July 2024

VOX

Monthly Newsletter of the Huntsville Amateur Radio Club®

The President's Corner

What a good Field Day this year at Ditto Landing...though very hot and humid. The results of our efforts will be at the July 12th HARC Meeting via Tom Cash WS4M and Mark Brown N4BCD. The location was actually not too bad though we already been told by Ditto Landing we cannot use next year due to a scheduling conflict...so back to finding a new location for 2025. More details coming via July 12th Meeting.

We have some good presentations for the month of July: July 12th HARC Field Day Results-Report / July 19th MESH-TASTIC and July 26th GEOCHRON by Patrick KJ7ZSU. Come learn something new and even engage and help others. If you have a topic or presentation for the Club; bring it to us to learn and see. Plenty of open slots available.



Upcoming events for the month July 13th Cullman Hamfest in Cullamn AL and July 27th is the Alabama QSO Party...check alabamacontestgroup.org/aqp/ for details. It is a fairly quiet month with the Huntsville Hamfest just around the corner. Speaking of the Hamfest we are still looking for volunteers to make the "The World's Friendliest Hamfest" be a outstanding event. The week of Hamfest will be quite busy in the area with the YouTube content creators on Monte Sano/W4DXCC at SIGNALS on Thursday and then Friday setup for the weekend Hamfest. Stay tuned for a schedule of events for that week and I am sure even Giga-Parts will be doing something during the week for sure.

Enjoy July...stay cool and be active in amateur radio. The solar wx can make some amazing HF activity and 10m operations should be possible this month we hope.

73, Steve KI4KWR, HARC President

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Group Photo—HARC Field Day 2024



The Huntsville Amateur Radio Club®

Club Officers & Info			_
Steve Molo	KI4KWR	President	president@harc.net
Billy Gold	KM4BGF	Vice President	KM4BGF@gmail.com
Jessica Molo	KN4JJA	Secretary	
Lisa Shier	N3WQL	Treasurer	treasurer@harc.net
John Morgan	N4CNY	Officer at-large	morganjohn@juno.com
Mark Brown	N4BCD	Officer at-large	mark.n4bcd@yahoo.com
Tim Huffaker	KM4ESU	Officer at-large	thuffaker1@gmail.com

Meeting location: 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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K4BFT Field Day Score Submission—by Mark N4BCD

Call Used: K4BFT GOTA Station Call: K4GIG ARRL/RAC Section: AL Class: 4A

Participants: 78 Club/Group Name: Huntsville Amateur Radio Club

Power Source(s): Generator, Battery, Solar

QSO's by station (all 100w except 2m @50w)

	CW	Digital	Phone
160m			
80m	319		
40m	701		1150
20m	1174		198
15m	268		125
10m			3
6m			
2m		1	
222			
432			
Other			
Satellite		31	32
GOTA			62
subtotal	2462	32	1570
Q-mult	x2	x2	x1
subtotal	4924	64	1570
all Q's			6558
power mult			x2
points from			13116

Year 2023 Year 2024

Points from		
QSO's	15220	13116
Bonus Points	2520	2060
Total score	17740	15176

Bonus Points



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Post Field Day Chairman's Comments

Thanks to all the HARC'ers that assisted in making Field Day 2024 as good as it was. From the setup crew to the tear down crew, folks showed up and pitched in to get stuff done. The big obstacle this year was having to find a new location on fairly short notice. And as it turns out, next year we have to do it again. I suggest we put a small committee together now to start that process so we'll know where we'll be next year as far in advance as possible. If you're interested in assisting, meet over in the MIE Kitchen area about 7:15 before the regular HARC meeting. We'll do that until FD 2025's site is selected.

Tom Cash, FD 2024's Head Turkey



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More Post Field Day Comments

Congratulations, HARC, on an outstanding effort! Speaking as possibly the only living former Head Turkey (I wish I'd thought of that term) who had to deal with a location change, I could not be more impressed with how Tom managed this year's effort. From securing a new location, to rallying the troops behind that new location, to organizing the team into designing a full 4A station layout from scratch (quite the accomplishment because we know how much hams can passionately disagree), and a million other little decisions that the HT has to make, Tom handled it all and made it look easy. Well done, Tom, now go back to bed, I'm sure you haven't had enough sleep to make up for all that you've lost.

I worked K4BFT on three band/modes: 40 PH, 40CW, and 20CW. The phone station's signal was clean and articulate (Bob Heil would be proud), 40CW was loud and efficient to work (efficient ops aren't as prevalent on FD as they are in other contests), and as for 20CW... from a mere 50 miles away, I was surprised to hear K4BFT at all, and with my 5W, I was surprised that it heard me, too. It was by far the weakest station I worked. I'd love to know who the op was. If it was anyone other than Larry, I'll be very impressed. Shoot, I'm impressed even if it *was* Larry!

And the field was clear by 5:00? Wow!!

73 and well done to everybody!
Laura K4CNY

Former Head Turkey (2020-2023)

This might have been the most stress-free FD for me in decades. I know, not everyone can say that, but for me it was 100% pleasure. Good planning & good people!

Chuck, N4NM



Larry K4AB making QSO's at the 20m CW station on Sunday morning

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Meeting Minutes— by Jessica KN4JJA

Location: Signals Museum
Date: June 7, 2024

Time: Meeting opened by club president, Steve Molo, KI4KWR promptly at 7:30

Attendees: Zoom-13; In person-35; Visitors-2

Announcements

Field Day discussion/planning

Field Day Safety presentation is next week by Jordan W4HBO

POTA Day is tomorrow at GigaParts from 10am-3pm

Field Day is 6/21-23rd at Ditto Landing

Old Business

ARRL is still down.

New Business

- 1. Donation jar for Field Day picnic is now out
- 2. Every Tuesday stating 6/4/24 until November, GigaParts will host an open question session from 2-4 and 6-7:30pm
- 3. Presentations for 2024 will include CERT, ARES, Haylarc, and Radio Programming
- The museum continues to need volunteers...
- 5. W4DXCC will be held 8/15/24 here at Signals. Cost is \$35.
- 6. Lisa presented financial report. It was approved by unanimous vote.
- 7. Swearing in of Jessica Molo as new secretary.
- 8. Outstanding Amateur Award goes to Lee Barlow.
- 9. Winner of monthly prize drawing is Brandi Wheeler.

New member voted in: John Daniels KQ4SPD

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Meeting Minutes— by Jessica KN4JJA

The meeting adjournment was set in motion and seconded at 7:56PM

Location: Signals Museum
Date: June 14, 2024

Time: Meeting opened by club president, Steve Molo, KI4KWR promptly at 7:30pm

Attendees: 42 In Person; 6 via Zoom, 1 visitor

Announcements

Next week there will be no meeting.

Field Day will be at Ditto Landing on 6-21 to 6-23 at Ditto Landing.

IARU Contest will be July 13-14

W4A will be July 18th-25th

Huntsville Hamfest is August 17-18th. Volunteer sign up is now live on the website. We need 100 people but only have about 35% of needed volunteers.

Every Tuesday stating 6/4/24 until November, GigaParts will host an open question session from 2-4 and 6-7:30pm

The museum continues to need volunteers.

W4DXCC will be held 8/15/24 here at Signals. Cost is \$35.

Old Business

None to report

New Business

- 1. Test session at GigaParts on 6/18.
- 2. Tomorrow there is a POTA group on Monte Sano Overlook at 3pm
- The Sunday after Huntsville Hamfest will be the Monte Sano birthday celebration.
- 4. Food donations are still needed for Field Day
- 5. Tomorrow there will be a team grooming the field at Ditto Landing for Field Day

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Meeting Minutes— by Jessica KN4JJA

Joseph and team will meet at Gary Sukow's property on Thursday evening to pick up the towers.

The business meeting was adjourned at 7:56pm.

Program: Field Day Safety Brief (Jordan W4HBO)

June 21, 2024 No Meeting for Field Day setup.

Location: Signals Museum

Date: June 28th, 2024

Time: Meeting opened by club president, Steve Molo, KI4KWR promptly at 7:30

Attendees: Zoom-10; In person-44; Visitors-1

Announcements

Tonight's presentation is on Node Red

No meeting next week in observance of July 4th

Cullman Hamfest 7/15/24

Iaru July 13-14th

Volunteer Portal is open for Huntsville Hamfest

Every Tuesday at GigaParts is open question for people studying for Tech/General/Extra

Huntsville Hamfest is August 17-18^{th.}

W4DXCC is 8/15. You can sign up on line

Signals still needs volunteers. Tomorrow is a work day.

Museum has reserved three tables at Hamfest and needs volunteers to man the tables.

Old Business

None to report.

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Meeting Minutes— by Jessica KN4JJA

New Business

1. Steve, KI4KWR, to purchase new coax for the club in exchange for old coax. Motion was seconded and approved.

- 2. New member-KQ4TIY-Technician-Motion seconded and approved; KK4JFY-General-Motion seconded and approved
- 3. Space and Rocket center still meeting for the Apollo anniversary
- 4. Signs need to be taken to storage unit for next year.
- 5. Ditto Landing will not be available for future use; Tom Cash will be unable to coordinate the Field Day next year.

The meeting adjournment was set in motion and seconded at 7:54 pm

Presentation to follow business meeting-Steve Molo-Node Red



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HAYLARC Happenings—by Lisa N3WQL

HAYLARC will hold a Social Lunch on July 11 at 11:30 at the Signals Museum This will be a bring your own lunch event at the Signals Museum (1806 University Drive NW, Huntsville) After lunch we will get training on using tablets for ticket sales at the Hamfest and organize old club materials into scrapbooks/photo albums. We'll repeat the these activities on Saturday, July 20, at 1 PM, also at the Signals Museum for those unable to attend on July 11.

The HAYLARC business meeting will be on July 23 at 7 PM on Zoom. Meeting log in information is on the HAYARC website.



HAYLARCs participated in Field Day throughout the Tennessee Valley.





(Left & Right)

Lisa Shier, N3WQL, checks the knots for the guy ropes for towers.

Brandi Wheeler, KQ4JNW, makes satellite contacts as Huntsville City Council Member
Jennie Robinson checks out the action.

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ARES RACES Meeting Minutes, June 13, 2024 by Steve KM4CJ

The meeting was conducted at the New Madison County EMA EOC There were 16 in attendance.

The meeting started at 18:00 central time.

Tim, KK5H, opened the meeting by welcoming everybody to the new EOC located in the new Huntsville City Municipal Building.

THATEUR RADIO

Announcements:

Tim, KK5H, announced next month's meeting, July 11, will be held at GigaParts. If you have not registered, go on-line to GigaParts events and sign up. We will have a trivia game with a few prizes.

Tim announced domain name is for hsv races.org needs to be renewed. A motion was made, seconded, and passed unanimously to pay for another 5 years.

Hamfest: Richard, KK4MDP, is heading the ARES table and is looking for volunteers to man the table. Contact Richard to sign up. Judi, N4GFW, volunteers to update/refresh our display poster for the table. Rick, KE4IOH, announced the volunteer signup for Hamfest is now active for those who want to help.

ARES – Tom, WS4M, announced if your badge has expired to see him for a new one and to email him your expiration date.

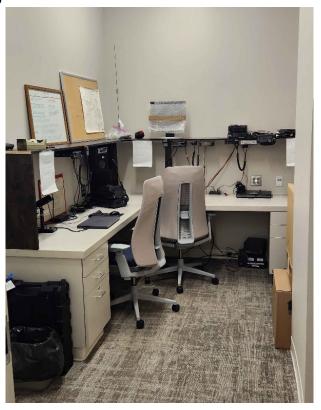
EMA – Chris, AI4U, welcomed everyone to the new EOC. Chris thanked Tom, WS4M, and Steve, KM4CJ, for their help in moving and setting up the new EOC.

Program:

Steve, KM4CJ, provided a presentation on getting ready for Field Day 2024.

Meeting adjourned 18:55 central time.

Respectfully Submitted Steve Smith Assistant Emergency Coordinator ARES Madison County



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Satellite Station was Different this Year — by Bob KV4PC

I'd like to thank Dr Wayne McCain, Athens State University, and The STEMSAT Working Group on behalf of HARC for loan of STEAMRoller and volunteers that helped HARC pull off a great Satellite Station for their Field Day event.

All STEAMRoller ops and support folk should give themselves a hearty pat on the back! We seem to have done well if previous years results for AMSAT Field Day contest are a clue.

I dont have a final score count, but we got less than or equal to 125 points in 63 QSOs. Tim Cunningham sez that might be a top 4 or better showing for AMSAT FD and is only a couple of points short of his last year's 3rd place score. I need to analyze the log, particularly for dupes to get the exact figure. And I need to complete the AMSAT Summary Sheets and get them submitted. And a copy of the scored log to HARC for ARRL FD.



I'm extremely happy with all the great help Satellites got; set up and teardown, operations, Power and Light, mesh internet, snacks drinks ice, ect. I had several ops on my team that were up all night taking turns at the mic and keyboard, and the bulk of our points QSOs were acquired between 10 PM and 6 AM so night ops for this activity was crucial. I was awake 36 hours straight myself.

Norm Schklar was a key player in almost everything. He worked out our tripod arrangement and antenna mounting system, loaned us his trailer, and spent many days making and testing mechanical modifications to it that made its use possible and convenient. He also found us a logging system that we could adapt to the peculiarities of AMSAT FD data capture. Alas N1MM+ does not supply a suitable contest log that does both Satellite AND FD logging in the same kit (I put in a help ticket last week on that with N1MM). We used DXKeeper by DXLabs to manage our logging, and it was pretty configurable to get the right stuff recorded and remove extraneous fields, but was awkward in other ways by insisting we enter certain data that doesn't matter for this contest. Logging got a bit behind operating a few times with this tool because of the extra hassle (#firstworldproblems). Norm was into every aspect, and we argued alot, but it was extremely productive and the best ideas got into the plan.

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Satellite Station was Different this Year—continued

Chuck Lewis kindly loaned us his excelent portable tripod for the effort which was essential to the use of the full sized Super LEO Pack antennas from Antennas & Amplifiers (I want one!).

Brandi Wheeler allowed us to use acreage on her farm in Somerville for many weeks to get everything put together, set up, and get many of the bugs worked out. Also for training operators, of which she was the most enthusiastic and diligent student.

My team was largely either beginners or folk who had not done Sats for years, and everyone got some training and pitched in their time, in and out of Field Day. We manged it all very well. I think getting seat time doing contesting or doing POTA activations in the next year will really sharpen their skills.

Various thoughts on FD ops.

Breaking in on FM satellites might best be done using the voice keyer. If we could do push button prerecorded messages for a few things, being tongue tied might be less of an issue. And we might be less tempted to unkey the radio if we don't hear our own echo or get covered by intermod from our own transmission. FM work needs to be fast and crisp, and also reception voice recorded for post processing. Brandi Wheeler did really well at this, so also using a female voice is probably a big plus too. We had so much trouble with FM Sats that I suspect many of our competitors are using TOO MUCH POWER. Four of the TEVEL birds were operational and ridiculously strong. Brandi got in on two of them. We had grazing passes along Green Mountain that were absolutely surprisingly full quieting including our own echos.

We could probably benefit from a set of external preamps. We experienced some midsky fades on nearly every pass in spite of "big gun" RHCP antennas. Alot of LNA preamps give 20 dB or so gain and that 3 S-Units. I dare say the EME project that we are following up with will need em anyway.

Chuck Lewis made a couple of CW tries. K4BFT sounded beautiful and strong on our own echos, and the relatively short JO-97 pass probably had room chronologically for many complete QSOs. Chuck quickly got the mechanics of finding himself on the transponder and using the built-in pushbutton keyer with prerecorded phrases so we now have a specialist operator. CW seemed to be far more prevalent on Saturday afternoon. I'm thinking Saturday afternoon might be the right time to try, and also having a raft of prearranged schedules for a particular pass like an RS-44 (20 minutes or so) might work well for these valuable 3 point contacts. We should have a chat with some of our relatively nearby FD ops like Davis Ausley at N4SEV or Steve Warner about that. Jim McCullers in Birmingham might be another. We should reach out to our QSO partners from our logs and see who might be interested in a Round Robin CW-fest on a couple of linear passes. Big points to be had.

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Satellite Station was Different this Year—continued

Greencube (IO-117) was our big money shot with 3 point digital Qs and passes lasting over an hour. Many operators, including DX operators, were playing nice with FD and it was not hard at all to collect a dozen or so 3 point Qs on each pass. I think my Facebook campaign to raise awareness of AMSAT FD worked, and lots of folks got the message. I actually fear that many competitors also benefited to the degree that our score will not be unique. Indeed, I saw so many 1D DX folk with Japanese calls on the bird that some JA ops might be in the running for first place just from working each other!

We fumbled the GC first pass somehow. 15 minutes in, we stopped hearing packets. I asked if the bird quit on Facebook and got several replies that it was fine. We had trouble with the next couple of passes of other birds too so I decided that the shade canopy at the back of the trailer was too close, penetrating the stacking envelope of the antennas and spoiling our pattern. I can't say for certain that fixed anything but our problems went away after we moved it.

We effectively lost the use of three good Satellite passes Saturday afternoon that would probably have easily yielded as many as 36 points based on our aggregate rate. So big lesson learned is keep extraneous metal objects as far as possible from the antenna trailer. I believe if we do this again, the location of the two trailers should be reversed with antenna trailer south and both tongues pointed south to take advantage of the full cable length to increase separation. With antennas south and STEAMRoller's big door north, we can set up shade with no worries.

Bugs were really bad on site and particularly at night. We had countermeasures available such as citronella Tiki torches and DEET spray but mostly didn't take advantage. It would probably have been more comfortable if we did.

STEAMRoller's next big mission is to try QRPp EME at Brandi's farm. We hope to have a kilowatt on 2m and 800 watts on 70cm in place and tested by the next full moon. We should be able to work several of the biggest guns on the planet with this rig.

We also want to do some 408 MHz and 1420 MHz radio astronomy experiments while we are at this. To this end, I'd like to thank Steve Molo and Gigaparts for loan of a new high performance SDR device to test for a couple of weeks.

I think STEAMRoller may be making an appearance at Huntsville Hamfest to market ASU, Dr Wayne's education programs, and demonstrate the CSNTechnologies SAT box.

This has been an exhilarating project from start to end and I feel privileged to have played a part.

73; Bob KV4PC Page 15 VOX

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? https://www.contestcalendar.com/contestcal.html

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

What are the solar conditions? https://www.grz.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://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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Photos needed

Program and Pro	oject Managers
Madison Co Emergency Coordinator	Tim Holland KK5H
Field Day Chairperson	Tom Cash WS4M
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
Program Coordinators	Jessica Molo KN4JJA, Chuck Lewis N4NM, Solomon Bolden KW4GY
Webmaster	Steve Molo KI4KWR
Repeater Program Announcer	Kelley Johns W4VPZ

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Important Exam Info (updated June 2024)

The Huntsville testing sessions are conducted the first Saturday of the month unless that weekend contains a holiday. If it does, the second Saturday will be the test date. Please check the HARC.NET website or www.cavec.us to confirm. The testing location is at The Madison County Fire Training Academy Building, 300 Shields Rd, Huntsville, AL 35811. Email: vec@cavec.us

The exam sessions start at 9:00 AM. Please plan to arrive between 8:30 and 9:00 AM.

Exam information and registration can be found at https://hamstudy.org/sessions/wa2zou/all

What you need to bring to the exam session:

One legal photo ID (identification)

- a. State Driver's License
- b. Government issued Passport
- c. Military or Law Enforcement Officer Photo ID card
- d. Student School Photo ID card
- e. State Photo ID card

If no photo ID is available, two forms of identification:

- a. Non-photo State ID card (some states still have them)
- b. Birth certificate (must have the appropriate seal)
- c. Social security card
- d. Employer's wage statement or Minor's work permit
- e. School ID card
- f. School or Public Library card
- g. Utility bill, bank statement or other business correspondence that specifically names the person; or a postmarked envelope addressed to the person at his or her current mailing address as it appears on the Form 605.

Students/minors without a photo ID need to bring only one of the above items if a legal guardian presents their photo ID; otherwise two non-photo IDs are required

Any current CSCEs that have not yet shown up in the FCC database:

Exam fee, CASH ONLY, exact amount (if possible): \$5
Exam fee waivers available for students, minors, Active U.S. Military and First Responders

A FCC Registration Number (FRN): Hamstudy will step you through this when you register for one of our exam sessions

https://www.fcc.gov/wireless/support/knowledge-base/universal-licensing-system-uls-resources/getting-fcc-registration

Calculators: Non-programmable calculators are allowed. Programmable calculators are NOT ALLOWED unless their memories can be cleared or reset at the exam session site by the testing crew prior to the start of the exam. The decision as to whether a calculator will be allowed to be used rests with the Session Manager and that decision is final. Cell phone/tablet Calculator Apps will not be used.

Notice: The FCC charges a \$35 fee for new applications, renewals and vanity call sign requests as of April 19th 2022. The fees should be paid directly to the FCC within ten days of your application being submitted by the CAVEC. Failure to do so will result in your application being dismissed. CAVEC will have to resubmit your application License. Upgrade applications are not charged the \$35 processing fee by the FCC.

Online Exams are also available and are conducted by the Marshall Spaceflight Center Amateur Radio Club VE team , look for their schedule at https://hamstudy.org/sessions/nn4sa/all or email nn4sa@arrl.net to schedule an exam.

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