

# The *Microvolt*

November, 2012



## 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.

**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 2012 Board

President: Clint Turner, KA7OEI	801 566-4497
Executive VP: Andrew Madsen, AC7CF	801 419-8378
Vice Pres: Brett Sutherland, N7KG	801 298-5399
Secretary: Dick Keddington, KD7TDZ	801 274-9638
Treasurer: Chuck Johnson, WA7JOS	801 268-0153
<i>Microvolt</i> Editor: Gordon Smith, K7HFV	801 582-2438
Asst. <i>Microvolt</i> Editor: Mary Alexander, KF7QVL	801 347-3220
Program Chairperson: Morris Farmer, AD7SR	801 278-4966
Program Chairperson: Gary Wong, AB1IP	801 582-0906
Imm. Past Pres: Linda Reeder, N7HVF	801 364-7006

## Committee Chairpersons and Members

“Book Lady”: Brett Sutherland, N7KG	801 298-5399
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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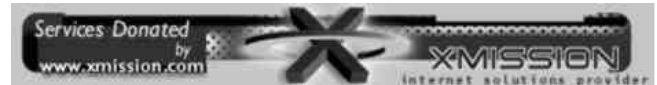
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## IRLP Information

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>

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



# The Microvolt

The Official Publication of the Utah Amateur Radio Club, Salt Lake City, Utah  
Volume 55, Issue 10, November 2012

## November Meeting: Bob Heil, K9EID

The November UARC meeting, to be held on Thursday, November 8, will feature Bob Heil, K9EID, speaking to us from home by way of Internet. Bob is featured on our cover at his FT-9000.

Bob is famous as the founder of Heil Sound, the first non-musician to be added to the “Rock and Roll Hall of Fame,” and the presenter of the weekly web video feature, “[Ham Nation](#).”

Bob founded the company, [Heil Sound](#), in 1966 and created unique touring sound systems for bands such as The Grateful Dead and The Who. In 1973 he invented the Heil Talk Box, which was frequently used by musicians such as Peter Frampton, Joe Walsh, and Richie Sambora, and is still in use today. Heil Sound also produces satellite dishes for broadcasters and live sound engineers. In the late 1980s it became one of the first American companies to create and install home theaters. Heil has lectured at major electronic conventions and taught classes at various institutions. He has won multiple awards and honors, and in 2007 he became the first manufacturer to be invited to exhibit at the Rock and Roll Hall of Fame.

In the late 1970s Heil Sound entered the amateur radio market, with Heil working to fix problems in the industry involving poorly transmitted and received audio. He applied science he had learned from Paul Klipsch, Don Leslie, Martin Wick, and the Bell Labs Fletcher-Munson curves. He developed his HC series microphones, intended for amateur radio communication. Heil Sound is currently the largest manufacturer of microphones and audio products for the amateur radio industry, with over 100 dealers worldwide.

In May 2011, Heil became the host of a weekly Ham Radio podcast, “[Ham Nation](#),” on Leo Laporte's podcasting network, TWiT.

This will be approximately our fourth try to have Bob available at the same time as our meeting, but at this writing Bob tells us that the omens are still looking good. That's Thursday, November 8, at 7:30 P.M.

UARC meetings are held on the second Thursday of each month at 7:30 P.M. The fall meetings will be in room 1230 (the “Duke” classroom) of the Warnock Engineering Building at the University of Utah. See [http://user.xmission.com/~uarc/ablip\\_meetmap.html](http://user.xmission.com/~uarc/ablip_meetmap.html) for information on finding the building and the room.

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 November get-together will be at “Su Casa,” 516 E. in Salt Lake City.

## Latest News

### December Meeting Date Change

UARC’s December meeting will take place this year on the *first* Thursday of the month, December 6, rather than the customary second Thursday. The second Thursday falls on a date in University finals week and our room will not be available. Help us spread the word to those who do not receive (or do not read) *The Microvolt*.

### Elections Coming

It is the time of year when we need to think about who officers will be for the Utah Amateur Radio Club in 2013. At the coming meeting, nominations from the nominating committee will be presented. There will be an opportunity for nominations from the floor. Elections will then take place at the

December meeting after a final opportunity for nominations from the floor. (Don’t forget that the December meeting is on the *first* Thursday of the month, December 6.)

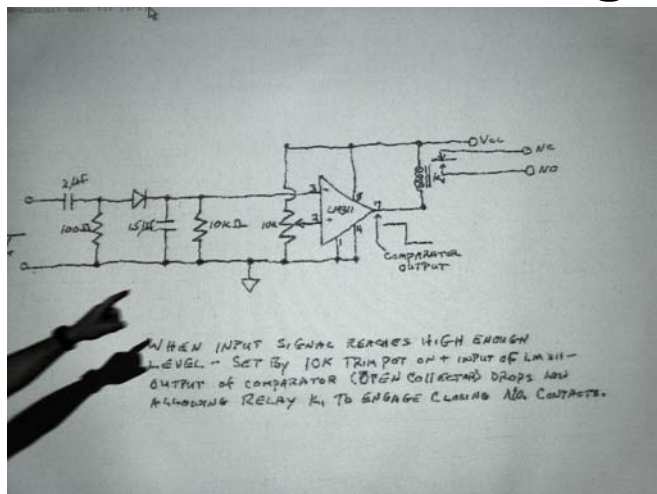
### RMD 2013 Convention

According to Brian Milesosky, N5ZGT, the Director for ARRL’s Rocky Mountain Division, the good folks in Colorado are spinning up the 2013 Division Convention in Estes Park. Mark your calendars for a superb event at the gateway to Rocky Mountain National Park on June 28-30, one weekend *after* Field Day. Bookmark the event’s website:

<http://www.hamconcolorado.org/wordpress/>.

Many more details are forthcoming.

## Homebrew Night Projects (Oct. 11)



Morris Farmer, AD7SR, and his home-designed VOX for use on digital modes



Jim Olsen, KC7GGQ, shows the “Blue Smurf” modem, used with his software that allows controlling a transceiver from a handheld device.



Jerry Williams, KF7JW, with his portable power package.



Chuck Johnson, WA7JOF, built a set of carrying cases for the club’s Field Day transceivers.

**Thursday, October 11, was UARC’s annual homebrew night where folks who had built (“homebrewed”) amateur radio gear had a chance to show it off to the membership. Thanks to Ron Speirs, K7RLS, for the photos.**



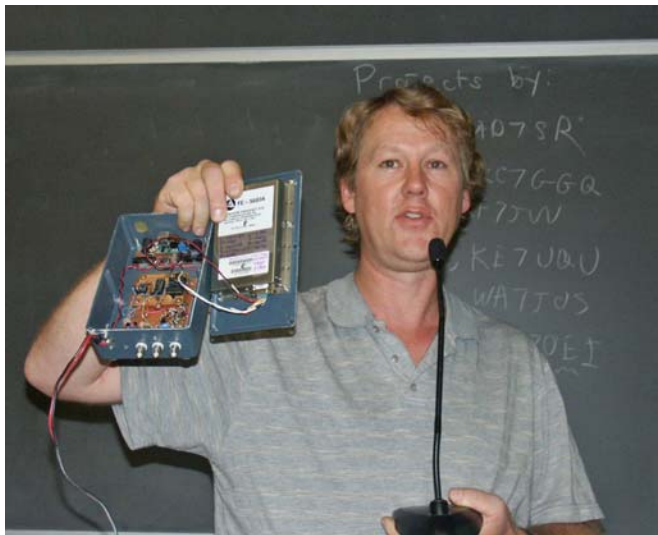
Andy Johnson, KE7UQO, with the “Arduino” microprocessor board which can be used for a variety of interfacing functions. The current program sends MCW.



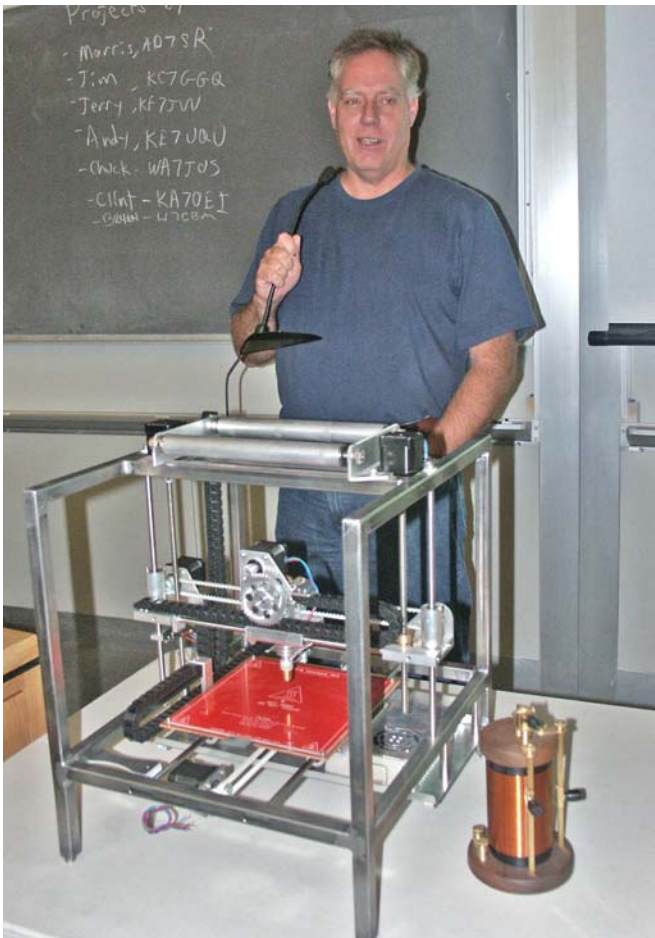
Robert Reed and his sons show crystal set components.



Bryan Mogensen, W7CBM, shows the coil for his FM crystal set.



UARC President Clint Turner, KA7OEI, shows rubidium frequency standard and phase-locked loop, used to make a transverter stable enough for single-sideband on 10 GHz.



Bryan also built 3-D printer to make plastic parts.



Aaron Ferdig, KE7GHA, shows his "Meditative Tool."

## **Member of the Month April Oaks, K7ATO**

*(Photo by K7RLS on page 8)*

By Linda Reeder, N7HVF

This month we are featuring April Oaks, K7ATO. It is really interesting how April got into amateur radio. Her dad, John Thorup, K7PPP; her husband, Keith Oaks, K7KTO; and her father-in-law, Lonnie Oaks, K7LO, and his wife, Linda, KD7GBW, are all amateur radio operators. They kept encouraging April to get her license. It was her father, John Thorup, who got the ball rolling. In 2010 he took an entire family to Provo to take a

class and pass the test. April's brother, sister, and even her mother went to Provo and most of them passed, all in the same day.

April and her husband, Keith, have two children: an 8-year-old daughter, Megan, and an 11-year-old son, Luke. Luke has expressed an interest in getting involved in amateur radio. April is working with him on getting his license. She hopes that eventually both of her children will have their licenses.

April's favorite thing about amateur radio is teaching her children the science of amateur radio. She said the main reason she got into amateur radio is the educational value of amateur radio and the family support. She likes the fact that when her family is on vacation amateur radio is a fantastic way of keeping in touch with family members.

April attended Field Day at Payson Lakes for the first time this year. At first, the only reason she went was to support her husband and to find out why her husband and her father loved this hobby so much. April enjoyed Field Day so much that she wants to go again next year. She got on the GOTA station and was making many contacts. She couldn't believe that contacts were coming in one right after the other. She ran the GOTA station for about an hour. She said next year she wants to try the advanced voice stations. April also attended steak-fry and really enjoyed it.

April is a member of UARC. April really enjoys the out of doors. She likes being in the water and skiing. April works in real estate for Coldwell Banker.

April, we wish you the best in all your endeavors.



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**For the latest news check::**

- The UARC e-mail list:  
<http://groups.yahoo.com/group/UtahAmateurRadioClub/>
- The UARC Information Net, Sunday evenings, 2100 MST, 146.62 MHz.

Member of the month, April Oaks, K7ATO

**License Examination Schedule**  
Opportunities to test for new or upgraded amateur licenses

Date	Day	City	Contact Person	Phone
11/07/12	(Wed.)	Clearfield	Mike Youngs, KK7VZ	(801) 573-3922
11/17/12	(Sat.)	North Salt Lake	Gary L. Davis, KE7MQF	(801) 298-3127
11/21/12	(Wed.)	Provo	Steve Whitehead, NV7V	(801) 465-3983
11/21/12	(Wed.)	St. George <sup>2</sup>	Gary O. Zabriskie, N7ARE	(435) 674-2678

<sup>1</sup>Preregistration required. Check with the contact person before the test session.

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