



ZERO BEAT

Meeting Notice

The meeting room at the Holyoke Hospital is still on hold at this time. Until this changes, meetings will continue to be held on Zoom. Meeting links are in each months "From the Presidents Shack"

Welcome New Members

Lauren Kelley — KE1DW
Iain White — W1IKW

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Our 74th Year as a Club!

April 2022

From the editor,

Spring is upon us, we're coming out of the pandemic and with a little luck we should be having a normal Field Day this year. I'm sure by now you have heard about Project Big-E, HCRA is the home club for this high exposure event!

With so much coming, one thing every member should be thinking about is how YOU can help as volunteers for these upcoming events. If everybody helps, the end result is work that is easy and goes by fast!

Many things are coming in 2022, beginning with NEAR-Fest in N.H. April 29th & 30th, Field Day in June and the Big-E booth in the Better Living Center in Sept.

Bill, W1FMX's friend Dave, KN4LEL wrote a great article about going to HamCation in Florida. Smitty, KC1IKA has a current update on his new NCS's. Another article about the basics of FT8 plus the 13 Colonies SES is not far away! The STK schedule has been updated to include the Zoom access link in each meetings description.

I'm still looking for any club members that would like to submit an article, or maybe you have a suggestion for an upcoming article? Drop an email to myself at kd1ku@arrl.net. Spring is in the air, but don't forget to take part in club activities such as the 10 meter net, STK & above all, club meetings! I hope to see you at the April Show n' Tell Zoom meeting or STK presentation.

73, Ken - KD1KU

April 1st Show & Tell Meeting

This is always a must attend meeting with our members!

Show and Tell is a wonderful meeting where club members can show off what they've been building during the long cold winter month's that we are just starting to come out of!

The Zoom meeting begins at 7pm with a social rag chew 1/2 hour.
Regular Zoom meeting begins at 7:30pm on Friday, April 1st

Besides the regular Zoom meeting don't forget to check out the "Share The Knowledge" mini-Zoom meetings. Tell your friends to check out the updated STK schedule on page 3. STK Zoom meetings are open to everyone and the Zoom links are on page 3.

Upcoming Zoom Meetings and Guest Speakers

 <p>September 2021</p>	<p>Everything you need to know to work satellites with equipment you already own by Gary, AA1UE</p>
 <p>OCTOBER 2021</p>	<p>Fred Kemmerer, AB1OC will speak on his plans to be the next NE Director. After his presentation he'll be taking questions from you. This is your chance to ask him your questions... one on one.</p>
 <p>November 2021</p>	<p>November 5th 2021 How you can create and maintain your very own You Tube channel. Plus, How you can start your own POTA Activation by Rob, N1NUG</p>
 <p>DECEMBER 2021</p>	<p>The Annual HCRA Holiday Party at The Steaming Tender Restaurant December 6th, 6:30 to 9:30pm A Night of Food and Fun! (subject to change due to Covid variant)</p>
 <p>JANUARY 2022</p>	<p>All About EMCOMM or Emergency Communications including Go-Boxes and several ways to power off grid operations by Charlie, KC1KA</p>
 <p>FEBRUARY 2022</p>	<p>Ken Caruso, W01N ~ President of the Yankee Clipper Contest Club will be giving a special presentation about the YCCC and what its all about!</p>
 <p>MARCH 2022</p>	<p>All About The New England Forest Rally by Paul, W1SEX</p>
 <p>April 2022</p>	<p>Show and Tell is back... Enter your projects and win prizes! This has always been one of the very best and most interesting meetings</p>
 <p>MAY 2022</p>	<p>All about Antenna Modeling and how it benefits you by Greg, WA1JXR</p>
 <p>JUNE 2022</p>	<p>Elections, Field Day prep and more. Please consider running for a board position, HCRA is better with you involved!</p>



SHARE THE KNOWLEDGE MEETINGS

STK ZOOM MEETING SCHEDULE FOR 2022

The Zoom access links for this Springs remaining Share the Knowledge Zoom meetings are listed with each STK meeting announcement. Larry, W1AST has worked extremely hard to put all of these Share the Knowledge meetings together for everyone's benefit and enjoyment!

If you have a topic to suggest or to give a STK presentation contact Larry at hamop.w1ast@gmail.com

Mark the following dates on your calendar, whatever you do don't miss a single one!
All STK presentations are held on Tuesday evenings at 7pm

January 25th - 7pm	D-Star - What is it and how to use it	By Cory, KU1U	✗
February 8th - 7pm	Introduction to FT8 & FT4 Digital Modes	By Dom, N1DM	✗
February 22nd 7pm	Traffic Handling and the Radiogram	By Marcia, KW1U	✗
March 8th - 7pm	JS8call: What it is & what it does for you	By Aaron, KF1G	✗
March 22nd - 7pm	SOTA: How to activate	By Harold, N1FTP	✗
April 5th - 7pm	The W1 QSL Bureau - What it is and Does https://us02web.zoom.us/j/88247448378?pwd=Qm0xUFRGMFE3bEUvQ0ZQbW1aNzhGZz09	By Eric, KV1J	✓
April 19th - 7pm	Using Propagation Prediction Software https://us02web.zoom.us/j/88209441442?pwd=d0toUGF1RIRINkxNTzFmd0NraDIQUT09	By Dennis, W1UE	
April 26th - 7pm	Everything you need to know about NEQP https://us02web.zoom.us/j/83822989755?pwd=T1pNUEhlb3R4MnRmUWFxdXdVZ2dQdz09	by Tom, K1KI	

Did you miss any of the Share The Knowledge presentations? Want to watch one again?
Watch any of the past STK meetings by clicking or copying the link below
https://www.youtube.com/channel/UCNXFxFYBbWxF5BxELHFF_ZQ



April 2022 - From the Presidents Shack

The April meeting is always one of the most anticipated meetings of the year. April is the Show and Tell month. A meeting where you get to show off what you built or started building in the past year since the last Show & Tell.

Whether you are assembling your first antenna, constructing a balun, assembling a kit or home brewing something. All construction projects are welcome to be shown. No project is too small.

It never fails. You show off something and someone else is interested in building the same. The HCRA members cover a range of long-time hams to brand new hams. What you are building is of interest to all.

Join us on Friday, April 1st at 7:30 pm for the Show and Tell Meeting. The virtual doors open for pre-meeting chat at 7:00 pm. Here is the link for the meeting:

<https://us02web.zoom.us/j/81083753545?pwd=bFFEYUhtdUVmMmcyZFFSLy9RYXVGZz09>

As some of you know, I started a big project in January of 2021. That project is to put a booth at the Big E in September of 2022 showcasing modern ham radio to the public.

This is a big opportunity to show the public that ham radio still exists and what it can do. Not only as a hobby, but also as public communication and emergency communication. It is our goal to set up a modern booth showcasing newer ham radio technology and also doing a 17 day special event station.

It will be the largest ham radio demo booth in New England as far as the number of people that will be exposed to it. It may be the largest in the country too. We hopefully will also have the support of the ARRL as well as clubs across New England. This is something that can benefit all of us here locally and across New England. It's BIG and you should think about becoming one of the volunteers.

Through my contacts, I have secured a 300 square foot booth in the Better Living Center, which is the most popular building at the Big E. We will have electricity and internet. We have access to the roof to put up a few antennas. We will have the support of Icom for a few loaner radios and maybe Flex. We are reaching out to more manufacturers for their support to loan us equipment.

We are hoping to have two HF stations running as well as possibly a remote station being one of those. There is also the possibility of a few hot spots for D-star, DMR and possibly Fusion. We will have a few big displays. We hope to show digital communications, ARISS contacts, kit building and much more.

Continued on page 5

FROM THE PRESIDENTS SHACK CONT'D

The HCRA is the base/home club for this event. There are clubs across New England that are supporting this effort too. This is a HUGE opportunity to show what ham radio is and what it can do to possibly 1.5 million people that attend. There will be sign-ups for people interested in learning and taking classes.

The Project Big E should generate a sizable amount of people interested in taking a local ham class. This is another area where we are going to need you, the HCRA member, to help us teach a Tech class sometime in the Fall of 2022 or early Winter of 2023. We are going to need your help. Please consider volunteering to teach a section of the Technician license when we ask in the fall. You'll be helping not only the HCRA but Amateur Radio too.

Back to the Big E. Once a few behind the scenes items get completed in the next 30 days, the project is going to move forward at an accelerated speed. We will need volunteers for the following:

- ◆ Staffing the booth each day – 12-13 hour days, split into 6-7 hour shifts each day
- ◆ Building the booths displays
- ◆ Assembling the booth
- ◆ Creating an electronic sign up for interested booth visitors
- ◆ Creating an electronic sign up for visiting hams (active and not)
- ◆ Operators for the special event stations
- ◆ Possible overnight hosts for visiting hams from far away portions of New England
- ◆ Building and assembling the antennas on the Better Living Center roof and running the cables to the booth
- ◆ When it's all over, it will all need to be disassembled

This is a BIG Project and we're going to need your help. Think about volunteering. You can learn more and keep up to date by joining the group at:

<https://groups.io/g/ProjectBigE>

Spring looks to finally be upon us. That means soon the foxboxes will come out of hibernation and go into hiding again. They will be waiting for you to find them. Stay tuned to Zero Beat, the HCRA email list, the HCRA FaceBook page and the WMA FoxHunters group at:

<https://groups.io/g/WMAFoxHunters>

Are you going to NEAR-Fest in NH this Spring? It's early this year as it's April 29th and 30th (Friday and Saturday). Here is the web site for more info. I hope to see you up there.

<https://near-fest.com>

The club is looking for another location in the Springfield - Holyoke location to use to hold meetings in person. Until the hospital allows the public to meet, which may still be a long way off, we are thinking about finding a temporary meeting location. If you know of a place or have an idea, please send it to:

hamop.w1ast@arrl.net

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April 1st Zoom meeting link. Pre-meeting chat at 7pm, meeting at 7:30pm

<https://us02web.zoom.us/j/81083753545?pwd=bFFFEYUhtdUVmMmcyZFFSLy9RYXVGZz09>

FROM THE PRESIDENTS SHACK CONT'D

The club needs nearby, safe parking, handicap access, easy to get to as we have attendees from up north and down south, so not too far from the 91 corridor. A room with chairs that can hold 75 to 100 people is all we need. A PA system and Wi-Fi would be nice, but not required. Also, we do not want someplace that requires us to buy a meal or make a purchase to use the location.

Field Day is coming up for June 24-26th. That's a Friday through Sunday. Field Day is one of the most enjoyable operating events in the year. It's when hams get together to help erect portable towers, assemble antennas, set up portable shelters and radio stations in those shelters. Then we operate for 24 hours from 2:00 pm on Saturday through 2:00 pm on Sunday. Then we take it all down again.

Once again, the HCRA will be at the School Street Park in Agawam. This is a beautiful, wide open public park. We will have the use of the men's and women's bathrooms, the band shell, and our area behind the band shell.

We need volunteers. If you are interested and available, please let me know via email at hamop.w1ast@gmail.net and what you would like to do and what time (if you're volunteering to operate).

- ◆ Friday setup
- ◆ Generator loan
- ◆ Food
- ◆ Operating (preferred band if any and mode and time)
- ◆ Stay over Friday night
- ◆ Stay over Saturday night
- ◆ Tear down Sunday
- ◆ Manage the GOTA station and help get people on the air

There are room for campers and tents for those that wish to spend Friday and Saturday nights. I'll be there from Friday through Sunday.

Get involved and join in the Field Day Fun!

Increasing sunspot numbers are greatly improving HF propagation. Turn on your HF radio and you may be surprised what and where you can hear. HF is a blast and if you are not on or have not been on yet, there are plenty of club members that can help you experience what HF operating is all about. You just need to ask.

Best 73 to all,
Larry, W1AST
HCRA President
hamop.w1ast@gmail.com

2022 HAMCATION

A TRIP TO HAMCATION IN ORLANDO, FL. BY DAVE, KN4LEL

After going QRT in 1974 and not getting back into the hobby of amateur radio until 2018, I was itching to attend a large Hamfest! Living here in Florida I have attended a couple of small Hamfests since 2018, which kind of wetted my appetite for some sort of huge Ham Radio event.

Looking through my latest copy of CQ Magazine, I saw the advertisement for the 2022 HamCation, in Orlando, Florida. I thought Orlando was only a couple of hours from my QTH, so I probably should check it out in the very near future!

About a week before the event. I began to talk myself out of attending this event. The usual excuses started to play on my mind. I have a ton of things that need to be done at the house, and I really don't want to make the 2-hour drive by myself. I have all the gear I need. I don't need to buy anything else. The day before I planned to take this trip, my wife asked me what time I would be leaving? I told her I was cancelling my plans for this event. I have one of those wives that knows me better than I do. She figured that I did not want to make the drive alone, and said she wanted to go and see for herself what this thing was all about? She is the kind of woman that could make something fun out of something that is considered boring to women. I had to ask her why she would want to see a bunch of Ham Gear, and that there would not be much to interest her? She insisted that she go. So, on Friday morning we made the drive to Orlando.

My last experience with a huge Hamfest was in Dayton, Ohio, 1968, at the ripe age of 15 years old. As I remember, that Hamfest had just tons of gear. A lot of the 1950's Boat Anchor gear, and a lot of military surplus electronic gear, not to mention tons of radio parts. I did not have much money so I left this Hamfest empty handed. So here I am 53 years later entering the HamCation, at age 68.

The HamCation did not disappoint me. The event is truly massive! Hundreds of tables of new, and old gear for sale. I told my wife if you had a project to build, and had a parts list, you would be able to find all the parts at this Hamfest for less than half cost. The gear being sold covered the entire spectrum, and history of Ham Radio from the 1930's to present day. Just some of the names of the gear being sold were Johnson, Collins, Heathkit, Swan, Knight, Drake, and Galaxy. The newer gear was represented well with Kenwood, Icom, and Yaesu in abundance. I was surprised to see quite a bit of WWII surplus radio gear for sale.

I ran across the venerable BC-348 general coverage receiver at many tables. The cost for these sets was very reasonable at \$50.00 to \$75.00 each. This receiver in its day was top notch. I suspect so many of these units were present, as they were the very last to leave the shack even in these modern times. Being an old gear hound, and a Drake collector, my wife and I were both surprised the lack of Drake gear that was found.

We only saw two pieces of Drake gear on display for sale in the entire event, a Drake TR-3, and a Drake TR-4C transceiver. This was kind of amazing, considering the size of this event. I had to think that Drake gear must be in high demand these days.



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2022 HAMCATION Cont'd

A TRIP TO HAMCATION IN ORLANDO, FL. BY DAVE, KN4LEL

I have to say, due to the size of this event you must spend more than one day to take in everything that this event offers. The Commercial Building alone was amazing! All the current new gear is displayed by most of the major Ham gear manufacturers.

A lot of this gear you can interact with, and try out. I stopped by the Radio Wavz Antenna booth and talked with their reps and I ended up purchasing a 160-meter Double Bazooka Antenna at this booth. I then stopped at the MFJ booth and chatted with a rep there, and got information on a C.W. interface, and decoder. I purchased one of these also from Ham Radio Outlet, at a reduced show special price.

This event also offers a complete class, and seminar calendar on just about every aspect of ham radio you can think of, being conducted by some of the very best in the field that specialize in the areas they talk about. The cost for HamCation was \$30.00 per ticket for the 3 days. I consider it well worth the cost, for all that is offered. My one-day venture at HamCation was very interesting and fun. I was able to talk with so many great hams, even my wife enjoyed talking with the folks there. I have to say hams are fun and interesting people to chat with.

I highly recommend this Hamfest, if you are in the Orlando area when this event takes place do not miss it! As a ham you will find it time very well spent!

73,
Dave
KN4LEL

Volunteers Needed for Field Day, Big-E Booth and More!

Beginning in June with Field Day and right through the duration of the Big-E in the fall, your HCRA has lots of exciting things planned that will put your club on the map like nobody before!

Starting with Field Day, volunteers are needed for set-up on Friday, June 24th at the School Street Park in Agawam and with breakdown at the end of the weekend after the end of the event at 2pm. Other help is needed during the weekend including food prep, cooking, operators and many other tasks!



Not that our club members need any motivation to volunteer, there will be a raffle for a wonderful prize. To be eligible for this raffle, you must work at least three consecutive hours during the weekend. There is plenty to be done and watching doesn't count as working. If you are not sure where you're needed, just ask someone.



The Big-E project will also need plenty of volunteers as well. From building the booth, setting everything up before the Fair opens to working the booth operating, talking with Fair-goers and don't forget there will be a special event station running the entire fair! HCRA is the "Home" club for this event as other clubs from New England will also help. If you would like to start this off by volunteering contact Larry at hamop.w1ast@arrl.net Get the latest Project Big E information by joining <https://groups.io/g/ProjectBigE>

SHOW YOUR SHACK!

THIS MONTH'S FEATURED SHACK IS THAT OF HAROLD, N1FTP

Hello, this is Harold, N1FTP.

I have been shortwave listening since 1967 and graduated to ham radio in 1985. Looking at the attached pictures, you will see my test bench in the photo to the right where I like to repair radios, especially the old tube radios.

I also build quite a few power supplies and kits. The photo below shows the 19" rack that I use for rack mounted power supplies, VHF/UHF radios, battery backup, and antenna switch.



(1) Harold's work and test bench

Below is my operating bench where I mostly operate SSB, RTTY, FT4, FT8, and now JS8Call.



(3) Harold's operating position, where many QSO's are held



(2) Rack holds VHF/UHF Radio's & Coax Switches

On the next page the photo 4 shows my AM bench where I would like to build an AM transmitter to go along with the Hammarlund HQ-129X. It would be a low output 6V6 or 6L6 tube type transmitter or if I can find one, a Heathkit DX-40 or DX-60.

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SHOW YOUR SHACK! Cont'd

THIS MONTH'S FEATURED SHACK IS THAT OF HAROLD, N1FTP



(4) Harold's AM bench and Hammarlund HQ-129X

The two flat screens in photo 3 are used for DXLabs. A great, free, and very versatile program. For contesting I use N3FJP's Amateur Contact Log program.

The photo below shows my shortwave radios that I use along with a mp3 recorder for those early morning programs that I don't want to set an alarm clock for... Besides hundreds of shortwave QSL's, from the ARRL I have DXCC, and WAS for 20m and 40m. I am not in any rush to get more awards, I just enjoy the hobby and all its modes.

I have a Yaesu FT-857D in a GO box that I use for SOTA activations. For an antenna I use either tuned dipoles or EFHW antennas that I built. For HF operation I use a Mosley TA-33 yagi with 10, 12, 15, 17 and 20 meter elements on a 30 foot tower along with a 40m tuned dipole.



(6) Shortwave radios & MP3 Recorder for early morning programs

Below in photo 5 is my pride and joy, an Icom IC-756 Pro II. I use it for DXing, contesting, and chasing POTA, SOTA station as well as Special Event Stations.



(5) Harold's pride & joy is a beautiful Icom IC-756 Pro II

For VHF/UHF operations I use a 3 element yagi for 2 meters, 5 element yagi for 440 and a 3 element yagi for 6 meters.

I also have an Icom ID-880H for D-Star. The best part of this hobby is that it is so diverse and never a dull moment.

73 for now,
Harold de N1FTP

Want to see your shack in Zero Beat? Send a few pics with a brief description to kd1ku@arrl.net

ITEM'S FOR SALE

HCRA MEMBER ITEMS FOR SALE, TRADE OR WANTED

FOR SALE!

Ham Equipment from the Estate of W6IS - Contact Larry, w1last@arrl.net

- 1: Collins 75S-1 \$500
- 2: Kenwood Model TS940S \$600
- 3: Collins Type 5164 - 2 S/N 10378 (Make Offer)
- 4: Collins 32S - 1 \$500
- 5: Sprague tube tester Model (Make Offer)
- 6: Kenwood SP430 Speaker \$20
- 7: Samlex America Model SEC1212 Switching DC Power Supply \$25
- 8: Yaesu FT727R Dual Band Handie Transceiver 2 Meters \$10
- 9: ICOM IC210OH w/mobile mic \$50
- 10: Yaesu FT - 109RH Handheld \$10
- 11: Yaesu FT - 209RH Handheld B \$10
- 12: Collins Station Control Model 312B - 4 \$150
- 13: Butternut HF2V 80 & 40m Vertical Antenna Brand New in box (HRO List \$450) ONLY \$250
- 14: Astron PS - 12A \$20
- 15: HY-GAIN Tail Twister Direction Control Model T2X \$55
- 16: RCP Radio City Products Model 664 \$25
- 17: Yaesu SP55 Speaker \$15
- 18: Precision 120 Meter (Make Offer)

PRICE REDUCED

Note: I purchased the FT-1000D and SP-5 Speaker from the W6IS estate and everything was in pristine condition as if it were new. Irv kept his equipment in excellent condition and you won't regret buying it!

Ken, KD1KU

Do you have an item(s) that you would like to sell? Or something you are looking for?
As long as it's ham radio related, list it here by contacting: kd1ku@arrl.net

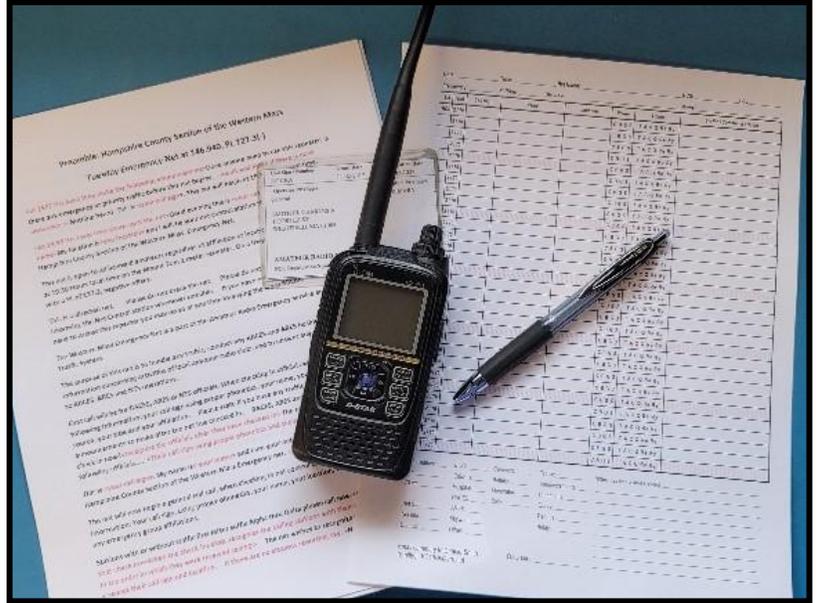
WMA ARES ASEC Net Manager Update

NET CONTROL STATION RECRUITMENT STATUS REPORT

Greetings everyone!

Winter has passed and we are heading into Spring and warmth. This Winter was very active with storms and plenty of action on the Skywarn nets. Thank you to everyone who provided reports and the Net Control Stations who assisted with taking the reports and forwarding them to the Skywarn liaison to the NWS.

If you would like to get trained as a Skywarn Spotter go to <http://wx1box.org/> to sign up for the training sessions. They are only doing remote training via Zoom so you won't have to drive anywhere. Sign up soon, these classes fill up quickly.



Speaking of training, the Western MA ARES web page, <https://wma.arrl.org/western-mass-digital-training/> has a sign-up form for stations looking for training in digital modes. You can sign up for WinLink, FLDigi, and, JS8Call training. The training is free and it will add to your EmComm skill set.

We are also still looking for three stations to sign up for NCS positions for the ARES nets. We will provide free training and you will only work one shift a month. We have one Tuesday evening shift and two Sunday morning shifts available. It only takes an hour for the Sunday morning and half an hour for Tuesday evening shifts, once a month. This will give you great practice listening to call signs and will help if you enjoy contesting.

If you have any questions or would like to sign up for training, please contact Smitty, KC1IKA at KC1IKA@ARRL.net. Smitty is the Assistant Section Emergency Coordinator and Net Manager for Western Mass ARES.

73,
Smitty, KC1IKA
ASEC, Net Manager, WMA ARES



13 Colonies Special Event

Be a Part of this Special Event Station July 1st ~ 7th

Each year from July 1 through July 7 the 13 Colonies special event stations are on the air. The goal is to work all 13 of the colony stations plus the extra bonus stations. This is a fun event that hams of Massachusetts are part of.

The call for Massachusetts is K2H. Team K2H is looking for a few additional operators to activate K2H during the 7 days of the 13 Colonies special event station.

If you have ever wanted to be on the receiving end of a DX pileup, this is a fun way to do something very similar.

Last Year the Team K2H ops worked 15,265 stations. We are aiming to beat that this year due to much better band conditions.

Would you like to be a part of Team K2H?

Last year eight of the 20 team members were HCRA members too.

We're looking for hams that can commit to operating at least 5 of the 7 days and work at least 500 contacts, which is very easy to do.



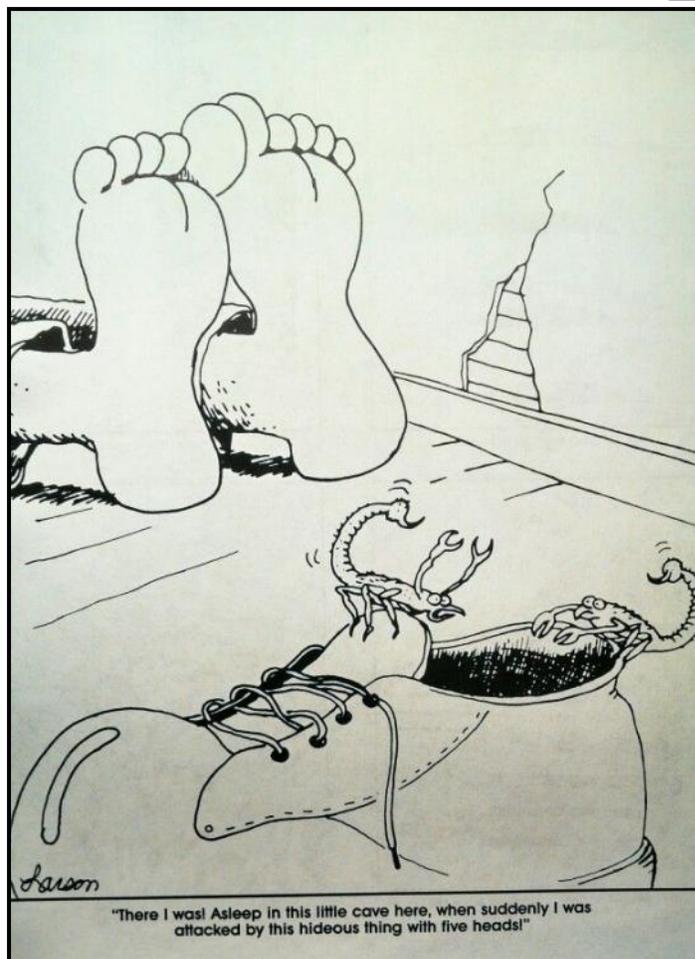
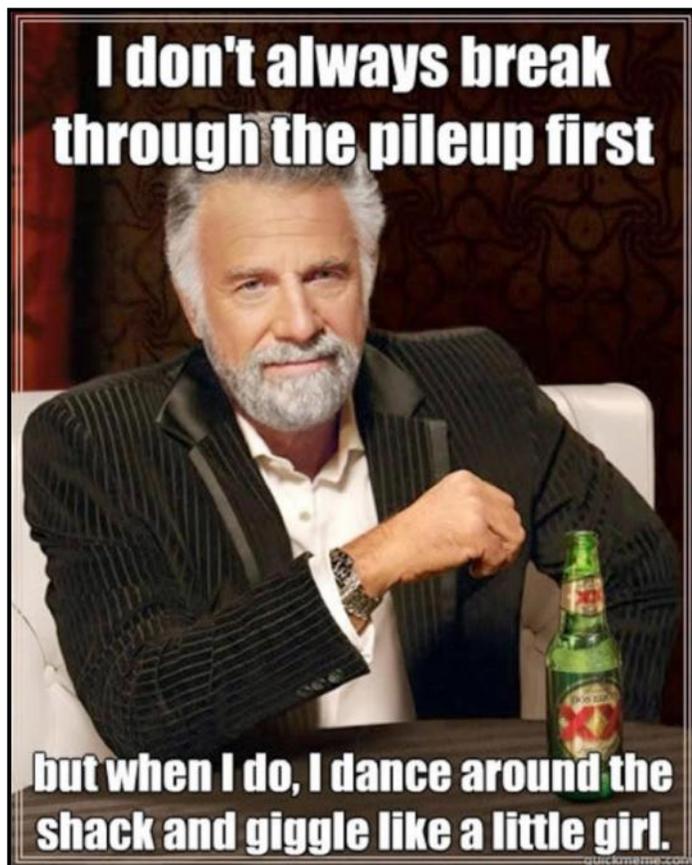
You can operate SSB, CW, Digital or Satellite.

All logging must be on a computer program that can export in ADIF file format.

If you would like to join the team or learn more, please contact:

Larry, W1AST at: w1ast@arrl.net

The last day to sign up to be an operator is **Thursday, June 9th.**



Things are happening in the world of Amateur Radio. ARRL is our advocate for Government, education and organization. I hope everyone that is a member of HCRA is also a member of ARRL.

Well, with both conventions, and the post-covid opening of venues, this should be even more fun!!

HamXposition to Host ARRL New England and Hudson Division Conventions

In what may be a “first,” the Northeast HamXposition will host both the ARRL New England and Hudson Division conventions this year. HamXposition takes place August 26 – 28, 2022, in Marlborough, Massachusetts, and tickets will become available May 1.

Formerly known as “Boxboro,” the New England Division Convention features a Saturday morning keynote address, Friday and Saturday evening banquets with guest speakers, a large outdoor flea market, and ample indoor vendor space. Proceeds from the convention will benefit scholarships for both New England and Hudson Division students. Volunteers and speakers will be drawn from both Divisions. Other details will be worked out as things progress.

“It certainly has been a while since the Hudson Division has had a convention,” said ARRL Hudson Division Director Ria Jairam, N2RJ. “By joining forces with the New England Division for a joint convention, we can bring back a sense of nostalgia and community.”

New ARRL New England Division Director Fred Kemmerer, AB1OC, said, “We are excited to have the Hudson Division join with New England to support and grow the 2022 HamXposition event.” Kemmerer called it “a great opportunity to expand HamXposition participation and programs, and [to] work to provide support for the scholarships to young hams in both Divisions.”

ARRL First Vice President Mike Raisbeck, K1TWF, predicted larger attendance than has been seen in many years.

In February, FEMARA, the organization that runs HamXposition, voted to officially approve the unique arrangement. The combined events have received ARRL Division convention sanctioning, approved by Directors Kemmerer and Jairam. Both are members of the HamXposition Convention Committee, along with New England Division Vice Director Phil Temples, K9HI, who serves as the Program Chair. Vice President Raisbeck is the FEMARA President and the convention’s Vice Chair.

Raisbeck said HamXposition will return to the venue selected for last year’s event — the Best Western Royal Plaza Hotel & Trade Center in Marlborough. “The new facility has everything we had hoped for. It is newer and larger than our old venue, and is more centrally located with restaurants, shops, and other hotels only minutes away,” he said. “We have long-term commitments from the hotel, and we plan to be at this location for the foreseeable future.”

Visit the convention website for more information, such as how to volunteer, serve as a speaker, and take advantage of the convention discount when booking hotel reservations.

Western Massachusetts Section News: <https://wma.arrl.org>

ARRL New England Division: <https://nediv.arrl.org>

ARRL Western Massachusetts Section Manager - Raymond P. Lajoie, AA1SE - aa1se@arrl.org

To learn more about an ARRL membership, and how it can help you - <http://www.arrl.org/membership>



Things are happening in the world of Amateur Radio. ARRL is our advocate for Government, education and organization. I hope everyone that is a member of HCRA is also a member of ARRL.

One of the best ways to ensure you are operating within your privileges is to progress to Amateur Extra license level. Next best is to keep the ham band [chart](#) at your operating station.

Volunteer Monitor Program Cautions against Operating Beyond License Privileges

Many of the Advisory Notices sent out each month by the ARRL Volunteer Monitor Program go to stations heard operating outside the operator's license privileges.

Typical cases often involve operators holding Technician- or General-class amateur licenses being heard on a frequency or band not permitted by their license privileges. Most recent incidents have frequently entailed FT8 digital mode operation by Technician licensees on 20 and 40 meters. Technician licensees do not have any operating privileges on 20 meters, let alone digital privileges, and FT8 is a digital protocol.

Technicians (and Novices) may operate CW between 21.025 and 21.200 MHz on 15 meters, from 7.025 and 7.125 MHz on 40 meters, and from 3.525 to 3.600 MHz on 80 meters, but they do not have any digital (data) mode privileges on these bands.

ARRL Volunteer Monitor Program Administrator Riley Hollingsworth, K4ZDH, said licensees who need a refresher course regarding their operating privileges may refer to Section 97.301 of the rules. ARRL also has a convenient chart on its website that details privileges available to all license classes, from Novice to Amateur Extra.

As monthly Volunteer Monitor reports indicate, some General-class operators have lost their way on some bands too, and Advisory Notices have gone out to those operating outside of the General-class phone subbands. For example, on 20 meters, Generals may operate phone from 14.225 to 14.350 MHz, but occasionally, General-class operators are heard outside of that subband. On 40 meters, the phone and image subband open to General licensees is 7.175 to 7.300 MHz. Of course, Technician- and General-class licensees may operate CW on any subband on which they have operating privileges, although operation within the CW subbands is preferred by band plan.

On 10 meters, Technicians have RTTY and data privileges — including FT8 — from 28.000 to 28.300 MHz, and SSB phone privileges from 28.300 to 28.500 MHz, and may operate on CW over the entire 28.0000 – 28.500 MHz segment. Technicians may enjoy all operating privileges at 50 MHz and above.

The ARRL Volunteer Monitor program is a formal agreement between the FCC and ARRL. Volunteers trained and vetted by ARRL monitor the airwaves and report evidence that may be used to correct errant operation or to recognize exemplary on-air operation.

To learn more about ARRL membership, and how it can help you - <http://www.arrl.org/membership>





HCRA STUFF

HCRA is an ARRL Special Service Club



2022 Volunteers Needed

Field Day is June 24 - 26th, as Covid continues to ease it will allow us a normal Field Day. Your board of directors have begun planning activities for this years FD. There will be a raffle held for volunteers who work a minimum of 3 consecutive hours during setup, food prep & cooking, operating or teardown plus anywhere help is needed.

The Big-E Fair Booth in the Better Living Center needs help with setup, booth workers, running the special event station, teardown & much more! HCRA is the "Home Club" as other clubs will be helping as well during the.

Please consider volunteering for these events. HCRA is at its best when members like YOU take an active part in all club activities.
Contact Larry, W1AST at hamop.w1ast@arrl.net

Monday Evening 10 Meter Net

Monday evenings HCRA hosts a 10 meter net at 7pm on 28.375 usb. This is a fun net where everyone is invited to participate regardless of club affiliation. Besides having a topic or open mic we have begun to have a trivia question which has turned out to be a fun experience! 28.375 is in the Tech portion of the band plan so hams new to the hobby can take part in the fun too. I hope you will join us each Monday evening at 7pm and if possible, please tell a friend! Questions? Contact kd1ku@arrl.net

Brown Baggers are Back!

For the benefit of our newer members Brown Baggers is a friendly lunch get together that happens on the 1st and 3rd Wednesday of each month. It is held at [The Munich Haus Restaurant](#) in Chicopee Center at 12:00pm (Noon). Located at 13 Center St, Chicopee, MA. Across from City Hall or click the link above.

Enjoy lunch, conversation and camaraderie with your fellow hams. Everyone is welcome!

Memorial Page

All members now have the opportunity to honor club member SK's in the all new Memorial Page on hcra.org. This can be done by sending in the SK members name and callsign along with any text, stories and can also include photo's too. Send them to our webmaster, Vanessa, W1IRL at the following email address: webmaster@hcra.org

**Please check-out the HCRA You Tube Channel and while you're there don't forget to click subscribe!
I hope that many members are working on their short video's for the club's You Tube channel.
For more info see the April issue of Zero Beat. The You Tube Channel link is below**

For Sale Items

There is a For-Sale section that is for HCRA members. Any members who have a want, something to sell or even to trade.

Send item description and photo(s) to:
kd1ku@arrl.net

HCRA Social Media Links

You Tube: <https://www.youtube.com/HampdenCountyRA>

Facebook: <https://www.facebook.com/groups/HampdenCountyRA>

Twitter: <https://twitter.com/HampdenCountyRA>

Instagram: <https://www.instagram.com/hampdencountyra>

FT8 MODE BASICS

WHAT IS IT AND HOW DO I GET STARTED?

Joe Taylor, K1JT, announced the availability of a new mode in the WSJT-X software suite, FT8, on June 29, 2017. Created by K1JT and Steve Franke, K9AN, FT8 stands for “Franke-Taylor design, 8-FSK modulation.” WSJT-X is a computer program used for weak-signal radio communication between hams. Note that this says weak signal and not necessarily low power. The program was initially written by K1JT, but now it’s open source developed by a team.

Writing about the FT8 protocol several months after its release, K1JT highlighted some of its important characteristics:

- ◆ T/R sequence length: 15’s
- ◆ Message length: 75 bits + 12-bit CRC
- ◆ Modulation: 8-FSK, tone spacing 6.25 Hz
- ◆ Constant-envelope waveform
- ◆ Occupied bandwidth: 50 Hz
- ◆ Synchronization: 7×7 Costas arrays at start, middle & end
- ◆ Transmission duration: $79 \times 1920 / 12000 = 12.64$ s
- ◆ Decoding threshold: -20 dB; several dB lower with AP decoding
- ◆ Multi-decoder finds and decodes all FT8 signals in passband
- ◆ Optional auto-sequencing and auto-reply to a CQ response
- ◆ Operational behavior similar to JT9, JT65



Getting Started: You need a radio with SSB capability. HF or SSB VHF is where FT8 can be found. You also need an audio interface. Some radios have this built in, requiring only a simple USB cord. The ICOM IC-7300, Yaesu FT-991A, and Kenwood TS-590SG are good examples of base stations that have this built-in capability. The ICOM IC-7100 HF/VHF/UHF transceiver is a mobile radio that has the audio interface built in.

If your radio does not have a built-in sound card interface, you can still access this function through an external sound card. There are quite a few products that can be used for this. One of the most popular is the [Tigertronics Signalink USB Interface Unit](#).

Now that you have the necessary hardware, you need software to run the program. You can download WSJT-X from the WSJT-X [website](#), which notes:

“WSJT-X implements communication protocols or ‘modes’ called FST4, FST4W, FT4, FT8, JT4, JT9, JT65, Q65, MSK144, and WSPR, as well as one called Echo for detecting and measuring your own radio signals reflected from the Moon. These modes were designed for making reliable, confirmed QSOs under extreme weak-signal conditions.”

What constitutes a QSO in FT8? Here’s an example of an FT8 contact:

“CQ KE8FMJ EM89”	CQ call from KE8FMJ
“KE8FMJ N8DXE EN91”	N8DXE replies with location
“N8DXE KE8FMJ-10”	KE8FMJ responds with a signal report
“KE8FMJ N8DXE R-09”	N8DXE replies with own report
“N8DXE KE8FMJ RR73”	KE8FMJ says Report Received & Best Regards
“KE8FMJ N8DXE 73”	N8DXE says Best Regards

Each message takes 15 seconds to send. There are four slots per minute; you transmit for one 15 second block, listen for replies for 15 seconds, and transmit again for 15 seconds. Therefore, the above exchange would take about 90 seconds for a full QSO!

Learn FT8 & more on the HCRA You Tube Channel: <https://www.youtube.com/user/HampdenCountyRA>

Clublog update: Clublog can be accessed at <https://clublog.org/league.php> Signup is free, and there are a number of ways to lookup information. Give it a try, who knows... you just might like it!

This is the HCRA Clublog for 2022 - you can see who has been on the air hot and heavy so far this year!
HCRA Clublog Information Updated on March 27th 2022



- Your Log
- DXCC Charts
- Satellite Charts
- Timelines
- Grid Squares
- QSL Charts
- Zone Charts
- Log Inspector
- Log Matching
- League Tables
- DXCC Leagues
- Satellite Leagues
- Zone Leagues
- Club Leagues
- CDXC Challenges
- Super League
- Uniques League
- Tools
- DX Cluster
- Log Search
- Call Tester
- Most Wanted
- DXCC Analysis
- Propagation
- Great Circle Maps
- LoTW Sync
- ADIF Diff
- QSL Archive

DXCC Leagues

The leagues are rebuilt once per day. Only callsigns active in the last 12 months are included in the league tables. The maximum size of a league is 2000 participants.

<input checked="" type="radio"/> No Mode Filter	<input type="radio"/> CW	<input type="radio"/> Phone	<input type="radio"/> Data
<input checked="" type="radio"/> Rank by DXCCs	<input type="radio"/> Rank by slots	Rank by band: Totals ▼	
<input checked="" type="checkbox"/> 160M <input checked="" type="checkbox"/> 80M <input checked="" type="checkbox"/> 60M <input checked="" type="checkbox"/> 40M <input checked="" type="checkbox"/> 30M <input checked="" type="checkbox"/> 20M <input checked="" type="checkbox"/> 17M <input checked="" type="checkbox"/> 15M <input checked="" type="checkbox"/> 12M <input checked="" type="checkbox"/> 10M <input checked="" type="checkbox"/> 6M			
<input checked="" type="radio"/> Current entities	<input type="radio"/> Current and deleted	<input checked="" type="radio"/> Worked	<input type="radio"/> Confirmed
<input type="radio"/> No Date Filter	<input checked="" type="radio"/> 2022	<input type="radio"/> 2021	<input type="radio"/> Last 12 months
Filter by club/continent:	HCRA - Hampden County Radio Association ▼		

Generate DXCC League

League for HCRA - Hampden County Radio Association

Rank	Callsign	160	80	60	40	30	20	17	15	12	10	6	DXCC ▼	Slots	Range
1	W1RM+1	33	63	0	131	13	140	25	140	10	98	1	206	654	59 yrs
2	NF1G	0	8	0	21	40	74	48	96	76	64	1	168	428	38 yrs
3	KX1X	16	56	18	86	73	97	59	112	54	68	0	144	639	25 yrs
4	KK1W+1	38	52	0	68	5	94	8	97	7	38	0	137	407	46 yrs
5	W1AST+1	2	7	0	33	4	38	16	38	58	26	1	101	223	13 yrs
6	K1VOI	1	23	0	30	16	49	5	28	3	24	0	75	179	21 yrs
7	N1JIE	1	3	5	10	9	17	18	12	11	8	1	47	95	5 yrs
8	W1PY+1	0	0	0	1	0	26	0	14	0	1	0	42	42	12 yrs
9	AB1XW+1	0	0	0	2	0	27	0	16	0	6	0	39	51	10 yrs
10	WD1S	2	2	0	19	0	16	0	9	0	0	0	31	48	10 yrs
		160	80	60	40	30	20	17	15	12	10	6			
11	K1NZ+1	10	0	10	0	12	0	0	0	10	2	0	28	44	11 yrs
12	NE1C	2	7	0	14	0	11	0	15	0	3	0	19	52	20 yrs
13	W1JA	0	2	3	0	0	0	0	0	0	5	2	8	12	45 yrs

The March meeting can be viewed on You Tube! Don't forget to click subscribe too!
 Miss last months HCRA meeting? Or maybe you want to re-watch all or part of any past meeting
 Use the following link to the last regular meeting or search You Tube for HCRA past meetings
<https://www.youtube.com/watch?v=AcMUmsHwD9g&t=230s>

DOTS & DASHES THINGS THAT DON'T FIT ANYPLACE ELSE!

License Applications Fee Increase Effective April 19, 2022

FCC announces new fees, effective April 19, 2022 and mandated by Congress, will apply a \$35 fee to applications for a new Amateur Radio license, modification (upgrade and sequential call sign change), renewal, and vanity call signs. The FCC initially proposed a \$50 fee. In a Report and Order (R&O), the amount was reduced -- the FCC agreeing with ARRL that its proposed \$50 fee for certain amateur radio applications was "too high to account for these applications."

2022 Virtual SKYWARN® Training Sessions

Due to COVID-19 concerns, SKYWARN® Training classes will again be held virtually. The SKYWARN® Training sessions will occur on 3 weeknights and 2 weekends. The weeknight sessions will be taught by NWS forecasters and the weekend sessions taught by Amateur Radio Operators. All are welcome to attend the training sessions. Those that are interested in becoming a SKYWARN® Spotter or existing spotters refreshing their SKYWARN® Training can take an optional quiz and that will get a new individual their SKYWARN spotter number and count as refreshing your training for existing spotters. NWS Boston/Norton Virtual SKYWARN® Training dates and registration information link: <https://www.weather.gov/box/skywarn#fragment-2a>

Contests and Special Event Stations

ARRL Contest Search - <http://www.arrl.org/contest-calendar>

April 10 | Rookie Roundup on 80, 40, 20, 15, and 10 meter, SSB | Sunday 1800z to 2359z

For Details Visit: <http://www.arrl.org/rookie-roundup>

The Rookie Roundup is not only for Rookies! Get on the air & work a Rookie!

April 22nd @ 19:01 to April 24th @ 18:59 | 10-10 International Spring Contest | Digital Only!

For more details visit: <https://www.ten-ten.org/>

Special Event Station Search - <http://www.arrl.org/special-event-stations>

April 23rd - 27th | 1400z - 2359z | 50th Anniversary of Apollo 16

For additional details visit: <https://nasaontheair.wordpress.com>

Search for more Special Event Stations at: <http://www.arrl.org/special-event-stations>

HCRA Member Outgoing QSL Service

QSL's will be sent to the ARRL Outgoing QSL Bureau quarterly on the following approximate dates

April 15th, June 15th, Sept 15th, and January 15th

See hcra.org for complete information

or

Contact Paul, NFIG at NFIG@arrl.net



Local Nets & Happenings

Sundays: 0845 Western MA. Emergency Net on 146.94, PL 127.3 W1TOM/R

Sundays: 0915 Western MA. Emergency Net on 443.200, PL 127.3 W1TOM/R

1st Monday:

RACES Drill, 1845, 146.49 Simplex

Mondays: 1900 7pm (Local) **HCRA 10 Meter Net 28.375 usb**

New topic each week. Have an idea for a topic? kd1ku@arrl.net

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

Wednesdays: 1930: MTARA Info net followed by the swap net & the N1RLX simplex net on 146.94, PL 127.3 W1TOM/R

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

2000: MTARA (N1RLX) Simplex Net, Check-in's 146.94, PL 127.3, then goes to 146.42 Simplex Immediately following the swap net

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

Join or Renew Your ARRL 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 and VE Sessions

Please contact site / organization to ensure it will meet.
Clubs meet on Zoom, VE sessions are being developed.

1st Friday of the month at 7:30pm HCRA Meeting. Virtual meetings are held via Zoom. Meetings start with a rag chew session at 7pm followed by the regular Zoom meeting at 7:30pm. <http://www.hcra.org/>

2nd Monday of the month 7:00pm, Franklin County Amateur Radio Club meeting. Virtual meetings via Zoom until it is safe to meet in person at the Greenfield Community College. <http://www.fcarc.org/>

Saturday before the FCARC meeting at 8am. Breakfast at Dennys Pantry in Greenfield (as Covid allows)

Event: FCARC Pioneer Valley Experimental Net

Location: 10 Meters 28.354 MHz

When: Every Wednesday morning, 9:00 am – 10:00 am

Organizer: Brad Councilman bc@councilman.com

HCRA Contact List

President - Larry Krainson, W1AST
w1ast@arrl.net

Vice-President - Marcel LaPierre, AA1WH
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Treasurer - Duane Pray, KC1FQV
kc1fqv@arrl.net

Secretary - Paul Kelliher, NF1G
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Programs - Gary Thomas, AA1UE
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WB1Z trustee, Vanessa, W1IRL



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

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