

## The President's Corner



HARC elections season begins in March with the selection of a nominating committee. The committee's nominees are announced at the first meeting in April. Elections are the first meeting in May and the new officers take over the first meeting in June. This

year's nominating committee is Stephanie Clark KR4FCO, Steve Molo KI4KWR, and Laura Morgan, K4CNY. If you are interested in serving as an officer or have other advice for the committee, please let them know. Nominations from the floor will be taken starting the first meeting in April through just before the vote. The only requirements for candidates are that they must be members of HARC and must be willing to serve.

I am stepping down from the board and will not be a candidate for any office in 2026. I have served on the board since 2020 and I'm being called to other tasks in life. HARC has gained many new members in the past few years. With new membership comes new ideas, new activities and new interests. I encourage everyone to support candidates that can shape HARC to meet the needs of all our members.

Your President,  
Lisa Shier, N3WQL



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## Email Reflector Sign-Up

Want to be informed of club announcements? Would you like to pose a radio question to the membership? This is a reminder that HARC has an email reflector but, YOU MUST CHOOSE TO JOIN IT.

The reason for that is when the reflector was set up years ago, the HARC Board wanted to give individual members the ability to specify their choice of email address and the ability to choose a digest format or once a day emails. And it was evident some people did not wish to be automatically enrolled.

As it is, HARC only sends 2 or 3 emails annually to the entire membership, those being the HARC/NARA meeting announcement where dues are collected, and a Field Day blast. By joining the reflector, you'll stay informed of all the other news & happenings.

Joining is simple.

1. Open the [www.harc.net](http://www.harc.net) page in any browser.
2. At the lower left corner of the page, click on the envelope icon 'Join Our Email List'.
3. Fill out the form with your preferred email address and choose individual email or daily digest.

## The Huntsville Amateur Radio Club<sup>®</sup>

### Club Officers & Info

Lisa Shier	N3WQL	President	president@harc.net
Rick Copeland	KE4IOH	Vice President	vicepresident@harc.net
Don Carter	KZ4DJC	Secretary	secretary@harc.net
Bill Yell	K4IBY	Treasurer	treasurer@harc.net
David Oakley	KQ4OAO	Officer at-large	doakley314@gmail.com
Mark Brown	N4BCD	Officer at-large	mark.n4bcd@yahoo.com
Leigh Bartlow	WD4CPF	Officer at-large	brtlo54@gmail.com

Meeting location: Signals Museum, 1806 University Dr, Huntsville, AL 35801  
 Online via Zoom. <https://us02web.zoom.us/j/6588519706?pwd=Z2VxVGJ0SCsvN2NTSFJ5TE5BVk1Rdz09>

Meeting time: Every Friday, 7:30 PM (except on major holidays)

Mailing address: HARC, PO Box 2196, Huntsville, AL 35804

Visitors welcome at all meetings.

Club website: [www.harc.net](http://www.harc.net)

Club callsign: K4BFT (<http://www.qrz.com/db/K4BFT>)

Mail reflector signup: follow the link below the HARC logo on the home page

## Meeting Minutes—by Don KZ4DJC

### February 6, 2026

Call to Order at 7:30 PM By: Lisa - N3WQL

Adjourned 7:52PM

Attendance: In Person 34      Zoom 9      Visitors 0      Total 43

#### Announcements:

- Field Day - Thanks to those that volunteered to assist Leigh, our Field Day Chairman. Volunteer as managers, operators, and other positions.
- Meeting date change - HARC has an informal agreement with Signals regarding contract contents. More news soon
- Please keep your contact information up to date with the club. If you have changes to your name, call sign, license class, email, phone, or want to check on what contact info we have for you please email [treasurer@harc.net](mailto:treasurer@harc.net).

#### Presentation:

- Tonight - Steve Molo - Operating as WA1WA in honor of America's 250<sup>th</sup> birthday this year
- February 13<sup>th</sup> - Tours of Signals Museum

#### Club Business

- Treasurer's Report for January was presented to membership by the Treasurer Bill Yell. A motion was made and seconded to accept report was passed unanimously.
- ARDC is still giving grants for Ham Radio. Give us your ideas for a HARC project grant.

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### February 13, 2026

Call to Order at 7:30 PM By: Lisa - n3wql

Adjourned 7:40 PM

Attendance: In Person 23 Zoom 7      Visitors 0      Total 30

#### Announcements:

- Signals Museum - Regarding keeping Signals Museum as our meeting place, the HARC Board received a contract this morning and are reviewing it.
- Storage of Club radio Equipment: We have been advised to sign a contract for storage now, rather than once the weather warms. The board is considering options.
- We are looking for programs for April - June. Please let us know if you have a presentation to present or if you have an idea for a program you would like to see.
- Tornado season - coming to a county near you very soon. Tax-Free Weather Preparedness Weekend is Feb 20-22.
- Please keep your info up to date with the club. If you have changes to your name, call sign, license class, preferred email, phone number or address, please send email with the details to [treasurer@harc.net](mailto:treasurer@harc.net). If you do not know what contact info we have for you, also contact the treasurer.
- Rick - ke4ioh reminded us that the Radio Shack at Signals does not belong to the club and you must have a licensed EXTRA with you to use the radios.

## Meeting Minutes—Continued

**Business** – Due to the small number of members present for the museum tour, all business presentations will be delayed until next week’s meeting.

**Presentation:**

Tonight – Signal Museum Tour  
February 20<sup>th</sup> HAMCATION REVIEW by Steve

**New Members** – The Club unanimously voted to accept the following new member:  
Stephen Berry – KA4LKW an Extra Class first licensed in 1980. Please welcome him into the Club as our 11<sup>th</sup> new member this year.

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**February 20, 2026**

Call to Order at 7:30 PM By: Rick – ke4ioh  
Adjourned 7:37 PM  
Attendance: In Person 27    Zoom 13    Visitors 2    Total

**Announcements:**

HARC will continue to meet on Fridays through the end of March. Our first Monday meeting will be Monday, April 6  
We are forming a committee to look at long-term storage options for HARC. If you wish to be a part of this effort, please contact Mark Brown or Bill Yell.  
We are looking for programs for April – June. Please let us know if you have a presentation to present or if you have an idea for a program you would like to see. Contact Lisa or Rick or email [info@harc.net](mailto:info@harc.net).  
Tornado season – coming to a county near you very soon. Tax-Free Weather Preparedness Weekend is this weekend Feb 20-22.  
Please keep your info up to date with the club. If you have changes to your name, call sign, license class, preferred email, phone number or address, please send email with the details to [treasurer@harc.net](mailto:treasurer@harc.net). If you do not know what contact info we have for you, also contact the treasurer.

**Presentation:**

Tonight – ORLANDO HAMCATION REVIEW by Steve Molo / Mark Brown  
Next Week YOTA – Youth on the Air

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**February 27, 2026**

Call to Order at 7:30 PM By: Lisa    Adjourned: 7:47 PM  
Attendance: In Person 31    Zoom 10    Visitors 4    Total 45

**Announcements:**

HARC will continue to meet on Fridays through the end of March. There will not be a HARC meeting on Good Friday (April 3rd). Our first Monday meeting will be Monday, April 6.  
The Board is still working on the contract with Signals Museum.  
A committee is being formed to look at long-term storage options for HARC. If you

## Meeting Minutes—Continued

wish to be a part of this effort, please contact Mark Brown or Bill Yell. HARC is looking for programs for April - June. Please let us know if you have a program to give or if you have an idea for a program you would like to see. Tornado season is coming to a county near you. "Don't Be Scared, Be Prepared." Please keep your info up to date with the club. If you have changes to your name, call sign, license class, preferred email, phone number or address, please send email with the details to [treasurer@harc.net](mailto:treasurer@harc.net). If you don't know what contact info we have for you, also contact the treasurer. Leigh will be back next week. He will need volunteers to help with Field Day. Consider how you can help - tower set up, logistics, station managers, operators, take down crew.

Upcoming HAM Fests:

Dalton Hamfest - February 28th

Birmingham- BirminghamHamfest March 6th & 7th

### Presentation:

Tonight: Youth On The Air - on ZOOM presented by Neil Rapp -WB9VPG  
March 6<sup>th</sup> - Introduction to the K4MIE Shack

**New Members**-The Club unanimously voted to accept the following new members:

Geoffrey Crowder-KR4JTB  
Andrea Crowder-KR4JTI  
Doug Haft-K8PO  
Linda Haft-WN1G  
David Thomas-KR4IZV  
Chuck Lindstrom-KC0GUK

## The Multiplier Effect—by Mark N4BCD

### Overview

ON4UN's Low Band Vertical Antennas and other publications strongly suggest a vertical antenna for effective DX on the low bands. Those publications all preached the importance of a good radial field for antenna efficiency.

Several years ago I toyed with the idea of a balloon launched vertical but the cost of helium and dubious longevity kept it on paper only.

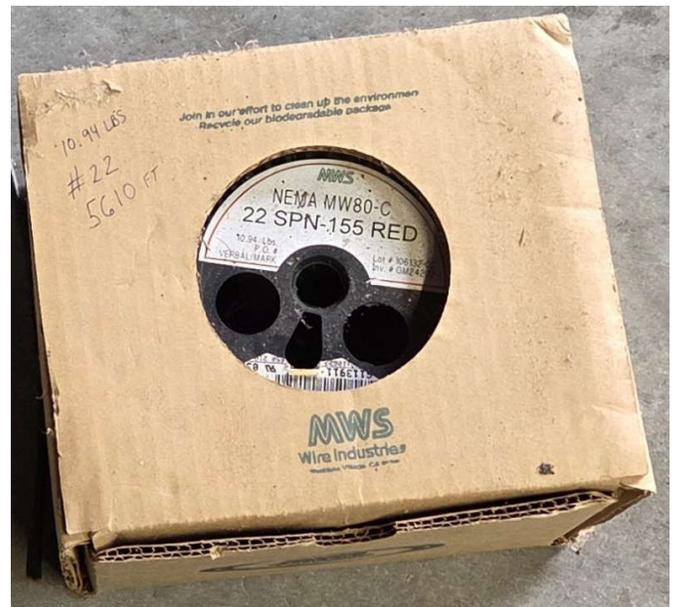
Bought 3 Rohn 25 tower insulators offered by East Texas Towers at Huntsville Hamfest a few years ago. They sat in a box until I decided to bite the bullet and build a real vertical antenna for 80m. Due to power lines, a 160m vertical was out of the question.

From the beginning I resolved to use 64 radials. My experience with a 160m Inverted L at another home when going from 4 to 12 radials convinced me that more was better.

I also had over a mile of wire available. At a previous job we sourced enameled copper wire from a company called MWS Wire Industries that sold spools by weight in a dozen different coatings. Purchased a spool of 22 ga enameled and they delivered 10.94 lbs. It was a little over \$120 about 10 years ago, can't imagine what it would cost today.

### Design

The 43' guyed tower and beam were installed last Fall along with a robust lightning protection system consisting of six buried ground rods around the tower and 4 gauge solid copper bonding everything together and to the service entrance ground.



## The Multiplier Effect—Continued

The tower base insulators are 2' above the concrete and the guy wires are broken up with compression insulators to be non-resonant on any band. A length was chosen that would provide capacitive loading.

The tower and lightning ground seems to be resonant ( $X=0$ ) at 3.6 Mhz but I'm unsure of R because the MFJ-259B analyzer might be susceptible to BCB interference. I'm planning to tune it at the base after the radials are installed.

Put off by the high price of commercial radial plates I rolled my own. Lowes has 2" wide by 3' lengths of 1/8" thick aluminum strips. I bought two, cut them in half and constructed an 18" square.

Clamps and a builder's square were used to keep things aligned during fabrication. I used a drill press in my father in law's shop to neatly drill the 64 tap holes for the 10-32 hex head stainless machine screws.

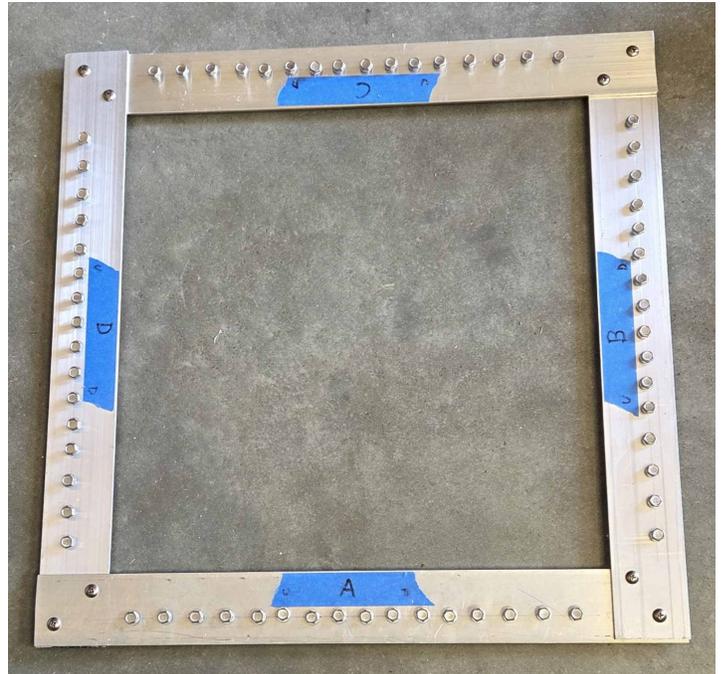
I measured the yard and had room for 31 full size radials. The garage, a dog fence, shed, and a few trees limit the others to less than 65'. Most of the remaining are over 50' with the shortest at 38'

Used a spreadsheet to estimate radial wire needs and some geometry to set the spacing. I sourced 500 biodegradable spikes at the suggestion of Jim W1WSF.

### Construction

I scalped the yard using a self-propelled push mower, then went over it again with the zero-turn mower to remove the clumps of dead grass.

To aid laying the radials accurately, I built jigs. A pre-measured rope for the radial length and a



## The Multiplier Effect—Continued

pipe to set the space between the radials at the 38' point so my jigs would work all the way around the circle.

Currently I have 25 of the 64 radials installed. From the photo you can see that I'm doubling up on some of the 22 ga wire. Now that I'm up on the learning curve, they're going faster.

### The Multiplier Effect

Several readers will remember Tom Russel N4KG (SK). Tom was one of the most accomplished DX'ers in the world, at the top of the DXCC Honor Roll, and knew more about hourly band conditions / propagation than anyone.

Some of these radials came out of the ground when DX Club members disassembled his station. I'm confident that using some of Tom's collection of wire (he used everything from 10 ga THWN to 18 ga tin coated copper) will help move the S meter.



## Press Release Announcing 2026 Youth on the Air Summer Camp in Huntsville

UNION, Kentucky, December 1, 2025—Applications are now being accepted for campers interested in attending Youth on the Air Camp. Licensed amateur radio operators ages 15 through 25 who want to attend are encouraged to apply online at [YouthOnTheAir.org](http://YouthOnTheAir.org). The camp is scheduled to take place June 14-19, 2026, in Huntsville, Alabama, United States of America. For the first time, YOTA Camp will have a theme for the week: Space.

For the best chance at being selected, applications should be submitted by 2359Z on January 15, 2026. Campers will be selected by the working group and notified by February 1. To encourage attendance from across the Americas, allocations for campers are being held open for various areas of North, Central, and South America. If countries do not use their allocation or should someone decline acceptance within an allocation, those positions will be filled from the remaining pool of applicants. As this will be an ongoing process, everyone will not receive notification of acceptance at the same time. Preference will be given to first-time attendees.

Applications will continue to be accepted through May 1.

The application process is FREE. A \$100 USD deposit is required upon acceptance. Should a potential camper be unable to pay the \$100 deposit, he or she may apply for a scholarship or waiver. Campers are also responsible for their own arrival and departure transportation to the camp location. Travel assistance may also be available, especially for those traveling from outside of the USA and Canada but within the Americas. Travel during camp events is provided.

Up to 50 campers will be accepted. Priority will be given to first-time attendees and youth residing outside of the USA. Only a limited number of returning attendees will be accepted and must serve as leaders during the camp. Leaders will be selected based on staffing needs to facilitate this year's session choices.

Potential campers that reside outside of the USA are encouraged to begin the process of obtaining the necessary passport (and appointment to obtain a tourist VISA, where applicable) NOW, as processing times may extend into several months.

Huntsville Amateur Radio Club is the local host for the 2026 camp.

For details about the camp, visit the camp web page at [YouthOnTheAir.org](http://YouthOnTheAir.org).

For additional information, please contact Camp Director Neil Rapp, WB9VPG at [director@youthontheair.org](mailto:director@youthontheair.org).



For the first time, YOTA Camp will have a theme – spaceflight.

## ARES Monthly Meeting Minutes - by Steve KM4CJ

Madison County, Alabama ARES Monthly Meeting Minutes  
February 12, 2026

The meeting was conducted at the Madison County EMA EOC.

There were 17 in attendance.

The meeting started at 18:00 central time.

Tim, KK5H – Announced ARES Shirts can be purchased from GigaParts for \$24.95. Our next meeting's program will be a live demonstration of how to setup and use WINLINK.

EMA – Chris, AI4U, announced the Madison County Emergency Planning meeting was held last week and thanked Tom, WS4M for attending and reporting on amateur radio.

CERT – Tom, WS4M, reported the current CERT class is about to complete and the mock drill will be in two weeks.

Steve, KM4CJ, gave a budget balance of \$1,488.

Program:

Steve, KM4CJ, provided an overview of ARES Net operations and reviewed the weather reporting criteria for WX nets.

Meeting adjourned 18:50 central time.

Respectfully Submitted

Steve Smith

Assistant Emergency Coordinator

ARES Madison County



## HARC Programs on YouTube – by David KQ4OAO

Programs presented at HARC meetings are typically recorded and uploaded to the YouTube HARC channel, allowing members to view them at their convenience.



During the month of February two new videos were added to the channel: 2026 Orlando HamCation Recap. Presented by Steve Molo (KI4KWR) and Mark Brown (N4BCD). Steve discussed his observations of HamCation in Orlando, FL. Mark followed up with his observations as well. Mark then discussed ongoing preparations for the 2026 Huntsville HamFest. For more information on HamCation, visit: <https://www.hamcation.com/>; for HamFest, visit: <https://hamfest.org/>.



Youth On The Air (YOTA) Update. Neil Rapp (WB9VPG) began his discussion with the purpose and history of YOTA. He then discussed how successful YOTA has been over the years. He wrapped up the presentation discussing the planned June 2026 Huntsville YOTA camp. For more information about YOTA, go to: <https://youthontheair.org/>.

These recordings can be accessed via the following link: <https://tinyurl.com/2r6vmv5v>. They can also be reached by scanning the QR code shown to the left, either will take you directly to the playlist. Additional archived videos will be added over time, so make sure to check back to see what's new.

The channel also features a HARC Tech Class playlist containing eleven instructional videos. These sessions are particularly valuable for amateur radio operators seeking a refresher on foundational concepts that may not have been revisited in some time.

## General Announcements

For those who are interested in learning CW but need some Elmering, Laura K4CNY has created a GroupMe group that you can use to ask questions and arrange with Elmers for on-the-air practice.

If you are interested in Elmering, we can always use your help!

To join, click here: [https://groupme.com/join\\_group/70112276/7m2J4Tpk](https://groupme.com/join_group/70112276/7m2J4Tpk)

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Interested in local POTA activations? Connect here.

<https://groups.io/g/harc-pota/messages>

You can request a subscribe here, or write me here for an invite.

[robert.ehresman@gmail.com](mailto:robert.ehresman@gmail.com)

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Time flies. Days turn to years, years into decades. It's a lot easier to renew your FCC license before it expires. That goes for your XYL too. Ask me how I know.

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Handy Bookmarks:

What contests are this weekend? <https://www.contestcalendar.com/contestcal.html>

What DXpeditions are active? <https://dxnews.com/calendar/>

What are the solar conditions? <https://www.qrz.com/>

Huntsville Amateur Radio Club <http://harc.net>

North Alabama DX Club <http://nadxc.org>

Huntsville Area YL Amateur Radio Club <https://haylarc.wordpress.com/>

Madison Co ARES/RACES <https://madisoncountyaema.gov/amateur-radio/>

North Alabama Repeater Association <http://n4hsv.net/>

Marshall Space Flight Center Amateur Radio Club <https://www.nn4sa.org/>

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## HAYLARC Happenings—by Lisa N3WQL



HAYLARC members gathered for our Annual Anniversary dinner on February 5 with 8 HAYLARCs and 3 OMs attending.



Our next meeting will be March 12 at 11:30 AM at Big Ed's Pizza (255 Pratt Ave NE, Huntsville, AL 35801). We'll decided on our March activity at the meeting.

### Program and Project Managers

Madison Co Emergency Coordinator	Tim Holland KK5H
Field Day Chairman	Leigh Bartlow WD4CPF
Public Information Officer	Open
K4BFT Club Station Trustee	Laura Morgan K4CNY
Picnic/Food Coordinator	Warren K4MMW & Karen Alford
Training/Education Coordinator	John Morgan N4CNY
VOX Publisher	Mark Brown N4BCD
Property Manager	John Equi KM4VSY
Video Manager	Billy Gold KM4BGF
Webmaster	Steve Molo KI4KWR
Club Historian	Jonathan O'Rear KD4MPW
Repeater Program Announcer	Kelley Johns W4VPZ

## Important Exam Info (updated September 2025)

### Schedule:

- 1st Saturday each month (holidays → 2nd Saturday)  
Madison Co. Fire Training Academy, 300 Shields Rd, Huntsville, AL  
Time: 9:00 AM (arrive 8:30–9:00)
- 2nd Wednesday each month  
GigaParts, 6123 University Dr, Huntsville, AL  
Time: 5:30 PM

### Registration: Please register ahead of time

- Details and sign-up: <https://cavec.us/testsched/>
- You need an FRN to register
- FCC FRN info: <https://www.fcc.gov/wireless/support/knowledge-base/universal-licensing-system-uls-resources/getting-fcc-registration>

### Contact:

- Email: [vec@cavec.us](mailto:vec@cavec.us)

### What to bring:

- Legal photo ID (driver's license, passport, student ID, etc.)
- If no photo ID: bring 2 forms (SS card, birth certificate, utility bill, etc.)
- Any CSCEs not yet in FCC database
- Exam fee: \$5 cash (exact change)
- FCC Registration Number (FRN) – see FCC site for details

### Calculators:

- Non-programmable calculators are allowed.
- Programmable calculators are not allowed unless the testing team can clear or reset the memory on site before the exam. The Session Manager has final say.
- Calculator apps on phones or tablets are not allowed.

### Online Exams:

- Remote sessions are available. See the Get Licensed page at <http://cavec.us> for details.

### Additional Services from CAVEC:

- Full-Service License Renewals: CAVEC offers complete support with renewals and administrative updates. More information: <https://cavec.us/renewals>
- Club Station Call Sign Administrator (CSCSA): CAVEC is authorized to process Club Station Call Sign requests. More information: <https://cavec.us/cscsa>



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