

# The *Microvolt*

October, 2017



## 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 \$20 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 Tom Kamlowsky, 4137 Clover Lane, Salt Lake City, UT, 84124-2711.

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: Tom Kamlowsky, 4137 Clover Lane, Salt Lake City, UT, 84124-2711.

**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 \$20 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 \$20 may obtain a membership without a *Microvolt* subscription for \$12. Send dues to the Club Secretary: Tom Kamlowsky, WA7ZRG, 4137 Clover Lane, Salt Lake City, UT 84124-2711.

**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 2017 Board

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Executive VP: Lonnie Oaks, K7LO	801 255-1225
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Treasurer: Chuck Johnson, WA7JOS	801 268-0153
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Imm. Past Pres: Linda Reeder, N7HVF	801 364-7006

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“Book Lady”: Brett Sutherland, N7KG	801 298-5399
Historian: Ron Speirs, K7RLS	801 904-3587
Field Day Chair: (To be determined)	
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://www.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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# The Microvolt

The Official Publication of the Utah Amateur Radio Club, Salt Lake City, Utah  
Volume 60, Issue 9, October, 2017

## October Meeting: Homebrew Night

One of the strong points of the amateur radio service has been that its members know not only how to operate a push-to-talk button, but also understand what's inside their equipment. They must pass tests on electronic principles to get their licenses. Amateurs have proven their worth in situations ranging from being a source of trained electronic technicians to the military in World War II to being able to repair their own repeaters during disaster communications. We like to celebrate this practical knowledge each year by focusing the spotlight on amateurs who have built some of their own equipment.

Our October meeting, Thursday, October 12, will be the annual Homebrew Night. This is a night where amateurs can bring their latest creations and show them off to the rest of the club. This may include anything that is usable in amateur radio including transmitters, receivers, power supplies, keyers, receiving converters, transverters, linear amplifiers, and even antennas. It should be items that have not been shown at previous UARC homebrew nights.

If your item is too big to bring in or too small to be understood by looking at it, bring along photos, schematics, block diagrams, or anything else that will help make it understandable to the group. We will have a computer connected to a projector, so you can bring a memory stick, a CD or DVD, or your own computer with a VGA output.

Even if you don't have a project to show off, you will want to come and see the latest in other hams' ingenuity. You may feel inspired to duplicate some of the projects yourself.

The meeting will take place at 7:30 P.M. on Thursday, October 12, in room L-103 (level L1) of the Warnock Engineering on the University of Utah campus. Take the elevator near the southwest corner of the building. (The elevators near the main entrance don't go there.)

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. See the map at <http://user.xmission.com/~uarc/meetmap.html> for information on finding the building. (The room number varies through the year depending on availability.)

Of course, the meeting will include the "standard" meeting features:

- Availability of ARRL books from Brett or John, the "book ladies"
- 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. It is held at "The Village Inn," 910 E. 400 South in Salt Lake City.

## Latest News

### Our Cover

Our cover this month shows the father and son presenter team who told us at our September meeting all about ways to operate and power our radios out in the field. The upper image is John Jacobs, W7DBO, who told us all about solar power and how to match up panels, controllers, and batteries.

In the lower image is John's father, Larry Jacobs, WA7ZBO. Larry showed us a variety of transceivers and antennas suitable for operating in the field. He made the point that a rig's current demand during *receiving* can make a big difference in total power needs.

### Elections Coming Soon

It's time to start thinking about UARC officers for 2018. During October the Board of Directors and anyone else interested in being part of the Nominating Committee will be finding a slate of candidates willing to run for 2018 positions. That slate will be presented at the regular November club meeting and the floor opened for additional nominations from the membership. Elections will take place at the December meeting.

The Board of Directors feels that it would be beneficial to the club for more people to volunteer to run for office. In particular, our President, Clint Turner, KA7OEL, is in his sixth year of the office and is hoping someone else will be willing to take over soon.

The Board members feel that there are many qualified hams out there that may not be known to them, and they would appreciate more participation in the process of nominating candidates. If you would like to be on the nominating committee, contact any of the current officers.

### Swaptoberfest October 14

The annual Cache Valley "Swaptoberfest" will be held this year on Saturday morning, October 14. This swap meet is open to everyone and there is no charge for entry or display.

This year's event will be at a new location: the Bridgerland Applied Technology College, West Campus. It is located at the corner of 1400 North and 1000 West in Logan. Enter through doors on the east side.

Swaptoberfest will run from 8:00 A.M. to 12:00 noon. Those that need time to set up displays may come as early as 7:00 A.M.

For more information including talk-in frequencies and modes, see:

<https://barconline.org/swaptoberfest/>.

### LF and VLF Bands Now Open

On September 15 word came out from the FCC that the new 630-meter and 2200-meter amateur bands are now available for use. However, before any amateur can make use of them, he must register his proposed station location and intended band(s) with the Utilities Technology Council (UTC) and wait 30 days to allow UTC to object in case the location is within one kilometer of a vulnerable power line.

Certain long power transmission lines use a form of control signalling called Power Line Carrier (PLC) which may operate on or near the frequencies of the new bands. Most amateur stations will not be close enough to a PLC power line to create a problem but all must submit their locations for confirmation. To register, go to <https://utc.org/plc-database-amateur-notification-process/>.

**The Microvolt October 2017**



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*George R. Smith* Editor

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## Amateurs Provide Communications in Caribbean

In the absence of any operational repeaters, amateurs in Puerto Rico have been using 146.52 MHz simplex to help police communications, assist the Electric Power Authority, and coordinate fuel deliveries. Activity on 7,175 and 14,270 kHz

has provided health and welfare communications.. Gerry Hull, W1VE, reports that during the first ten days of operation, thousands of messages have been handled there.

### Member of the Month Ron Mortensen, KE7VAO

By Linda Reeder, N7HVF

This month we are featuring Ron Mortensen, KE7VAO. Ron has been in amateur radio for nine

years. It was emergency preparedness that got Ron into amateur radio. Ron's LDS ward and stake were

actively involved in emergency preparedness and they wanted everyone to get their amateur radio licenses. They were running amateur radio classes and testing. Ron has his Technician license, but he is planning on upgrading to General before his license expires next year.

Shortly after Ron obtained his amateur radio license, his eldest son, Nate, received his Technician license and is now KF7WOH. Ron and Nate were a great influence on Ron's younger son, McKay, who received his General license this year and his Technician license a year ago. I featured McKay in the July *Microvolt*. McKay's call sign is KI7DNO. It excites Ron to see McKay so active in amateur radio. McKay has made many wonderful friends and he is learning a great deal. Ron enjoys taking McKay to the UARC ham club meetings. Ron's wife passed away four and a half years ago. They have four children: two boys and two girls.

Ron's favorite repeater is the Intertie. The Intertie is connected to a repeater in Roosevelt where Ron grew up. When the boys go to visit their relatives and Ron is here at home he can communicate with them on the Intertie.

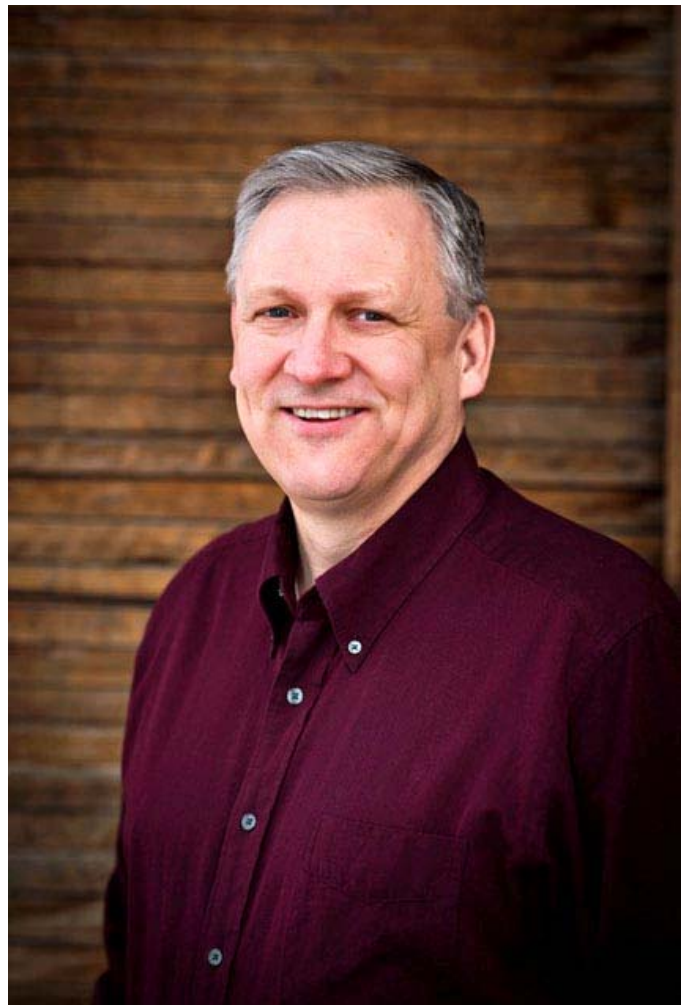
In August of this year Ron and his family went to Sugar City, Idaho, to view the eclipse. Ron gave information on the Intertie as it unfolded. Ron enjoyed it so much that he can't wait to attend another one when it becomes available. It took them nine hours to get home.

Ron enjoys building with his sons. They build electronic equipment and items for ballooning and robotics. Ron works for Ecliptics where writes software for computers.

Ron is a member of UARC and of the Herriman Amateur Radio Club. The Herriman Amateur Radio Club has a net every Sunday night at 8 P.M. and Ron checks in.

Ron, we appreciate your contributions to amateur radio and we wish you the best in upgrading before your license expires.

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Ron Mortensen, KE7VAO