

The *Microvolt*

July, 2011



Prologue

Publication: *The Microvolt* (USPS 075-430) is the official publication of the Utah Amateur Radio Club, Incorporated, 3666 S. State Street, Salt Lake City, UT 84115-4848. 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.

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Historian: Ron Speirs, K7RLS	801 904-3587
Field Day Chair:	
Club Trustee: Brett Sutherland, N7KG	801 298-5399
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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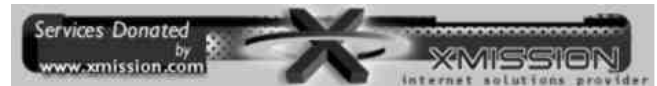
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IRLP Information

For information on using the club's IRLP node on the 146.76 repeater, check <http://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://www.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:
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July Meeting: Steak Fry, July 16

UARC's July meeting will be the annual steak-fry and swap meet on Saturday afternoon, July 16, at "The Spruces" campground in Big Cottonwood Canyon. We will start getting steaks on about 5 P.M. and folks will likely start gathering to socialize and enjoy the cool of the mountains about 2 P.M. In addition, John Hardy, K7ALA, will be setting up a hidden transmitter hunt, so bring your H-T and DF antenna.

Big Cottonwood Canyon is the canyon that goes to Solitude and Brighton. Take the 6200 South exit from eastern I-215 and follow the signs to the ski resorts. "The Spruces" is about ten miles up on the right. Tell the folks at the entrance station that you're with the radio group in Area 7.

There will be paper plates and plastic utensils available, but you might prefer to eat a steak on a real plate with real silverware. If so, remember to bring your own table setting.

If you still need a ticket, they are available from the Secretary, Dick Keddington, KD7TDZ, for \$10 each. Dick can be reached at (801) 274-9638, or e-mail at kd7tdz@arrl.net.

Latest News

Our Cover

Our cover this month shows the UARC setup for its entry in the nationwide Field Day contest, held June 25 and 26. The 80-foot tower atop the Communications on Wheels ("COW") trailer is visible, supporting the A-4 triband beam. More details in the article on page 4.

Homebrew Coming

A reminder that UARC's October meeting will be the annual Homebrew Night. If you're planning to build a 5-band SSB transceiver from scratch, it might be time to get started. Mark October 13 on your calendar.

No August Meeting

UARC does not have a regular meeting during the month of August. The next Thursday night meeting will be September 8 when Bob Armstrong, N7XJ, will be giving a presentation on QRP for Backpacking.

W7NOA, SK

We regret to announce the passing of John Kleingeld, W7NOA, on May 28, a few months short of his 65th birthday.

John, a UARC member, was first licensed in 1996 as KC7SGT.

Field Day 2011

Field Day 2011 is over and we think that most of the participants had a good time, although there were certainly enough opportunities to solve Murphy-related problems. The first was a worry that our chosen site at 8200 feet elevation near Payson Lakes would not be clear of snow by the Field Day weekend. Chuck, WA7JOS, and his XYL, Arlene, KD7IZC, made a trip to the site on the first day the road was open. They discovered that, despite the record-breaking winter, the site was already quite usable, and the few snow patches and wet spots would almost certainly be gone by Field Day weekend.

The next Murphy intervention happened when no one was scheduled to meet Bill Sticka, AD7TC, who had generously volunteered to pick up the small trailer holding the club's A-3 beam, tower, and old generator. We had hoped to have one of the Field Day veterans meet Bill to point out and help load the rigs, ropes, feedlines, lamps, plug strips, and network cables onto the trailer. Somehow, that bit of scheduling failed to happen, so Bill, not having heard otherwise, simply picked up the trailer with only its permanent contents.

Near-miss number two happened when Doug, KF7OZL, came by to get the tote boxes with various important accessories, but found he did not have room for all of what needed to be taken. Fortunately, Rian, KF7QGY, was on the air and volunteered to take the material in his pickup. This led to near-miss number three when the author, K7HFV, helped Rian load the remaining totes. Unfortunately, I did not realize there were other vital items still left behind that were not in totes.

By now it was Friday night and the 80-foot tower could not be raised due to lack of ropes and feedlines, and there seemed to be no prospect for getting them before Saturday morning when setup needed to begin in earnest. Brett Sutherland,

N7KG, came to the rescue, and made attempt number four. He made another trip back to the Salt Lake Valley, starting near midnight, and returning sometime in the wee hours of the morning. He succeeded in getting most of the remaining vital pieces to the site at last.

Saturday dawned a beautiful, sunny day with comfortable temperatures and most of the equipment ready to set up. All the problems were behind us, right? Well, not quite. The A-4 beam was lifted into place and mounted on the 80-foot tower. The next step was to tilt the tower up so it could be extended to full height. The generator was started and the "Tilt Up" switch was depressed. There was a loud hum for a few seconds, but no motion. Trouble with the tilt motor? The cover was removed allowing a beautiful rusty-red waterfall to emerge from motor and gear train. Ooops. Oh, that's right. Last winter was a wet one, wasn't it?

The motor and mechanism was soon broken free from its frozen mode, but the tilt motor now refused to respond to the switch. Apparently in that few seconds of hum, something had opened in the circuit. It might have been a limit switch, a pole of the control switch, or a hidden fuse. Clint, KA7OEL, pointed out that in the hour and a half remaining until start time, we could either work on troubleshooting the motor problem with success not assured, or we could just spend it turning the mechanism by hand with some assurance that after a couple of thousand rotations or so, the tower would be tilted up. We went with Plan B using about a half-dozen volunteers in sequence to give the wheel as many spins each as they could manage before getting tired. Sure enough, in about a half-hour, the tower was upright and ready to extend.



Nathan, KD7YYN, takes a turn cranking the tilt mechanism.

Doug, KF7OZL, our Field Day Coordinator, took care of climbing the (not yet extended) tower and tightening some bolts as well as attaching the pulley needed for wire antennas. Finally, with leveling, tilting, mounting, and attaching out of the way, it was possible to extend the tower to its full 80 feet and put the locking pins in place.

Meanwhile, others of us had been working to run the networking cables and get the logging computers and monitors set up. Everything seemed to be working, but we could not test the code-sending interface for lack of the CW station's transceiver. Just as I headed across the field to find

a VOM, though, Andrew, AC7CF, pulled into camp with his Elecraft K2 in hand. There was a full ten minutes, yet, before starting time. We can say happily that the interface worked on the first try and we were on the air calling "CQ FD" only eight minutes late.

The rest of Field Day went tolerably well. We operated in the two-transmitter class with the CW station on the A4 at 80 feet and the SSB station using the A3 at 30 feet. The SSB station didn't seem to be getting out as well as one would expect, and the cause was never determined. Power output seemed to be within tolerances as

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did SWR, so the culprit might have been lossy feedline, misadjusted transmitter, or something wrong with the beam itself. We must remember to investigate that next year.

John Brewer, N7MFQ, provided a great chicken recipe as the main course for the Saturday night dinner, and had it in such quantities that seconds and even thirds were encouraged.

We discovered in the wee hours of the morning that we had only one serious tuner for two stations needing wire antennas for 80 and 40 meters. We really need another big tuner in addition to the one that Brett, N7KG, usually lets us use. That's another thing to remember for next year.

In addition to the two "main" stations, we operated the allowed "Get On The Air" (GOTA) station for newcomers to HF and Field Day. The GOTA operators wracked up 149 contacts this year, possibly the best in the club's history for the GOTA station.

Altogether we did a bit better than last year on SSB and a bit worse on CW. The total showed an

improvement, mainly thanks to the GOTA operation on 40-meter SSB. Below is the summary of contact points.

BAND	CW	SSB	GOTA	Tot. QSOs	CW Pts	Tot. Pts
80	—	53	—	53	—	53
40	113	46	149	308	226	421
20	479	141	—	620	958	1099
15	41	37	—	78	82	119
Total	633	277	149	1059	1266	1692

Note that "QSO Points" are different from just QSOs because CW QSOs provide two QSO points each. That total of 1692 compares to 1572 in 2010. It now gets multiplied by the power multiplier (2) and will have the bonus points added to it which should yield a total near 4000 points. We'll show the final submission total on the UARC web site

<http://www.xmission.com/~uarc/announce.html>

when all has been calculated.

License Examination Schedule

Opportunities to test for new or upgraded amateur licenses

Date	Day	City	Contact Person	Phone	Notes
07/20/11	(Wed.)	Provo	Steve Whitehead, NV7V	(801) 465-3983	
07/20/11	(Wed.)	St. George ²	Gary O. Zabriskie, N7ARE	(435) 674-2678	
07/26/11	(Tues.)	Salt Lake C.	Eugene McWherter, N7OVT	(801) 541-1871	
08/06/11	(Sat.)	Salt Lake C.	Gordon Smith, K7HFV	(801) 582-2438 ¹	
08/17/11	(Wed.)	Provo	Steve Whitehead, NV7V	(801) 465-3983	
08/17/11	(Wed.)	St. George ²	Gary O. Zabriskie, N7ARE	(435) 674-2678	
08/30/11	(Tues.)	Salt Lake C.	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>

Member of the Month: Rob Patterson, KF7MME

By Linda Reeder, N7HVF

This month we are featuring Rob Patterson, KF7MME. Rob is a new ham. He became interested in the hobby through his LDS stake, the Crescent North Stake. They are encouraging their members to get their ham licenses as part of emergency training. His stake has an emergency training net on the 145.45 repeater on Thursday nights at 9 P.M. There was a ham radio class at the stake center. David Matern, KB7YOS, was one of the instructors.

Rob and his 16 year old daughter, Jacqi, took the class and received their Technician class licenses in November, 2010. Rob and his wife, Cherie, have two children, girls 16 and 18 years old.

Rob works for ACS as a data entry manager. Rob really enjoys computer programming. One day Rob was browsing through the web pages and came upon the VHF Society web page and that is where he learned about UARC. Rob and his daughter, Jacqi,

have attended the last two UARC meetings. Rob's favorite meeting was the one on vintage radio.

Rob is working on upgrading to General. He really wants to get into DXing. Rob speaks German and wants to make contact with Germany. He is really looking forward to that. Rob really enjoys listening to the 146.62 repeater. Rob has an Icom 380 dual bander handheld radio. Rob also enjoys participating in helping with communications in public events such as marathons. Rob and his daughter helped out with the Salt Lake marathon. They operated one of the aid stations for the runners. Rob is looking forward to helping with communications in more of these events. Rob is also a member of ARRL. Another hobby Rob enjoys is playing the accordion.

Rob, we wish you the best in all of your endeavors, especially getting that upgrade so you can make contact with Germany.

Vintage Radio Night

Our May meeting featured old amateur equipment from the past. Here are some photos by club Historian, Ron Speirs, K7RLS.

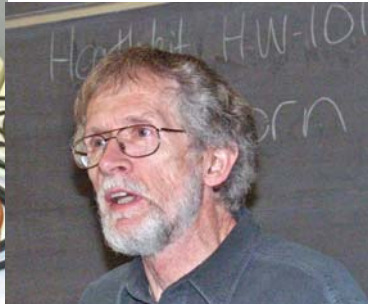


Bob Harbrecht, KE7QEQ, shows a Heathkit DX-40, a CW and AM transmitter from the 1950s.

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Bruce Fereday, KF7OZK, showed a National SWL receiver.



Rolan Carr, KA7PGH, shows the venerable ARC-5 surplus rig.



Club Treasurer, Chuck Johnson, WA7JOS, shows the Heathkit HW-101 SSB Transceiver, assembled from a kit.

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Don Ballou, N4TRS, shows a truly ancient driver and horn as a loudspeaker.