+ QRP ½ watt to 10 watt portable radio with built in tuner, 80-6 meters, cw, ssb, data, big display, power poles power connection, pre-amp, RIT, attenuator, front headphone jack, front microphone jack, DSP, Dual VFO's, 99 memories, back lit keys, IF Shift, memory keyer, removable/remote head (requires remote head kit), easy to operate. Looks just like the IC-706 but with the features listed and much more. Also includes Heil Traveler Headset, original manuals and box. In excellent condition and operates great! PRICE: \$600 (a perfect portable radio for field, camping or home operation)



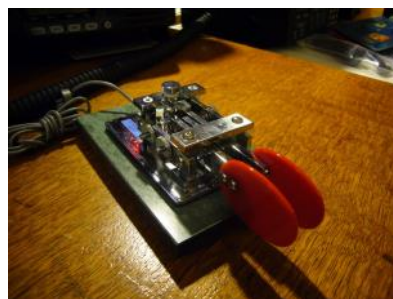
Vibroplex Code Warrior with black base, brass movements, clear paddle grips, perfect for portable operation as it's small and easily transported. Price: \$65 (new \$119)
(Great for the new cw op or experienced user)



Vibroplex Code Warrior with chrome base, Chrome movements, clear paddle grips, perfect for portable operation as it's small and easily transported. Price: \$95 (new \$149)(great for the new cw op or experienced user)



GHD 307WS paddles. Chrome with red finger grips mounted on a marble base. Beautiful to look at and operate. Price: \$100 (New \$229)



HCRA MEMBER'S PROFILE

This months Member Profile is Dan Vierno;

Dan is one of the founding members of POTA*413, a group that operates from Parks all over the area. He is also very active in RACES in the Southwick/Westfield area, and can be heard as the NET Control Operator on Tuesday nights ARES Net.



1. **Name:** Dan Vierno
2. **Town:** Southwick, MA
3. **Callsign:** KB1VWQ
4. **Previous Callsigns:** NONE - 1st issue
5. **License Class:** General
6. **Main station equipment:** Fixed: Yaesu FT-847 100w all band/mode, EME / 50' Rohn Tower / 2 element mini beam 20m - 10 (MQ-26SR)
Portable: Elecraft KX3 QRP 10w / Homebrew Open End Fed. 40m - 6m
7. **Favorite Band(s):** The one that's open
8. **Favorite Mode(s):** SSB and CW
9. **Year you were first licensed and license class:** 2011 / Tech
10. **How did you become interested in amateur radio?** The days following September 11th 2001, As I'd seen how amateur radio played an essential role.
11. **What are some of your favorite aspects of the hobby?** Public Service, POTA / SOTA
12. **What is your most memorable experience in the hobby?** Working under RACES in my hometown of Southwick during SNOW-tober. October 29, 2011 On duty, at the EOC as radio ops. Later, I was unable to make it back home after my midnight shift ended due to downed trees/wires... (1 MILE AWAY) I continued to work more EOC duties for another two hours before sleeping at the operations center in an Army cot, until morning post storm. (aftermath) Personally, my family went 7 days without main/commercial power. I learned a lot from that weather event.
13. **If different from the above question, what was your most memorable contact on the radio?** December 15th 2014. I was working under callsign W100AW, Centennial ARRL League Callsign... I was working through the HUGE pile up on 15 meters... Then, I HAD to just take a moment to have a sort of "informal" QSO with a gentlemen that contacted me to tell me, this QSO was his 1st contact in amateur radio in OVER 40 YEARS !!! And also, his 1st contact EVER on SSB, as he was strictly a CW operator. That station was K6MB, Gary Klemens... (which he even makes reference too, on his QRZ page). Thank you Gary, for the greatest QSO, I think I'll ever remember. dit dit
14. **What do you feel ham radio operators must do to help ensure the future of the hobby?** Proper operations and on-air courtesy...

THE AMATEUR RADIO PARITY ACT OF 2015: S-1685/HR-1301

The ARRL has announced that they expect the US House Bill HR-1301 will have 100 co-sponsors when congress returns after it's summer break. Currently there is only 1 Congressman from Massachusetts, District #2 James McGovern. District #1 (Where most of the HCRA resides.) Richard Neil has yet to sign on. It is time for us to step up and get involved. [You can find more information on getting involved here.](#)

Senate Bill S-1685 currently has only 2 co-sponsors: Sen Roger Wicker of Mississippi , and Sen Richard Blumenthal of Connecticut.





HAMPDEN COUNTY RADIO ASSOCIATION

P.O. Box 562
Agawam, MA 01001



Application for New or Renewal Membership

DATE: ____ / ____ / ____

NAME: _____ CALLSIGN: _____

ADDRESS: _____ LICENSE CLASS: _____

CITY: _____ STATE: _____ ZIP: _____

PHONE: Home (____) ____-____ Cell (____) ____-____

Work (____) ____-____ - ____ ext ARRL Member: ☐ Yes ☐ No

E-mail: _____ @ _____ ☐ I don't want to be a member of the HCRA mailing list

Type of application: ☐ New ☐ Renewal (see below)

If renewal use data already on file?: ☐ Yes ☐ No

Class of application: ☐ Regular ☐ Family

*Donations are tax deductible!
Thanks!*

Please list additional family members (family members at same household are free!)

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	

My interests: (please check all that apply, even if renewing)

<input type="checkbox"/> Alternative Power	<input type="checkbox"/> Digital Modes	<input type="checkbox"/> QRP
<input type="checkbox"/> Antennas	<input type="checkbox"/> DX'ing	<input type="checkbox"/> Satellite
<input type="checkbox"/> Board of Directors	<input type="checkbox"/> Emergency Communication	<input type="checkbox"/> Teaching Ham Classes
<input type="checkbox"/> Club Events	<input type="checkbox"/> Field Day	<input type="checkbox"/> Training (Elmering)
<input type="checkbox"/> Contesting	<input type="checkbox"/> Fox Hunting	<input type="checkbox"/> VHF/UHF
<input type="checkbox"/> CW	<input type="checkbox"/> Kit Building	<input type="checkbox"/> ?

Thoughts for improving 'our' club: _____

Received by: _____ Date: ____ / ____ / ____

Entered in database by _____ Date: ____ / ____ / ____

Payment received by _____ Date: ____ / ____ / ____

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



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

Don't forget your Dues!

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