

The *Microvolt*

July, 2013



Prologue

Publication: *The Microvolt* (USPS 075-430) is the official publication of the Utah Amateur Radio Club, Incorporated, 699 E. South Temple Ste 100, Salt Lake City, UT 84102-1282. It is published monthly except August. Subscription is included with club membership at \$17 per year. Single copy price is \$1.50. Periodicals postage paid at Salt Lake City, Utah. Postmaster: send address corrections to *The Microvolt*, c/o Dick Keddington, 1783 Woodside Drive, Holladay, UT, 84124-1620.

Deadline for submissions is the 24th of each month prior to publication. Submissions by email are preferred (k7hfv@arrl.net), but other means including diskettes and typewritten submissions can be mailed directly to: Gordon Smith, 632 University St., Salt Lake City, UT 84102-3213. Reprints are allowed with proper credits to *The Microvolt*, UARC, and authors. Changes in mailing address should be communicated to the Club Secretary: Dick Keddington, 1933 Woodside Drive, Holladay, UT, 84124-1632.

Club: 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 non-profit organization under the laws of Utah. It holds a club station license with the call W7SP, a memorial call for Leonard (Zim) Zimmerman, an amateur radio pioneer in the Salt Lake City area.

Meetings: The club meets each month except July and August. The meetings are held on the second Thursday of the month at 7:30 PM in the University of Utah's Warnock Engineering Building, generally in room 1230 or 2230., sometimes in 2250 or 105.

Membership: Club membership is open to anyone interested in amateur radio; a current license is not required. Dues are \$17 per year, including a *Microvolt* subscription. *The Microvolt* and membership cannot be separated. Those living at the same address as a member who has paid \$17 may obtain a membership without a *Microvolt* subscription for \$9. Send dues to the Club Secretary: Dick Keddington, KD7TDZ, 1783 Woodside Drive, Holladay, UT 84124-1620.

Contributions: Monetary contributions are gladly accepted. Send directly to the Club Treasurer: Chuck Johnson, 1612 W. 4915 S. Taylorsville, UT 84123-4244. For in-kind contributions, please contact any board member to make appropriate arrangements.

Repeaters: UARC maintains the 146.62- and 146.76- repeaters. The repeaters are administered by the UARC Repeater Committee. Comments and questions may be directed to any Committee member. The Lake Mountain repeater (146.76-) is IRLP node 3352. Instructions for IRLP use are on the club website.

Ham Hot-Line: The Utah Amateur Radio Club (UARC) has a Ham Hotline, 583-3002. Information regarding Amateur Radio can be obtained, including club, testing, meeting, and membership information. If no one answers leave your name, telephone number

and a short message on the answering machine, and your call will be returned.

UARC 2013 Board

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Field Day Chair: Brett Sutherland, N7KG	801 298-5399
License Trustee: Brett Sutherland, N7KG	801 298-5399
Repeater Engineer: Randy Finch, K7SL	801 556-7565
ATV Engineer: Clint Turner, KA7OEI	801 566-4497
Autopatch Engineer: Gordon Smith, K7HFV	801 582-2438

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IRLP Information

For information on using the club's IRLP node on the 146.76 repeater, check <http://user.utaharc.org/irlp> .

For late breaking news listen to the UARC Information Net Sundays at 21:00 on 146.62 or set your browser to: <http://user.xmission.com/~uarc/announce.html>

We are grateful to the management of XMission, our Internet Service Provider (ISP), for the donation of this Web-Page service.



For account information go to:
<http://www.xmission.com/>
 Or call 801 539-0852



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July Meeting: Steak-Fry and Swap Meet, July 10

July is a special month for the Utah Amateur Radio Club. Instead of meeting on a Thursday evening at the University of Utah, we meet on a Saturday afternoon in Big Cottonwood Canyon. The annual steak-fry will take place on Saturday afternoon, July 13. Reservations are \$10 for the full steak dinner. It can be paid at the June UARC meeting, at Field Day, or by mailing a \$10 check made out to “Utah Amateur Radio Club” to the secretary:

Richard Keddington, KD7TDZ
1783 Woodside Drive
Holladay, Utah 84124-1620

Another option, if you are a Pay-Pal member, is to use PayPal to send funds to “uarc@xmission.com.”

The place is Group Area 7 of “The Spruces” Campground in Big Cottonwood Canyon. Tell the folks at the entrance station that you’re with the radio group in Area 7.

We have the site reserved for the entire day, so you can come any time you would like if, for example, you would like to start with a family picnic. The swapping part of the event has been a bit limited in recent years, but if you’d like to help cure that, bring along any goodies you’d like to get rid of.

Most people generally start arriving at about 2 P.M. and the steaks will go on about 5 P.M. There will be paper and plastic utensils available, but if you’d rather cut your steak with a real steel knife on a real plate, you might want to bring your own table service.

“The Spruces” is located in Big Cottonwood Canyon. Look for a right turn about ten miles up from the canyon mouth. Big Cottonwood is the canyon that goes to Brighton and Solitude (although if you get to either one, you’ve gone too far). One route is to take the 6200 South exit from eastern I-215 and follow the signs toward Brighton. Another is to get on Fort Union Boulevard (the 7200 South exit from I-15) and follow it east to the canyon mouth.

Parking is limited — we only get about 30 spaces with the group area. If you arrive after the spaces are all in use, your choices are to pay several dollars for a parking place near the entrance station, or to park out along the highway and walk in. Car pooling is highly advised.

Deadline to get your \$10 in is Saturday, July 6.

Latest News

Our Cover

Our cover photo this month shows tents and antennas in a view of UARC's Field Day camp on June 22 and 23. The event was near Payson Lakes on the Mt. Nebo Scenic Loop. For more on Field Day see page 6.

No August Meeting

UARC does not meet during the month of August, so if you've been putting off your vacation for fear of missing another fine UARC program, August is the month when you can do it without worry.

Thursday evening meetings will resume on Thursday, September 12, in the Warnock Engineering Building, room 2230. We have room 2230 reserved for our meetings during the entire fall semester.

Wasatch-100 Help Needed

One of the Utah public service events that requires an enormous amount of effort by radio amateurs is the Wasatch Front 100-mile endurance run, nicknamed the "Wasatch-100." It is a foot race which challenges runners to cover 100 miles of trail in 36 hours or less. The course involves over 26,000 feet of elevation gain and loss.

Although there are now many ultra-marathons in the country, Wasatch was one of the original four and attracts runners from all over the nation.

Radio amateurs use voice and packet radio to keep an accurate database of the last reported positions and times of all runners. They man approximately 15 checkpoints, some for over 24 hours. This network helps those in charge of the race to identify quickly runners that may be in trouble or have gotten off the course and to send out search parties when necessary.

The event takes place each year on the Friday and Saturday after Labor Day weekend, which puts it this year on September 6 and 7.

Claude Grant, WC7G, tells us that there is a need for van drivers this year. They must be at least 25 years old and have a decent driving record. Those with an amateur license who could operate mobile on two meters would be preferred. If you would like to volunteer or to help in other ways, contact Claude at <mailto:info@wasatch100.com>. For more information about the run, check <http://www.wasatch100.com/>.

Homebrew Night Coming

Maybe it's a little early to begin talking about events in October, but major homebrew projects may take a few months to complete.

UARC's annual homebrew night will take place at the October meeting, Thursday, October 10. This is a chance for amateurs to show off home-built equipment of various sorts. Anything which can be used in amateur radio and has not been shown at a previous UARC homebrew night is welcome.

If your project is too big, too heavy, or too permanently installed to bring in, just bring pictures and diagrams to show what you have done. Digital images on a USB flash drive are one good way to accomplish this.

Good projects include power supplies, linear amplifiers, direction-finding systems, audio preamps, RF preamps, QRP transmitters and/or receivers, and antennas.

The clock is ticking; get started!

Member of the Month

Sam Evans, WE7NDN

By Linda Reeder, N7HVF

This month we are featuring Sam Evans, WE7NDN. Sam has been in amateur radio since 1994. In 1994 Sam and six members of his family went to Salt Lake and passed their amateur radio exams. Sam's wife, Lamita, obtained her Technician license. Her call sign is N7EWE. Sam and his wife, Lamita, have three children: two boys and one girl. All three of them have their amateur radio licenses. Sam and Malita's 20-year-old son, Dallon, has his Technician license. His call sign is KE7SOM. Their 18-year-old daughter, Sierra, has her Technician license with the call sign KF7RUU, and their 16-year-old son, Samuel E., has his Technician license with the call sign KF7OQH. Sam's father-in-law, Earnest Brinkerhoff, has his Technician class license. His call sign is W2OPA.

Sam's Family is very active in emergency preparedness. They have all passed the cert test. Sam is a member of the emergency response team. He is the leader in the emergency team in his ward.

Sam's favorite thing about amateur radio is the camaraderie, looking out for each other. Sam said his friend Doug, WE7BBQ's stepson was sick at school and had forgotten his cell phone but he was able to get ahold of Doug by using ham radio.

Sam told me about another gentleman who lives in Payson for part of the time, and works part of the time in Eureka working on housing projects. One housing project was going to take a little bit longer than he had planned and he was able to contact his family by way of the reflector.

Sam is a 76er. You can find him on the morning crew on the 146.76 repeater. Sam said it is great having someone to keep him company so early in the morning when he is on his way to work. If you just happen to be awake at 4 A.M. you are welcome to join in on the fun.

Sam is a field mechanic for a small construction company where he has worked for 15 years.

Sam really enjoys Field Day. He likes to help set up the antennas. Sam plans on attending Field Day with his friend Doug, WE7BBQ, who will be doing the cooking. Sam is a member of UARC. He plans on upgrading to General soon.

Sam is involved in farming. He has five and one half acres. They have lots of animals and raise their own beef. They have cows, pigs, and chickens. Sam, we wish you the best in all your endeavors and good luck on your upgrade to General.

Petition to Allow Encrypted Transmissions

The FCC is inviting public comments on a proposal from a Massachusetts ham to amend the Part 97 Amateur Service rules to permit the encryption of certain amateur communications during emergency operations or related training exercises. On June 7 the FCC accepted for filing a

Petition for Rulemaking (RM-11699) from Don Rolph, AB1PH. It will remain open for comment until July 7. The full petition can be read at <http://apps.fcc.gov/ecfs/document/view?id=7022424684>.

License Examination Schedule

Opportunities to test for new or upgraded amateur licenses

Date	Day	City	Contact Person	Phone
07/17/13	(Wed.)	Provo	Steve Whitehead, NV7V	(801) 465-3983
07/17/13	(Wed.)	St. George ²	Gary O. Zabriskie, N7ARE	(435) 674-2678
07/30/13	(Tue.)	Salt Lake City ³	Eugene McWherter, N7OVT	(801) 541-1871
08/03/13	(Sat.)	Salt Lake City ^{1,4}	Gordon R. Smith, K7HFV	(801) 582-2438
08/17/13	(Sat.)	Hurricane ²	Gary O. Zabriskie, N7ARE	(435) 674-2678
08/21/13	(Wed.)	Provo	Steve Whitehead, NV7V	(801) 465-3983
08/21/13	(Wed.)	St. George ²	Gary O. Zabriskie, N7ARE	(435) 674-2678
08/27/13	(Tue.)	Salt Lake City ³	Eugene McWherter, N7OVT	(801) 541-1871

¹Preregistration required. Check with the contact person before the test session.

²More information at <http://www.dixieham.org/meetings.html>

³New location: Senior Center at the Columbus Center, 2530 S. 500 East

⁴More information at <http://www.utaharc.org/Exams/>

Check <http://user.xmission.com/~uarc/testinfo.html> for further exam information.

Field Day 2013

Field Day, the national contest to test amateurs' preparedness for emergency communications, is probably the annual UARC event that takes more effort and man-hours than any other. We set up serious HF stations capable of contacting most any part of the world, and do it in a spot with no buildings, utilities, or pre-constructed antenna supports.

The event for 2013 is now over even though many operators may still be suffering from PFDST (Post Field Day Stress Syndrome) where their wives tell them they've been mumbling "CQ Field Day" in their sleep.

So how did this year's event go? There were many positives:

- The weather was about as good as could be expected in late June.
- There was plenty of help setting up and tearing down.
- The new thin client computers for logging generally worked well.

- The generator ran the whole time without a hitch.
- Many operators participated on the GOTA station, some getting their first HF experience.
- New rules about the hours available for setup were helpful.
- The club-supplied food, prepared by WE7BBQ, was great.
- Our first attempt at making a 40-meter Vee antenna was a great success.
- We were able to keep all the stations manned for a larger number of hours than in many other years.

On the downside, the most obvious issue was that we only made about half as many contacts as last year. We will probably be analyzing the situation for some time to decide just why that was. Some contributing factors might have been:

- We had a greater number of inexperienced operators (probably a *good* thing).

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- The A-4 (large tri-band beam) may not have been operating quite up to snuff. (We need to check the feedline among other things.)
- We didn't have Max (Matt) George, NG7M, with his great CW station and excellent operating skill.
- Perhaps band conditions on 20 weren't as good as last year?
- Interference between stations was a limiting factor.
- The A-4 beam was occasionally found pointed south, possibly one of the least useful directions.

The new Field Day rules for 2013 allowed us to start setting up as early as 6 P.M. on Thursday. There probably wasn't a lot done on Thursday evening, but it was possible to use all of Friday morning and afternoon without exceeding the 24-hour maximum. As a result, we actually started operating on time this year.



Ted, KC7PM, operates the CW station at UARC's Field Day 2013

We ran in the 3A class — three simultaneous transmitters with two on single sideband and one on CW. We also ran the separate “Get On The Air” (GOTA) station that the rules allow for first-timers or generally inactive folks. The CW station was transmitting right on the dot of noon. The 20-

meter SSB station was making its first contact within nine minutes, and GOTA was active by 12:12. The 15-meter SSB station was pulling them in by 12:30. This was quite a contrast from some years when we were still working out antenna,

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tent, and network problems two or more hours after the contest started.

One of the most pleasant surprises in 2013 was how well our 40-meter Vee antenna worked. The Vee is a wire antenna that makes a “V” shape in the horizontal plane. The two legs are each 350 feet long with an apex angle adjusted depending on the band of interest. For 40 meters it needed to be in the 60-65 degree neighborhood. The antenna is bidirectional along the line bisecting the apex angle.

We had used a 20-meter Vee in 2012 with good results but had never tried 40 before. The result was impressive: we made more contacts on 40 CW than in any of the eight prior years. Our total this year was 334 compared to runners-up 2012 at 261 and 2007 at 260. Not-so-memorable years were 2005 with 32 and 2010 with 12. We don't know if it was UARC's best year of all time for 40 CW. For some reason internet archives from the 1930s are limited.

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The bottom line is that we hope everyone had a good time and learned a bit more about emergency operating. For those that would like to help with the post-mortem analysis and help with the planning and preparation for next year, there is a Yahoo group, especially for that. Go to: <http://groups.yahoo.com/group/UARCFD/> to see how to join.



Lonnie's (K7LO) Ice-Fishing tent was wonderful for CW operation and took but two minutes to erect.