

The *Microvolt*

March, 2014



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, 5474 Hews Place, Taylorsville, UT, 84129-1416.

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, 5474 Hews Place, Taylorsville, UT, 84129-1416.

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, 5474 Hews Place, Taylorsville, UT 84129-1416.

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 2014 Board

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Historian: Ron Speirs, K7RLS	801 904-3587
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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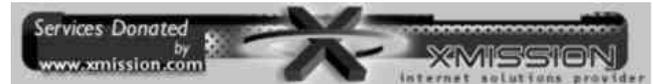
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IRLP Information

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>

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For account information go to:
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The Microvolt

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March Meeting: Antennas and Other Stuff

In various surveys we have done, antennas seem to be a perennial topic of high interest. At the March UARC meeting, to be held Thursday, March 13, Dave Christensen, KD7UM is going to give us some practical tips on antennas for both HF and VHF. He calls his talk “Antennas and Other Stuff.” The other stuff will include information about how radios communicate, how you can improve your station or setup, and some common errors and misconceptions.

Dave wanted us to give you some information about himself and his ham history. He was first licensed in March of 1983 as a Novice with the call KA7PRW. His mentor was a co-employee, Bob Lambert, N7DBL, who lent him a receiver for the weekend. Dave was hooked and immediately began studying to become an amateur radio operator. In August, 1983, he passed the General and Advanced class examinations and was awarded the callsign KD7UM. On June 6, 2008, he test for and received his Extra Class license.

He has been active in emergency communications since he was originally licensed and involved with RACES (Radio Amateur Civil Emergency Service), Salt Lake County ARES (Amateur Radio Emergency Service), Salt Lake County Sheriff’s Office, CERT, and is currently president of the Mercury Amateur Radio Association (MARA), an international amateur radio organization. He was a past UARC Board member.

Dave is employed by the LDS Church as a Senior Satellite Engineer and is responsible for a network of 7300 downlink sites in their global broadcast network.

The meeting will be on Thursday, March 13, at 7:30 P.M. in room 2230 (the “Clark” classroom) of the Warnock Engineering Building.

The front elevators in the Warnock Building have the second floor locked out in the evening. There are two possible solutions for the handicapped. The first is to get into the elevator and then send an able-bodied person to the second floor to call the elevator. The second method is to find your way to the elevator in the southwest corner of the building and use it to access the second floor.

UARC meetings are held on the second Thursday of each month at 7:30 P.M., in the Warnock Engineering Building on the University of Utah campus. The winter and spring, 2014, meetings are scheduled in room 2230 or 2250. See the [map](#) for information on finding the building. The room number varies depending on availability.

Of course, the meeting will include the “standard” meeting features:

- Availability of ARRL books from Brett, the “book lady”
- An opportunity to join UARC or renew your membership
- An opportunity to join ARRL or renew your membership
- The chance to meet face-to-face the people you talk to on the air
- The “Meeting after the meeting”: A chance to enjoy pizza or other gastronomic delights with other hams. It happens at Litza's Pizza, 716 E. 400 South.
- The “Meeting *before* the meeting”: A similar get-together for those who can leave work early enough to get there by 5:15 P.M. The March get-together will be at “Charlie Chow's Dragon Grill,” 255 E. 400 South in Salt Lake City.

Latest News

Our Cover

Our cover this month shows Darryl Hazelgren, K7UT, who presented our February meeting program about remote control of amateur stations. He is shown along with a well-equipped station that can be remotely controlled. (Thanks to K7RLS for the photo of Darryl.)

VHF Society Has Annual Meeting

Saturday, February 22, saw the annual meeting of the Utah VHF Society, Utah’s organization devoted to the furtherance of VHF and UHF repeaters. Attendance was much better than for the 2013 event, possibly owing to the absence of the blizzard that dominated the weather in 2013.

New plans announced included a new repeater on Monroe Peak in the Richfield area, and a new repeater in Salt Lake City to serve the recently created Salt Lake Crossroads Amateur Radio Club, a club formed to provide amateur help to Salt Lake City emergency agencies.

Some of the Society officers made a marathon trip to southern Utah last fall to (among other things) put a 70-cm repeater on the air from Navajo Mountain. The 146.96 repeater has been on the air for a number of years from this site, but was only occasionally linked into the Intermountain Intertie.

The new repeater will be connected to the rest of the system full-time.

Navajo Mountain also provides a gateway to major cities in Arizona, although the link in that direction is still suffering from some problems.

It was announced that the owner of the 146.96 repeater has agreed to give the 146.96 repeater to the VHF Society upon his death, so a vote was taken to “align” that repeater with the Society. (“Alignment” makes the repeater able to receive maintenance funds from the Society.)

Awards Nominations Sought

Our ARRL Director of the Rocky Mountain Division, Brian Milesosky, N5ZGT, is soliciting nominations for various awards given out by the Division. Brian writes:

“There are many individuals within the Rocky Mountain Division who deserve recognition for their achievements and contributions to ham radio and the amateur radio community — and we’d like to help you honor them through awards that our Division offers for this very purpose.

“This is a call for nominations for the following awards:

- Ham of the Year
- Young Ham of the Year
- Technical Achievement Award

“Complete rules and a nomination form can be found at:

<http://www.rockymountaindivision.org/awards.html>

The deadline for nominations for each of these awards is April 1. Please give thought to hams in your community who are deserving of recognition and nominate him or her today!”

W1AW Portable Schedule

As part of the ARRL centennial celebration during 2014, stations in various states will be signing the W1AW call and looking for contacts. The schedule for the next several weeks is as follows:

Dates	State	State
3-12	Arizona	Ohio
3-19	Tennessee	New Mexico
3-26	Iowa	Vermont
4-2	Pennsylvania	Oregon
4-9	Massachusetts	Virginia

For those who have yet to get their “Worked All States” (WAS) certificate, this year presents an opportunity to find all fifty states on the air from easily-heard stations on the HF bands. The portable W1AW operations are part of the “Centennial QSO Party” where operators can accumulate points in various ways throughout 2014. For full details see: <http://www.arrl.org/centennial-qso-party>.

Net Help Needed

UARC sponsors the “UARC Information Net” each Sunday evening at 9 P.M. on the synchronous 146.62 repeaters. The net is in need of additional operators to serve as Net Control Stations (NCS) and operators to run the “Other Club Information” portion of the net. Anyone who is interested and could contribute about one hour per month is invited to contact the net manager, Mike Youngs, KK7VZ, at <mailto:KK7VZ@arrl.net>.

Idaho Ham has Tower Accident

A recent news report told of injuries that Robert B. (“Bearpaw”) Galindo, KE7ADT, received when he was climbing his telescoping tower and the winch cable broke, smashing his hands as the upper sections fell. Reports disagree on the extent of his injuries, but it seems clear that his hands were severely injured. It took 20 minutes for emergency crews to figure out how to lift the upper tower sections to free him. He was airlifted to a nearby hospital. He lives in Athol, Idaho, about 20 miles north of Coeur d’Alene.

The moral to the story seems to be that one should never climb a crank-up tower relying solely on the winch cable to keep it extended. One should either retract it fully or block it in place before climbing.

ARRL to file “Friend of the Court” Brief in Antenna Case

ARRL has announced plans to file an *amicus curiae* (“Friend of the Court”) brief in the case of an Ohio ham who was denied a permit to erect a 60-foot tower despite a state law patterned after FCC’s PRB-1 document. The ham, Gary Wodke, WW8N, appealed the decision to the Fulton County Common Pleas Court and received a favorable ruling. Now, the village is appealing to the Ohio Sixth District Court of Appeals claiming that the state law violates the Ohio Constitution.

Although any ruling by the appeals court would technically affect only other cases in Ohio, it is believed it could set a precedent that could have an effect in cases in virtually any part of the country. ARRL believes its intervention could have a beneficial effect nationwide. Fred Hopengarten, K1VR, author of the ARRL publication *Antenna Zoning for the Radio Amateur*, is assisting in the case. Meanwhile, the Village of Swanton is allowing Wodke to erect a tower to 40 feet.

License Examination Schedule

Opportunities to test for new or upgraded amateur licenses

Date	Day	City	Contact Person	Phone
03/01/14	(Sat.)	Logan	V.P. Rasmussen, N7JFG	(435) 770-0630
03/05/14	(Wed.)	Clearfield	Mike Youngs, KK7VZ	(801) 573-3922
03/15/14	(Sat.)	Farmington	Gary L. Davis, KE7MQF	(801) 298-3127
03/19/14	(Wed.)	St. George ²	Gary O. Zabriskie, N7ARE	(435) 674-2678
03/19/14	(Wed.)	Provo	Steve Whitehead, NV7V	(801) 465-3983
03/25/14	(Tue.)	Salt Lake City ³	Eugene McWherter, N7OVT	(801) 541-1871
04/05/14	(Sat.)	Salt Lake City ^{1,4}	Gordon Smith, K7HFV	(801) 582-2438
04/12/14	(Sat.)	Boulder	Eric J. Feiler, KE7ZDV	(435) 335-7393
04/12/14	(Sat.)	Hurricane ²	Gary O. Zabriskie, N7ARE	(435) 674-2678
04/16/14	(Wed.)	Provo	Steve Whitehead, NV7V	(801) 465-3983
04/16/14	(Wed.)	St. George ²	Gary O. Zabriskie, N7ARE	(435) 674-2678
04/29/14	(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 June 28-29

It's been suggested that we might get more people out to Field Day if we made sure everyone knew the date well ahead of time so they could plan. We don't really know if that will help, but it's worth a try.

What is Field Day?

A good starting point might be to explain what Field Day is. Field Day is an annual nationwide contest (involving both the U.S. and Canada) in which hams compete with one another trying to make the most contacts from an outdoor location away from city facilities and utilities, i.e. "in the field." ARRL, the national association of amateur radio operators, is the sponsor of the event. For complete details of how the contest works, see <http://www.arrl.org/field-day>. The point of such an operation is to test our ability to provide

emergency communications most anyplace that might be necessary.

Field Day is Fun!

A lot of folks enjoy Field Day because it combines camping with a lot of hours of ham radio. The camping part can be anything from a sleeping bag thrown on the ground to your new \$200,000 RV. And the radio part involves operating (in shifts — as much or as little as you like) for a full 24 hours between noon Saturday and noon Sunday.

UARC Supplies the Stations

You don't have to worry about bringing equipment. UARC will likely be entering from our traditional area near Payson Lakes in Utah County

and setting up about three stations with good antennas to operate on a variety of HF bands and modes. It is likely that we will contact over 1000 stations and include every single state. Even if you don't yet have a higher-class license, there will be people there who can act as control operators while you make contacts. This can be a great way

to see what HF operating is like. It sometimes encourages people to upgrade their license classes and their stations.

So mark your calendar for June 28-29, 2014.

Member of the Month

Mark Knight, KG7BBC

By Linda Reeder, N7HVF

This month we are featuring Mark Knight, KG7BBC. Mark has been in amateur radio for just one year. although he has always been interested in building radios. When he was a kid he loved science experimenting and making things. He still does. He use to have a Radio Shack 150-in-1 kit, which he used to build a crystal radio, a transistor radio, and a few micro-transmitters. One Christmas his parents gave Mark and his brother each their own Radio Shack channel 14 CB walkie talkies. They really enjoyed messing around with them. Sometimes they would talk to truckers that were driving along I-5 through camp Pendleton and Oceanside in Southern California.

As he grew older Mark continued to love electronics and computers. He went to BYU for three years and studied electrical and computer engineering. He really enjoyed it, but he realized that he really didn't want to do it for a living so he bailed out of school. Fortunately, Mark knew the right person at the right time and started professionally doing what he really loved which was programming video and computer games. It was about this time when Mark started to study for the Technician class amateur license, but he got busy with his new career and never got around to taking the exam.

Mark set a goal to get back to it eventually and earn his license, but he was too focused on other things. Finally 20 years later Mark did obtain his amateur radio license. In February, 2013 Mark

passed both the Technician and General class exams. Mark is now studying to get his Extra Class license. He is taking the Extra class taught by Morris Farmer, AD7SR, and Ron Speirs, K7RLS, on Wednesday nights.

Mark does more listening than talking. On rare occasions Mark will connect to the Western Reflector via Echolink. Mark's favorite thing about amateur radio is listening and emergency communications. Mark is very active in the community Emergency Response Team. It is affiliated with FEMA. The purpose of this group is to prepare individuals for when emergencies arise. They have a net every Sunday night at 8:30 P.M. on two-meter simplex. Mark is also evolved with neighborhood watch and CERT.

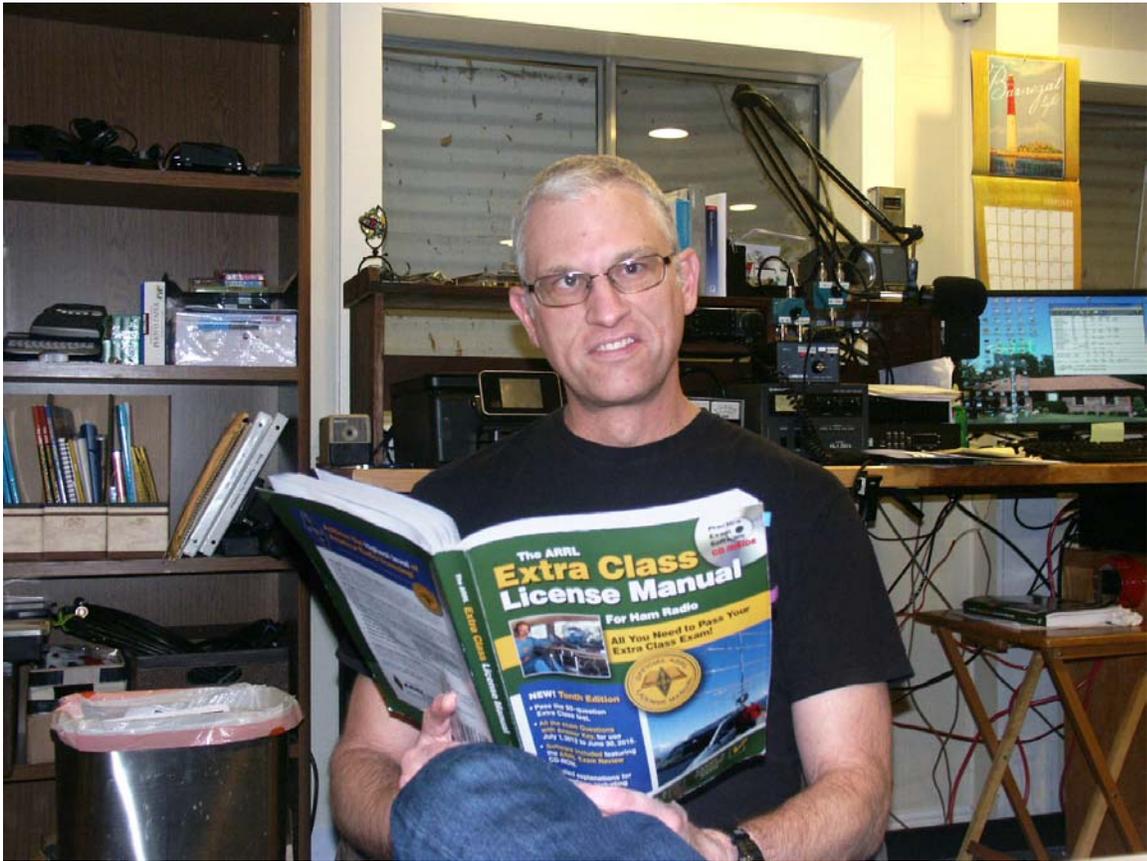
Mark has worked for several different companies including Microsoft, Headgate, Access Sofftware, Morpheus Interactive, and for awhile Mark even had his own company, Sir Knight Software. When he was working for Microsoft, Mark went back to school and finished a Bachelor of Science degree in Information Technology at the University of Phoenix with an emphasis in Web Technology. Mark still makes video games professionally. Mark currently works for Electronic Arts as a programmer on the line of games. Electronic arts is the world's largest publisher of video games.

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Mark is a member of ARRL and the Utah Amateur Radio Club. He volunteers as a committee member for his local Cub scout pack in the Boy Scouts of America. He is an Eagle Scout, amateur photographer, cross-country skier, hiker, and camper. He enjoys bird watching, four-wheeling, target shooting, and digitally restoring old family photos. Of course we can't forget that Mark loves making and playing video games.

Mark, we wish you the best in obtaining your Extra Class license.

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Mark Knight, KG7BBC, at AD7SR's house preparing for the Extra Class exam.
(Photo by K7RLS)