# Microvolt

Monthly newsletter of the Utah Amateur Radio Club

### **November 2025**





The collective of amateur radio operators is made from not only a diverse population, but more importantly a people with common interests. One of those universal passions is service, especially here in Utah, the undisputed home of volunteerism. Over a year ago we had mentioned that service was among the very first purposes of amateur radio, addressing our involvement in EmComm as a way to offer our time and skills. But what about you? What kinds of amateur radio service opportunities have roped you in?







# Service

HAM RADIO OPERATORS HOLD FOOD DRIVE



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### Cover - Service

Let's first distinguish between two general categories of service. One is a *radio service* type defined by a particular purpose, such as maritime, aviation, broadcast, public safety, and amateur. Our discussion surrounds *community service*, which is the rendering of assistance, such as that performed by organization leadership, search-and-rescue, volunteer firefighters, and emergency communicators.

Performing some sort of service is natural for many of us, especially those who became licensed because of a desire to assist with EmComm. While a fair amount of overlap exists between community service types, ours tends to be classed as those for public interest, for personal interest, and for the amateur radio service itself.

### **Public interest**

Service in the public interest is typically effort and activities aimed at using amateur radio in helping people, especially those in government and public events. Here are examples of ways amateurs can use radio to provide public service:

- Monitoring (Richard Heward K7KGK)
- ARES (Amateur Radio Emergency Service)
- Aid stations at ultra marathons
- City drills (in behalf of civic and religious thirdparties)
- CERT (training, callouts)
- TERT (Timpanogos Emergency Response Team) and SAR (search-and-rescue)-related
- Skywarn (weather spotting)
- · Parades and public events
- Become a VE (volunteer examiner)

### Personal interest

Service for personal interest loosely means helping individuals and groups of individuals rather than organizations and government. Here are some examples or people-oriented service opportunities:

- Become an elmer
  - ♦ Be a resource of ham radio knowledge
  - Respond to signal report requests
  - $\diamond\,$  Offer your shack to a newer ham
  - ♦ Learn the art of kind helpfulness
- · Make a go-kit that includes ham radio
- · Become a resource for technical knowledge



- Assist in an antenna raising party
- Scouts and JOTA
- Offer or post repeater info updates

### For amateur radio itself

Much of our service opportunities focus on people, using amateur radio as a means to an end. These tend to focus on the craft of radio:

- Volunteer as net control
- Start a website / page / group / blog that showcases amateur radio
- Teach something
  - ◊ Volunteer to give a training topic on a net
  - Offer to give a club presentation one month
- Write a newsletter article (hint!)
- ♦ Insert yourself in a preparedness event
- ♦ Share a skill at Homebrew Night
- ♦ Teach a class on a radio topic
- Serve in the club leadership or as a specialist
- Start a ham radio club
- Volunteer to help out at Field Day
- Set up a POTA station and share your experience
- Start a net

### Finally

Not only are there ways in which you can serve, but that your service is actually in need. Our amateur radio community is growing at a break-neck pace, and all these new hams can't be adequately served by the same few people. You might not feel like you know very much about ham radio, but you might also be surprised to find just how much you have to share with even a few who can use your experience.

Microvolt editorial staff

### **Editorial – Giving back**

Thinking back, you can probably recall numerous kind souls who were willing to hold your hand and gently guide you through the maze of study, exams, equipment, operating, and proficiency. You're very grateful for the many who voluntarily and selflessly gave of their time and talents to help you, and so you'd like to *give back* to that same community.

Honestly, there's no way you can truly *pay back* the time, effort, and kindness that had been shown you. But that shouldn't stop you from trying. One of the best ways to give back to the amateur community is through your service, which can be performed doing any number of activities. In a previous article regarding emergency communication we pointed out an excellent way to give back, and that's service as a communicator in a variety of capacities.

When you give back to the amateur radio community, not only do you benefit others by your unselfish time, but you benefit yourself. As a result of your helpfulness, you tend to feel better about yourself and improve your self-esteem. Service tends to give people confidence, pride, and the satisfaction of time well-spent.



If you regard giving back to the amateur radio community as a duty or obligation, a debt that you need to repay, your service will be welcome, but you might also portray a check-the-box attitude. People are quite grateful to receive your help, yet when you truly feel that you're sharing of your time and energy out of love for the craft and the people that participate, your sincere enthusiasm will be obvious and heart-felt. It's often said that people don't really care how much you know until they know how much you care.



### Social media needs you

An increasing number of people have decided to opt out of social media involvement, some due to the large waste of time spent viewing unimportant photos, memes, and videos. Many have decided to leave social media because of the mean-spirited or otherwise unkind approach many commenters have taken while hiding behind anonymity. If you're one of the majority who has decided to remain in the communication of social media, I encourage you to be the example of kindness and wisdom.



Many people who frequent Facebook, Instagram, Pinterest, X, and Snapchat often seek for more than just answers to ham radio questions. Not only are they looking for good, patient mentors who can provide information, but they're also looking for fathers, mothers, true friends, and people they can look up to. Some are looking for the meaning of life and the will to keep living. This is not to say that you have an obligation to be their therapist, but you can be their kind, listening friend who's willing to read the emotion behind the text, and maybe stand up for them when signs of bullying are posted.

And while you're giving back, please also don't forget to *pay it forward*. Patiently elmer a new ham or one who might be struggling with a disability. Do good unto others the same kind of good others have done unto you.

Anything to add? Email editor@utaharc.org

### Letters to the editor

Dear Editor:

Why do people get vanity call signs?

Brenda in Kaysville

#### Dear Brenda:

While it's not necessary in the US, there are a several reasons people might request a vanity call sign:

- The one they've been awarded a) sounds awkward, either alphabetically or phonetically, or b) doesn't "roll off the tongue" very easily or c) doesn't code well in CW (try KK7HEI)
- Some prefer one that reflects their name or initials, or holds a personal meaning for them
- A shorter call sign is sometimes easier to remember or more convenient to announce during contests, nets, or when calling out for a contact
- To obtain the call sign of a deceased close relative

### Dear Editor:

I just passed the Technician license test, so what should I do next? I saw this newsletter and thought it would be good to email you at this address.

John in Sandy

### Dear John:

Welcome to the world of amateur radio! Depending on your interests, goals, and skill level, there are a number of things that might be appropriate for you to jump into as a new ham. One of the first things is to get involved with a club. May I suggest the Utah Amateur Radio Club? Here are a few more next-steps that might be good for you:

- Purchase a handheld radio and whip antenna
- Learn how to use your radio
- · Check in on a local net
- Attend a ham radio activity or club meeting and introduce yourself

#### Dear Editor:

Online I've read several people warning that you should not place a handheld radio next to your head. If that's true, why aren't handheld radios sold with headsets or ear pieces?

Richard in Salt Lake City



#### Dear Richard:

First, it's not the radio, but the antenna whose distance from your head is of concern, but you probably knew that, and I'm only splitting hairs, since they tend to be in the same general proximity anyway. Second, the ARRL, FCC, and independent laboratories have performed extensive studies on the effects of radio frequency signals on human tissue, and a general consensus is that keeping a handheld radio that transmits 5 watts of FM at UHF about eight inches from your head and reproductive organs is sufficient to prevent damage. Third, many handhelds, such as Baofeng handhelds, are regularly packaged with ear pieces.

### Dear Editor:

South Dakota is the last state I need to complete my WAS (Worked All States) award, and I've successfully contacted three hams in SD on 20 meters SSB, but none of them will confirm my contact. I've looked up all their QRZ pages, and only one of them has an email address listed, but it bounced when I tried to contact him. I'm so frustrated! What can I do to get these guys to QSL?

Nate in South Jordan

#### Dear Nate:

There are several things you can try, but in the end, it'll be up to them whether they're willing to confirm your contact. Locate their local clubs and ask for help. You can contact others during the South Dakota QSO Party on October 11. If all else fails, try snailing them a letter, since you have their mailing addresses on QRZ with a SASE enclosed.

Send your questions to editor@utaharc.org

### Club news



Jed Marti KI7NNP presents his AREDN power supply for several voltages



James Bennett KK7AVS displays his balloon transmitter payload



The October club meeting is traditionally our annual *Homebrew Night*, a monthly meeting dedicated to showcasing our projects, ideas, and crafts we've been tinkering with over the past year. See page 8.



Elisabeth Barry N7MEB shows us her end-fed antenna 3-D printed enclosure and strain relief

BTW, you can view past club meeting presentations on our YouTube channel.

### **UARC 2025 Christmas Dinner**

We've discovered that our members enjoy eating and socializing so much that we're planning a third dinner (not counting the one at Field Day or Steak Fry) for this year, this one in time for the Holidays. This UARC Christmas Dinner (not a "potluck" after all) will replace the December club meeting on Thursday 11 December 2025, to be held at the Golden Corral on 665 E 7200 S in Midvale.

## **UARC 2026 Winter Field Day**

Missed Field Day this summer? You can make up for lost time by attending Winter Field Day with UARC. We plan to participate *from noon Saturday January 24 through noon Sunday January 25* at a local park, and all are invited. We're looking for two benevolent amateurs to volunteer their RVs for the event, to let us use them to house our stations for the duration.

### For your information

### Christmas 2025 Dinner

The club Christmas dinner is 6:30 pm Thursday 11 December 2025 at the Golden Corral, 665 E 7200 S in Midvale.

### Winter Field Day 2026

UARC is planning to participate in Winter Field Day, from noon Saturday 24 January to noon Sunday 25 January 2026 at a yet-to-be-disclosed location. To keep things simple, we plan to only run 2 stations, so our exchange will be *W7SP 2M UT*.

### License courses

#### Salt Lake:

General: Tuesdays 7:00 pm to 9:00 pm 147.160+ MHz (127.3 Hz tone)

#### Provo:

Technician: Saturday, 8:00 am to 1:00 pm 15 Nov, 20 Dec, 17 Jan, 18 Feb, 18 Mar Visit HamStudy.org/sessions to register (free) Provo Fire Station #2, 2737 N Canyon Rd Email nv7vham@gmail.com for info

#### Orem:

Technician: 4 Tuesdays, 6:30 to 8:30 pm Jan 20, Jan 27, Feb 3, Feb 10 Visit psclass.orem.org to register (\$10) Orem City EOC, 56 N State St, 2nd Floor HamStudy.org account required Email nojiratz@hotmail.com for info

#### Eagle Mountain:

Technician: 5 Thursdays, 7 to 9 pm
Feb 12, Feb 19, Feb 26, Mar 12, Mar 19
Email ki6oss6365@gmail.com to register (free)
Eagle Mountain City Hall, 1650 Stagecoach Run

#### **Exam sessions**

### Salt Lake County:

- Email Garth Wiscombe W7PS w7ps@arrl.net
   Oct 27, Nov 24
- Email Rick Morrison W7RIK w7rik@arrl.net



### **Utah County:**

Wed 15 Oct 7:00 pm : Provo : signup
 Sat 15 Nov 10:00 am : Eagle Mtn : signup

Sat 15 Nov 2:30 pm: Provo: signup
Sat 20 Dec 2:30 pm: Provo: signup

• Sat 17 Jan 2:30 pm : Provo : signup

### Club repeaters

Farnsworth Peak: 146.620- MHz (no tone)

Scott Hill: 146.620- MHz (no tone)

Lake Mountain: 146.760- MHz (no tone)

### SDRs and beacons

Northern Utah WebSDR: sdrutah.org

KK7AVS SDR: k7xrd.club N7RIX SDR: sdr.n7rix.com K7JL beacon 28.2493 MHz

### HF remote and club transceiver stations

If you'd like to learn how to get started using the remote stations, visit the HF Remotes link on the club website:

https://user.xmission.com/~uarc/HFRemote.html

### How you can help!

Email uarc@xmission.com to reach the club leadership. Email editor@utaharc.org to add content.

### Spotlight - Kris Gainsforth KBØSTG

Kris has been active in amateur radio for over thirty years. While working at Radio Shack, he was intrigued by the idea of a box and a wire that could allow him to talk with just about anybody in the world. Kris was living in northeast Nebraska when he took the Technician Class ham radio exam, and passed it on his third attempt. Fast-forward, Kris passed his General Class license in 2023, and today wants to become a VE (volunteer examiner) to pay it forward, and help others get licensed.

The fact that amateur radio was integrated with SKYWARN kept Kris interested in the craft, and served as a spotter for several years. This basically meant being on dirt roads in the middle of the country and reporting any tornado activity to Net Control.



In 1998, while working at Radio Shack, Kris met his wife Tammy, who was also employed there. They now have three kids. In 2018, new job opportunities brought his family to Herriman, Utah, where he heard about UARC while scanning the repeaters on his handheld radio.

Kris currently serves as president of the Mountain View Amateur Radio Club (N7MVC) in Herriman. Their club held both Summer and Winter Field Days, their Winter Field Day at Riverton High School, where they operated for six hours, and their summer Field Day running four stations at Crane Park in Herriman, from noon to 10 pm. They ran four stations, including SSB, CW, and digital, for a total of 225 contacts. Their fall activity was a POTA (Parks on the Air) activation. Kris also creates training programs for their club meetings.

Kris is a member of the Long Island CW Club, the Mountain View Amateur Radio Club, UARC, the Utah VHF Society, the Murray Amateur Radio Club, and the Taylorsville Amateur Radio Club. He also enjoys 3-D printing, video games, and software development. Kris says that he wants everybody to know about amateur radio, and is willing to talk with anybody who shows an interest.

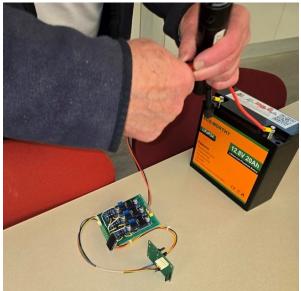
Thank you, Kris, for your dedicated service and commitment in the ham radio community.

– 73, Linda Reeder N7HVF



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# 2025 Homebrew Night















### Strays - Ham radio for the military

The US military (Army, Navy, Air Force, Marine Corps, Coast Guard, Space Force, and National Guard) have their own radio services that are officially recognized and strictly regulated. Is it possible, then, that military radio and amateur radio can ever cross paths? If you are in the service of our country in a military capacity, can your skills and privileges carry over into the amateur world? A fair number of service men and service women want to participate and enjoy the craft as much as anybody else.

Amateur radio, by its nature and definition cannot be used for military purposes. Yet, the US government has come to recognize the value of amateur radio in disaster communication performed by an army of trained and skilled operators, and has partially bridged that gap by an auxiliary group. MARS (Military Auxiliary Radio System) is a non-military organization sponsored by the Defense Department to redundantly assist the military on a regional and national level when access to traditional forms of communication becomes unavailable.



Many specifically allocated frequencies can be used by MARS operators, but the primary ones are 13.927 MHz USB, 7.6335 MHz USB, and 11.407 MHz USB. To operate on them, a person must hold a valid FCC amateur radio license and must have been accepted into the MARS program, but does not need to be a member of the military. Most amateur radio transceivers are unable to transmit on MARS frequencies because they are outside the amateur bands. To accommodate them, many amateur transceivers can be wired to allow transmission on MARS frequencies, an alteration known as a *MARS mod* or modification.

Membership in the armed forces does not automati-



cally qualify a person to transmit on the amateur bands; the operator must hold a valid FCC amateur radio license to transmit on them. Yet any member of the military can enjoy the hobby of ham radio by passing the Technician exam to obtain an FCC amateur radio license, just like you and me.

Normally, we amateurs are prohibited from using amateur equipment to communicate with a person using another radio service, such as GMRS. Once a year, however, civilian licensed amateur radio operators and are permitted to freely communicate with members of the American military outside the MARS program using amateur radio frequencies on Armed Forces Day, per Part 97.111(a)(5). This interoperability exercise, at one time declared a communication test, is now a crossband test, allowing civilian amateurs like you and me a unique opportunity to participate using unmodified amateur radio equipment.

As an increasing number of military personnel move into our area, an accompanying increase in amateurs will be bringing their skills and their questions with them. Likewise, an increase in military folks also means more of them will want to become licensed as amateurs out of the fun of the hobby or even out of sheer curiosity. As they do, we should a) not assume that they have any more knowledge about ham radio than us civilians and b) be armed with answers to their questions when they ask about the need for licensing and in what ways they can participate.

We welcome our military friends, neighbors, and family members to Utah, and invite them to become part of our growing family of radio amateurs. And to those who are serving our nation in a military capacity, and have served in the past, thank you for your service to our nation and our families!

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We encourage you to submit original pictures (highest resolution), articles, software and hardware descriptions, appropriate humor, and responses to editorials. Email the content, pictures attached, to the editor at editor@utaharc.org by the 20th just prior to the target month.

The Utah Amateur Radio Club was organized under its present name in 1927, although its beginnings may date back as early as 1909. In 1928, it became affiliated with the American Radio Relay League (club #1602) and is a 501(c)(3) non-profit organization. It holds a club station license with the call sign W7SP, a memorial to Leonard "Zim" Zimmerman, amateur radio pioneer in the Salt Lake City area.

The club meets each month except July and August. The meetings are usually held on the second Thursday of the month at 7:30 PM in the University of Utah's Warnock Engineering Building, room 2230.

Club membership is open to anybody interested in amateur radio; a current license is not required. Dues are \$20 per year. Send dues to club secretary James Bennett, 4960 W 5400 S, Kearns, Utah 84118. Email address changes to kk7avs@gmail.com

**Tax-deductible monetary contributions** are gladly accepted. Send directly to club treasurer Shawn Evans, 1338 S Foothill Dr, #265, Salt Lake City, Utah 84108-2321. For in-kind contributions, please contact uarc@xmission.com to make arrangements.

**UARC maintains** the 146.620- and 146.760- repeaters, which are administered by the UARC Repeater Committee. Direct comments and questions to any committee member. The 146.760- repeater is on IRLP node 3352.

Call the **UARC Ham Hotline** at **801-583-3002** for amateur radio information, including club, testing, meeting, and membership information. Leave a message, and we'll make an effort to return your call.

### **UARC 2025 Board**

President: Marvin Match, KA7TPH

Exec. Vice President: Linda Reeder, N7HVF Vice President: Bruce Fereday, KF7OZK Secretary: James Bennett, KK7AVS Treasurer: Shawn Evans, K9SLE

Microvolt Editor: Noji Ratzlaff, KNØJI

Asst. *Microvolt* Editor: Ricky Asper, AC7RA Program Chair 1: Mike McAinsh, KI7MTI Program Chair 2: Jeri Brummett, WJ3RI

Immediate Past President: Morris Farmer, AD7SR/SK

**For-late breaking news** listen to the UARC Information Net, Sundays at 8:30 pm on 146.620— or visit the announcement page.

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