November 2025

# VOX

Monthly Newsletter of the Huntsville Amateur Radio Club®

### **The President's Corner**

Public service is the reason that ham radio exists. Without contributions to the public good, we wouldn't have any spectrum space, which is increasingly valuable.

In September, HARC ran communications for the AYCE Century Bike Ride. We helped quite a few participants get the assistance they needed to complete the race.

In October, more than a few HARC members joined with Madison County ARES RACES for the Simulated Emergency Test. Others participated in the test with their own counties.

Right after Halloween, HARC will be helping with the Tootsie Roll 5 K run in Madison.

We'll also be supporting the Rocket City Marathon in December.

Thank you to all of the hams how have participated in these public service activities. A second thank you to all who stand ready to deal with severe weather as we approach the peak of the fall severe weather season.

73, Lisa N3WQL

President



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### My Last Tower Project—by Mark N4BCD

Third time's a charm, isn't that how the old saying goes?

My first tower project in Madison, AL was a well performing tri-bander atop a 65' Rohn Foldover with the hinge section at 33'. Working on the antenna at waist height or the rotor from a ladder was relatively easy.

The second iteration was the same tower and antenna on a hilltop in Park City, TN. Downward sloping terrain for miles ensured great takeoff angles and it performed extremely well with very low local noise.



Now we're in our forever home on Lynchburg Hwy, just outside of Mulberry, TN. The terrain isn't as conducive to low takeoff angles and a 100' tower wasn't something I wanted to tackle. I did however want to put up better antennas and that became possible when Fred K3FRK gifted me Tom KG4CUY's (SK) Cushcraft X7 (20/15/10m) with the X740 (40m) addon, and the D3W rotatable dipole for 30/17/12m.



The fold-over tower served well for a simple 3 element tribander that weighed 27 lbs and had a windload of 4.3 sq ft. The new antennas with a combined weight of 91 lbs and a windload of 10.8 sq ft demanded a tower guyed to Rohn specifications. With the guyed tower (43' at the thrust bearing) built last summer, I resolved to finish the project soon after Hamfest 2025.

Installing the D3W at only 11 lbs was an easy task for one

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### **My Last Tower Project—continued**

person. Then through the dry month of September I measured & reassembled the other antennas on sawhorses near the tower - wondering to myself how to navigate the X7 & X740 antenna up through the guy wires using a bucket truck. More on that later.







I rented a trencher and installed direct bury 2" PVC between the tower base & the house entry panel. The PVC had to follow a curve to clear an old cement pad and buried electrical service box. Pulled a mason's line through with a shopvac, then used the mason's line to pull Dacron rope. The Dacron rope allowed me to bundle and pull one run of LMR-400 and two 8 conductor control cables for the rotor and DXE antenna switch.

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## **My Last Tower Project—continued**

On the last weekend of September, I rented a bucket lift and with the help of XYL Julie KK4CLG, Jim W1WSF, Jill K4TXT, and Bruce AC4G we lashed the antenna to the bucket and through incremental movements in XY&Z directions we got the antenna through the guy wires and into position. We were right at the limit of the bucket lift in some dimensions. While the ground crew carried the weight of the antenna through a rope and pulley, I maneuvered the antenna onto the mast and installed the U-Bolts.





With the cables run, it was now time begin connecting coax and control wiring at the tower base and the lightning protection box at the house entry panel. The coax runs from the tower base to the antennas was straightforward, but control of the rotor or the antenna switch from the house wasn't working.

The DXEngineering Antenna Switch had leakage between the control lines that was traced to faulty LED's on the control panel. An order to Mouser for replacements fixed that bug. I never noticed this failure in Park City.

With the switch working I swept all 3 antennas with my MFJ-259B analyzer. All 3 antennas are resonant out of band. While I Page 5 VOX

### **My Last Tower Project—continued**

can compensate for this with a Palstar auto-tuner, I'm making contacts and even breaking DX pile -ups. My next step on this diagnosis is to borrow a better analyzer to gain insight into what the problem might be.

The rotor wiring to the tower base, done in 2024, didn't match my printed record. The first clue was a blown fuse in the rotor controller. A matrix of resistance measurements didn't identify the error, so I took the safe route of building a new rotor pigtail and installing up on the Tower. Wiring the bottom of a rotor while squinting into sunlight isn't the easiest job but it fixed the problem.

With the antenna switch and rotor working and the tuner compensating for high SWR, I decided to spend some time in the CQ WW SSB contest. I didn't hear the PFZZZT noise coming out of the Alpha 91B because I was wearing headphones. Only noticed an issue when a glance at the bar graphs on the amp showed no gain at any setting of the Load & Tune controls.

So, while I have a functional station I still have some bugs to work out.



October 2025. Antennas in place, wiring completed and on the air. Tower is mounted on Rohn 25 insulators at 3' and 43' to thrust bearing. The guy wires are broken with compression insulators and dimensioned to be non-resonant on any band. They also provide capacitive loading to make the tower resonant at 3.65 MHz (a lucky guess). Radials will be installed this winter. The antenna switch is mounted below the insulators to isolate the relays from the RF-live tower. The Davis weather station is at 10m (33').

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### **Meeting Minutes— by Don KZ4DJC**

Date: Oct. 3, 2025 Called to Order:7:30 PM By: Rick - KE4IOH Adjourned: 7:36 PM

Attendance: In Person Zoom 28 Visitors

Total 28

#### Announcements:

HARC Meeting Location for October 10<sup>th</sup> is American Legion 2900 Drake Ave SW Arduino Build Nights - Oct 10, Nov 14, and Dec 19

Arduino Parts kits may be picked up at next week's meeting. Lisa has one extra kit

for someone who wants to jump in at the last minute.

Rocket City Marathon is looking for a Comms Coordinator

Chattanooga Hamfest - today and tomorrow

### The Huntsville Amateur Radio Club®

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	KQ40A0	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=Z2VxVGJ0SCsvN2NTSFJ5TE5BVklRdz09

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

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

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

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### **Meeting Minutes—continued**

Still seeking suggestions for an alternate meeting location

#### Upcoming Events:

Giga Parts Jamboree - looking for operators - more to come

#### Presentations:

Tonight: Steve- KM4CJ - ARES/RACES Simulated Emergency Test

Next Week: Arduino Build Night Oct. 10<sup>th</sup> @ American Legion Bldg.

October 17<sup>th</sup> Skylab by Chuck Lewis

#### New Memberships:

Doyle Combs - KF4NBN

Date: October 10, 2025

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

Adjourned 7:42 PM

Attendance: In Person 34 Zoom 3 Visitors 2 Total 39

#### Announcements:

Next week's meeting is back at the Signals Museum

Meeting on Friday, October 31 is cancelled. It's Halloween, so go have a spooky good time.

Arduino Build Nights - Oct 10, Nov 14, and Dec 19

Looking for volunteers or suggestions for programs for after the first of the vear.

John needs assistance for School Ham Club Roundup Oct 20-24 at Discovery Middle and Sparkman Middle Schools.

Willy announced Support Your Park October 25<sup>th</sup>. Catch him at the Pavilion Rock announced Orders are being taken for new order of Huntsville Amateur Radio Club badges. \$15(plus tax?)Payable at sign up.

#### Presentation:

Tonight: Arduino Build Night

Next Week: SKYLAB presented by Chuck Lewis N4NM

#### Business:

Old: None

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### **Meeting Minutes—continued**

New: None

New Members: None

Date: October 17, 2025

Call to Order at 7:30 PM By: Rick - KE4IOH

Adjourned 7:50 PM

Attendance: In Person 29 Zoom 7 Visitors 2 Total 38

#### Announcements:

Mel Bartlett, KD4PID/SK. He was a long-time member of JCAR. Meeting on Friday, October 31 is cancelled. It is Halloween, so have a spooky fun time.

Arduino Build Nights -Nov 14, and Dec 19 Looking for volunteers or suggestions for programs for after the first of the year.

Rick announced Orders are being taken for new order of Huntsville Amateur Radio Club badges. \$15(plus tax?) Payable at sign up.

Stephen Werner-AG4W announced the DX Expedition to Sierra Leone/Banana Island October 29-November 10, 2025 (https://www.dx-world.net/9191-banana-island-af-037/)

PJ6Y Youth Expedition - Saba Island Next two weeks. (<a href="https://www.dx-world.net/pj6y">https://www.dx-world.net/pj6y</a> -saba-island-dxpedition/)

#### Presentation:

Tonight: SKYLAB presented by Chuck Lewis N4NM

Next Week: High School Weather Balloon: A Cautionary Tale by Chris Brown, Ph.D., W9SBS from ASCTE

#### **Business:**

Treasurer's Report - Bill Yell K4IBY

#### 01d:

ARRL SE Director Election continues – read up on the candidates and Voting. ARRL members should receive instructions on how to vote.

#### New Memberships:

Tony Kenny -KM4ZZC

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### **Meeting Minutes—continued**

Date: October 24, 2025

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

Adjourned 7:45 PM

Attendance: In Person 28 Zoom 9 Visitors 4 Total 41

#### Announcements:

Meeting on Friday, October 31 is cancelled. It is Halloween, so everyone have a spooky fun time.

Arduino Build Nights -Nov 14, and Dec 19 Looking for volunteers or suggestions for programs for after the first of the year.

Rick announced Orders are being taken for new order of Huntsville Amateur Radio Club badges. \$15(plus tax?) Payable at sign up.

Saturday 25<sup>th</sup> is the SET for ARES/RACES beginning AROUND 8:00 AM

CQ Worldwide - thru Sunday the 26<sup>th</sup>.

Rocket City Marathon December 12-14. Marathon is on Sunday. Volunteers needed.

#### Presentation:

Tonight: High School Weather Balloon: A Cautionary Tale by Chris Brown, Ph.D., W9SBS from ASCTE

Next Meeting: Nov 7: "9-1-1, What is the location of your emergency?" by Ernie Blair, WA4BPS

#### Business:

Old:

Rocket City Marathon Bill Yell K4IBY

Shirt Committee being established for new Club shirts.

New Memberships:

Diana Davidson - KR4GNS

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### **HAYLARC Happenings—by Lisa N3WQL**

Four members of HAYLARC participated in the Simulated Emergency Test in Madison County on October 25. All of us gathered at Sharon Johnston Park, which was a distribution center for the test. Lisa Shier, N3WQL, and Stephanie Clark, KN4MEW, each took a turn as the net control station for the Madison County Emergency Net. Susan Newman, KD4RVV and Miki English K4MDE checked into the net. Congratulations to Susan on her first radio contact.

The next HAYLARC meeting will be on November 13 at 11:30 at Olive Garden. The November activity will b a POTA activation with Willie Sandifer on Monte Sano. The date is not yet determined. The meeting and activity for December will be combined into a Christmas Party at the Bartlow home at 6 PM on December 11. We'll have a potluck and gift exchange, plus officer elections.





HARLARCs Susan Newman, KD4RVV, Miki English K4MDE, and Stephanie Clark, KN4MEW, operate a simulated distribution center at Sharon Johnston Park during the Simulated Emergency Test. Photo Credit N3WQL.

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# **ARES Monthly Meeting Minutes — by Steve KM4CJ**

October 9, 2025

The meeting was conducted at the Madison County EMA EOC. There were 20 in attendance.

The meeting started at 18:00 Central time.

EMA – Chris, AI4U, announced the Madison County Emergency Planning Meeting will be Oct 21, at 9:00 am in the City Hall conference room.

Tim, KK5H – Tim announced that the Simulated Emergency Test (SET) is October 25<sup>th</sup>. The Jamboree on the Air will be October 18<sup>th</sup> from 1 to 6 pm at GigaParts. They are looking for operators to support the event. If you have a program or training project you would like to see next year, let an officer know. Next month's program will be a SET review.



Stephen, W4PPC, announced the Great Shake Out Drill will be October 16<sup>th</sup> at 10:16 am. We will have a net on the 147.220 repeater to take reports. For more information on the drill, go to www.ShakeOut.org.

Program:

Steve, KM4CJ, provided an overview of the 2025 SET final preparations. Bob, KV4PC, gave an overview of the Meshtastic plans for the SET.

Meeting adjourned 19:15 central time.

Respectfully Submitted Steve Smith Assistant Emergency Coordinator ARES Madison County

(editor: Steve has a SET write-up planned for the next issue.)

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### **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

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

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.

\_\_\_\_\_

#### Handy Bookmarks:

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

What DXpeditions are active? <a href="https://dxnews.com/calendar/">https://dxnews.com/calendar/</a>

What are the solar conditions? <a href="https://www.qrz.com/">https://www.qrz.com/</a>

Huntsville Amateur Radio Club <a href="http://harc.net">http://harc.net</a>

North Alabama DX Club <a href="http://nadxc.org">http://nadxc.org</a>

Huntsville Area YL Amateur Radio Club <a href="https://haylarc.wordpress.com/">https://haylarc.wordpress.com/</a>

Madison Co ARES/RACES https://madisoncountyalema.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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# **From Your Publisher**

Program and Project Managers		
Madison Co Emergency Coordinator	Tim Holland KK5H	
Field Day Chairwoman	Leigh Bartlow WD4CPF	
Public Information Officer	<b>Open</b>	
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	

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# **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

#### 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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