

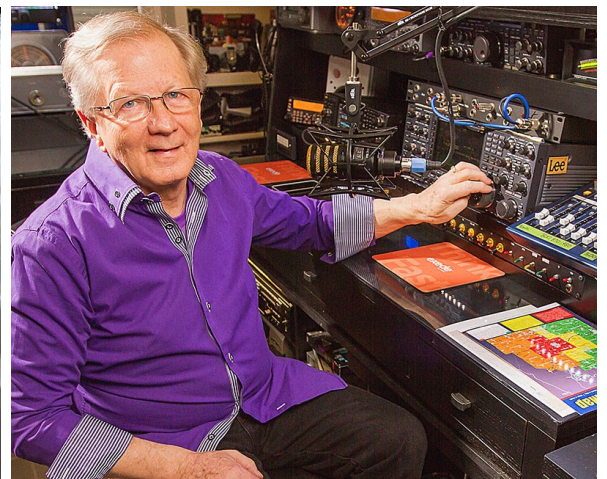
Microvolt

Monthly newsletter of the Utah Amateur Radio Club

August 2026



Professional Amateur



Why is our craft called *amateur radio*, and why are we licensed operators called *amateurs*? In many circles, the word *amateur* often carries a negative connotation, indicating unskilled, childish, or immature. It turns out that *amateur* in the world of radio means *unpaid* or *not compensated*. The term *professional* can also present a dual interpretation, in some ways inferring *paid*, while meaning expert or skilled in other contexts. The terms *amateur* and *professional* seem to hold opposite meanings, but is it possible to use both to describe the same person?

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Cover – Professional amateur

One of the hallmarks that identifies an amateur in radio is the fact that the operator must not accept payment, also known as a *pecuniary* (money) interest ([Part 97.3.a.4](#)), to communicate using amateur radio frequencies. Some exceptions to this rule are discussed in this issue's [Editorial](#).

Professional trade

Although we amateurs don't get paid for communicating by radio, many of us are engaged in technical vocations that might or might not have much to do with radio. For example, quite a lot of the amateur radio exam material surrounds concepts studied in electronics or electrical engineering, and a few licensed operators make a living in these very fields as professionals. Yet, that presents no conflict of interest or rule violation, in spite of the cross-connections. In that way, those operators are both amateurs and professionals, but by different disciplines.

Then again, some amateurs hold jobs that are directly related to amateur radio, such as ham radio courses, radio repair, radio equipment sales, and much more. Some of these are discussed in this issue's [Strays column](#). But what makes their business models legal is that they don't use amateur radio frequencies to conduct business, like place an order, exchange trade or money, or make a sale. In other words, they might use the institution of amateur radio as subjects of their businesses, but they don't use RF (radio frequency) as a vehicle to make money.

Professional behavior

One way in which an amateur can present a professional side is through his or her mannerism. This includes appropriate language, civil discussion, and proper treatment of others. Foul and obscene language, insults, gossip, and other unprofessional behavior have no place in amateur radio. Those would be amateurish, after all.



Other forms of professional behavior might not be as obvious, such as avoiding criticism of specific clubs,



operators, or operating modes, whether on or off the air. Acknowledging and praising other operators, being helpful to others, and admitting mistakes are also dead giveaways for professional mannerism. Today's world is replete with critics who insist on having their say; you don't need to be one of them.

Professional volunteers

A volunteer is a person who performs a vocation or service without compensation—out of the goodness of heart. If a volunteer is not paid, can he or she be considered a professional? In fact, performing in a volunteer role can offer a person a great opportunity to demonstrate professionalism without being a paid professional.

People who give their time in the interest of nonprofit clubs, special events, fundraisers, skilled *pro bono* service (legal, engineering, educational, tax, etc.), and even moral support, are obligated to maintain a high level of professional interaction due to their human connections.

Conclusion

Are you a professional, or an amateur? You might be a professional if your vocation pays you for your expertise, as a teacher, a nurse, a politician, or a custodian for example. You can be both if you're a licensed ham and treat others with respect, courtesy, and civility, regardless of how you make a living.

Also, whether or not you're paid for your service, the marks of a professional are deep competence, consistent reliability, and unwavering commitment to integrity. Along with those, humility, accountability (ownership), and emotional intelligence (maturity) play large roles in defining the professional amateur.

Microvolt editorial staff

Editorial – Professional exceptions

Because of the unpaid requirement of amateur radio, we can probably agree that we licensed operators should not be paid to transmit ([Part 97.113.a.2](#)). Still, there are regulation allowances that permit the seeming opposite. After all, the chapter and verse just referenced states ***except as otherwise provided in these rules***. Examining the instances “otherwise provided”, it turns out that there are indeed a few exceptions that meet with FCC approval.

Preparedness nets at work

In behalf of an employer as part of an emergency preparedness or disaster readiness test or drill for the duration of the drill, a licensed operator can technically be paid for operating an amateur radio station during working hours. The same operator is also permitted to test the equipment immediately before the start of such a drill ([Part 97.113.a.3.i](#)).

On-air equipment sales

It's permissible to offer *incidental* selling of ham radio gear over the air, meaning please don't make it a habit. Normally, advertising or announcing for-profit activities on amateur frequencies is not permitted ([Part 97.113.a.3.ii](#)).

Classroom instruction



If a school teacher demonstrates or uses ham radio as part of classroom instruction, he or she is technically getting paid for the operation. Ham radio transmissions made by a licensed amateur as part of his or her classroom instruction at an educational institution is yet another exception ([Part 97.113.a.3.iii](#)).

Code practice and information bulletins

An operator of a club station can actually get paid

for transmitting code practice and bulletins on HF, provided he/she does so for 40 hours a week and that the schedule for the transmissions are published 30 days in advance ([Part 97.113.a.3.iv](#)).

Emergencies

The one exception to the rule that we amateurs love to quote is the one allowing a person to use amateur radio equipment to transmit in the event of an emergency ([Part 97.403](#)). The Part 97 rules don't actually use the word *emergency* in the exception to the rules, but instead states ***immediate safety of human life and immediate protection of property***, and even that ***when normal communication systems are not available***.

Being in need of a pizza is not normally considered a threat to life when phone service is unavailable, but you're covered in violating a written rule if you can justify the threat to your life or that of another.

Oops

As a salaried employee, you're typically “on the clock” all day. But, pulling out an HT and talking with a friend on a nearby repeater during working hours does not violate [Part 97.113\(a\)\(2\)](#) unless you attempt to conduct business or are communicating in relation to your job, like asking your friend to close a business deal you've been working on.

Conclusion

So, because of the exceptions, it's very possible to be “paid to communicate” for pay, in spite of the rules that state otherwise. And since we amateurs are diligent at following rules, it probably goes without saying that it's best to steer clear of the exceptions if possible. Can you think of others?

Anything to add? Email editor@utaharc.org



Letters to the editor

Dear Editor:

Might be a stupid question, but can a Baofeng UV-5R be programmed to be legally used by my scouts who have no ham radio licenses?

Luis in Salt Lake City

Dear Luis:

Not a stupid question. On one hand, yes, a Baofeng UV-5R can be programmed so it can legally be used by unlicensed individuals, by disabling its transmit ability. On the other hand, it cannot be programmed to be legally used by an unlicensed person to transmit, except in a situation a) in which there is a threat to the immediate safety of human life or property and b) when normal means of communication are unavailable ([Part 97.403](#)). That includes the ability to transmit on FRS, GMRS, and MURS frequencies, because that radio model is not certificated for those services, regardless of power level and antenna compliance.

Dear Editor:

I just noticed that out of the 733,000 current American licensees, over 26,000 are listed as Advanced licensees. What are the biggest reasons for them to choose keeping that license instead of upgrading to Amateur Extra?

Emilio in West Haven

Dear Emilio:

Recently on Facebook that very question was posted, and the overwhelming majority of respondents commented that they refused to upgrade because the Advanced ticket is seen as a public badge of honor. They said it's an outward indicator of their achievements in passing what they considered a much more difficult test than today's Extra exam, including Morse code proficiency. I suspect the real reason is because it's probably much more difficult for an 80-year-old to pass the Extra exam today than for a 30-year-old to pass the Advanced exam back then.

Dear Editor:

I'm returning to ham radio after being gone a long time. As I recall, one had to change his call sign if he



moved outside his original call sign area. Is that still the case?

Chris in Fruit Heights

Dear Chris:

Welcome back to the world of amateur radio! If you are licensed by the FCC, then you are only permitted to use that one call sign if you transmit from within the US, whether that's an original call sign, vanity call sign, or call sign of a close relative. That current US call sign replaces all others you might have held in the US. And that one call sign follows you everywhere in the US you might move or even casually travel.

Dear Editor:

I've heard that it's better to point an inverted-V dipole wire connected to the coax center, not the braid, in the direction I want the best signal. What are your thoughts on that?

Charlie in Rose Park

Dear Charlie:

First, because the signal that's being sent to your antenna is AC (alternating current), one element wire of your dipole will perform exactly the same as the other. Second, for best directional effect, point your dipole perpendicular to the target direction of transmission and reception; in other words, present the "broadside" of your dipole to your target. Third. If your antenna is not mounted at least a quarter-wavelength above the Earth, your dipole's orientation won't matter that much anyway.

Send your questions to editor@utaharc.org

Club news

Because UARC doesn't hold a regular monthly meeting in July, this issue highlights our two big summer activities, ARRL Field Day and the UARC Steak Fry. Photos start on page 7.



BTW, you can view past many club meeting presentations on [our YouTube channel](#).



Fall 2026 UARC Potluck

You and your family are invited to a potluck dinner **6:30 pm Thursday 10 September 2026** at the [Salt Lake County Facilities Management Cafeteria](#), 2001 S State St, room S1-100. Details are posted [on our website](#). We'll have announcements and door prizes, but no presentations or long speeches.

2026 UARC Homebrew Night

The annual UARC Homebrew Night will take place this year **Thursday 08 October 2026** at the [Salt Lake County Facilities Management Cafeteria](#), 2001 S State St, room S1-100. It's a chance for you to show off your project, your latest purchase, or something else you've been cooking up during the year.

2026 UARC Christmas Dinner

You and your family are invited to the annual UARC Christmas Dinner **6:30 pm Thursday 10 December 2026** at the [Golden Corral, 665 E 7200 S](#), in Midvale. More posted [on our website](#). We'll hold our annual elections that night, plus have announcements and door prizes, but no presentations or long speeches.

2027 Winter Field Day : *we need your help!*

As summer temperatures start to dip below 100°F, we need to start thinking about Winter Field Day. If all goes as planned, we'll hold Winter Field Day at the [Great Salt Lake State Park](#) from noon Saturday 23 January through noon Sunday 24 January. We're asking for three volunteers to set up their RVs at the park starting about 8 am Saturday morning. If you're willing to contribute your RV for one night, please contact James KK7AVS (kk7avs@gmail.com) or Noji KNØJI (801-368-1865).

For your information

Save that date

Fall Potluck Dinner : 6:30 pm 10 September 2026

Homebrew Night : 7:30 pm 08 October 2026

Christmas Dinner : 6:30 pm 10 December 2026

Winter Field Day : noon 23 January through noon
24 January 2027

Spring Potluck Dinner : 6:30 pm 11 March 2027

ARRL Field Day : noon 26 June through noon 27
June 2027



License courses

Salt Lake:

Technician : Tuesdays

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

Orem:

Extra : 5 Tuesdays, 6:00 to 9:30 pm

14 Jul, 21 Jul, 28 Jul, 04 Aug, 11 Aug

Visit psclass.orem.org to register (\$10)

Orem City EOC, 56 N State St, 2nd Floor

HamStudy.org account required

This course will not be live-streamed

Email nojiratz@hotmail.com for info

Technician : Saturday 19 Sep, 8:00 to 2:00 pm

Email nv7vham@gmail.com to register

Provo Fire Station #2

Eagle Mountain:

Technician : 5 Thursdays, 7 to 9 pm

13 Aug, 20 Aug, 27 Aug, 10 Sep, 17 Sep

Email ki6oss6365@gmail.com to register (\$0)

Eagle Mountain City Hall

Exam sessions

Salt Lake County:

- Email Garth Wiscombe W7PS w7ps@arrrl.net
27 Jul, 31 Aug, 28 Sep, 26 Oct, 30 Nov, 25 Jan

Utah County:

- Wed 19 Aug 7:00 pm : **Provo** : [signup](#)
- Sat 19 Sep 10:00 am : **Eagle Mtn** : [signup](#)
- Sat 26 Sep 10:00 am : **Spanish Fork** : [signup](#)
- Wed 16 Sep 7:00 pm : **Provo** : [signup](#)
- Sat 19 Sep 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 suggest content.

2026 ARRL Field Day



2026 ARRL Field Day



2026 ARRL Field Day



2026 UARC Steak Fry



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2026 UARC Steak Fry



Spotlight – Matt Newman KA7VSA

I grew up in the Provo/Orem area of Utah. All during my childhood I wanted a set of walkie-talkies. Every Christmas I would ask for a set and never receive them. About the time I was 11 or 12 a friend got a pair of the horrible bottom-of-the-line Archer Space Patrol walkie-talkies from Radio Shack.

Using them one night, we noticed that we could hear CB traffic, and that started me on the road to CB radio. Ah, the good old days. I really felt like hot stuff. I got to know all the guys and especially girls in my school who had CB. It almost made you feel like a member of a club or something. Staying up late at night with a CB by the bed talking to friends was as much fun as a sleep-over.



Every spring I get the urge to grab a walkie-talkie and head for the mountains. The sad part is, there's no one left to talk to. A few years ago we had a handful of old-timers living around us that I could chat with but these days the only thing I ever hear are passing truckers being obnoxious with their echo units and roger beeps. And Nate in Elberta. I'm almost hoping another CB fad comes along soon!

In 1985 while in college studying electronics I had a teacher assign the class an end of term project. As he described the types of projects he'd accept he threw in, "On [such and such a date] there will be a ham radio license test given. Anyone who gets their Novice license as their project will be given a B+." That sounded great to me and a couple of buddies, so together we set about learning Morse code and everything else the test would entail. A few years later I took the test for the Technician license and happily passed. Of course the code was forgotten within six months.



Right after getting my Technician license a friend lent me a Kenwood 2-meter hand-held. I had a lot of fun with that, talking to locals and using the phone patch on the 76 repeater. But I eventually had to give it back.

In the early 2010s I received a church calling as Emergency Communications Specialist. I purchased a Yaesu FT-60R and started checking in on the Stake nets every week. And I joined the 76ers! I still use that FT-60R. I've also acquired a TYT TH-7800 which I use as a base station. And now that I'm retired and have more time on my hands, I really should get my General license.

– 73, Matt

Strays – Making money from ham radio

Every so often the question arises as to whether a person can benefit financially doing something related to ham radio, while keeping [within the rules](#). It turns out that there's quite a lot one can do to make money in a ham-centered venture, limited only by imagination and guts. Here are some examples.

You know these people

Gordon West WB6NOA has made a business of compiling and publishing training materials for classroom study. Not only has he taught many classes, but he has also published many online courses.

Bob Heil K8EID (SK) has created an audio industry from amateur radio sound quality design. His equipment is considered the industry standard in sound transmission and reproduction.

Dan Romanchik KB6NU has created the [No-Nonsense Guide](#) series for the concise study of ham radio exam material. Many have not only used his guides, but copied his methodologies (highlight, hide, storytelling) to incorporate into their own amateur exam documentation.

Richard Bateman KD7BBC, the author of [HamStudy](#), has single-handedly revolutionized both amateur radio exam studying by HamStudy.org and examination hosting with his widely used platform ExamTools.org.

Entrepreneur authors of the two most widely used world-class logging software named after their call signs, **Scott Davis** N3FJP and **Tom Wagner** N1MM, are in hot competition for the top spots as the best and most popular. Many other [logging software developers](#) have discovered niche audiences who use CW, FT8, and special modes.



Fred Lloyd AA7BQ, founder and owner of QRZ.com uses a web interface for software logging and awards, but his online tools do much more. Included in QRZ is a popular Ham Radio Gear For Sale page.



Other ham-oriented businesses

In a recent ([March 2026](#)) *Microvolt* issue, we highlighted [repair shops](#), who have formed niche businesses from radio repair. Most of them have branched out to servicing more than amateur radio equipment because the market size of ham-only repair is quite small, and a radio is a radio, so if you've repaired one you've repaired them all.

Many amateur radio stores have emerged, which have discovered a competitive market for selling ham radio equipment. Although a few notable ones (Amateur Electronic Supply, MFJ, SteppIR, CheapHam) have gone out of business, the majority, such as [HRO \(Ham Radio Outlet\)](#), [GigaParts](#), [RandL Electronics](#), [American Radio Supply](#), and [DX Engineering](#), have survived. Businesses serving amateur radio as a secondary operation that have also thrived include [Powerwerx](#), [Batteries America](#), [West Mountain Radio](#), and [Antique Radio Knobs](#).

Finally, many amateurs, such as [Kevin Bowen](#) K7SW and [Josh Hoshnasi](#) KI6NAZ, have taken advantage of YouTube to publish informative videos to help the budding ham learn both the basics of ham radio and in-depth results of experimentation. They regularly post video reviews of old, new, and controversial equipment, and even use technology to demonstrate the mysteries behind some of our craft, and get paid by Google through its ad revenue sharing system.

How about you?

What do you think...can ham radio become the foundation for a lucrative business venture in your future? Or are you happy making a living at what you're doing right now? Who knows...a new idea might be begging for your attention right around the corner.

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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

The **Utah Amateur Radio Club** was organized under its present name in 1927, with its beginnings dating back as early as 1909, then becoming affiliated with the **American Radio Relay League** in 1928. UARC is a 501(c)(3) non-profit organization and 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 **Warnock Engineering Building**, Room 2230, unless otherwise posted.

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. Send 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 2026 Board

President: [Adam Stribling](#), KK7NJJ

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For-late breaking news listen to the UARC Information Net, Sundays at 8:30 pm on 146.620– or visit the [announcement page](#).

We are grateful to the management of our internet service provider XMission, for the donation of our web service. For account information go to <https://xmission.com/> or call 801-539-0852

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