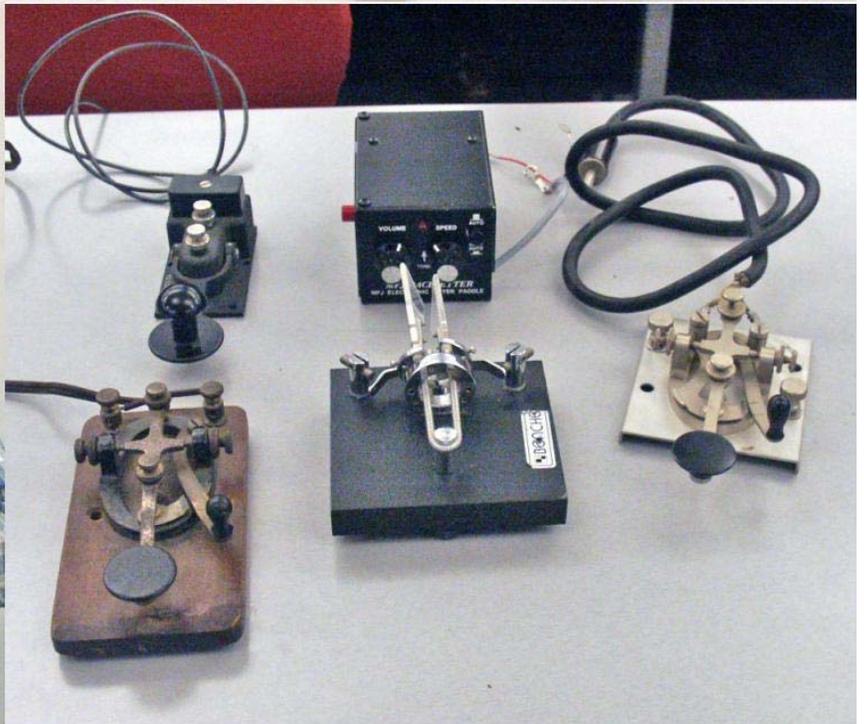
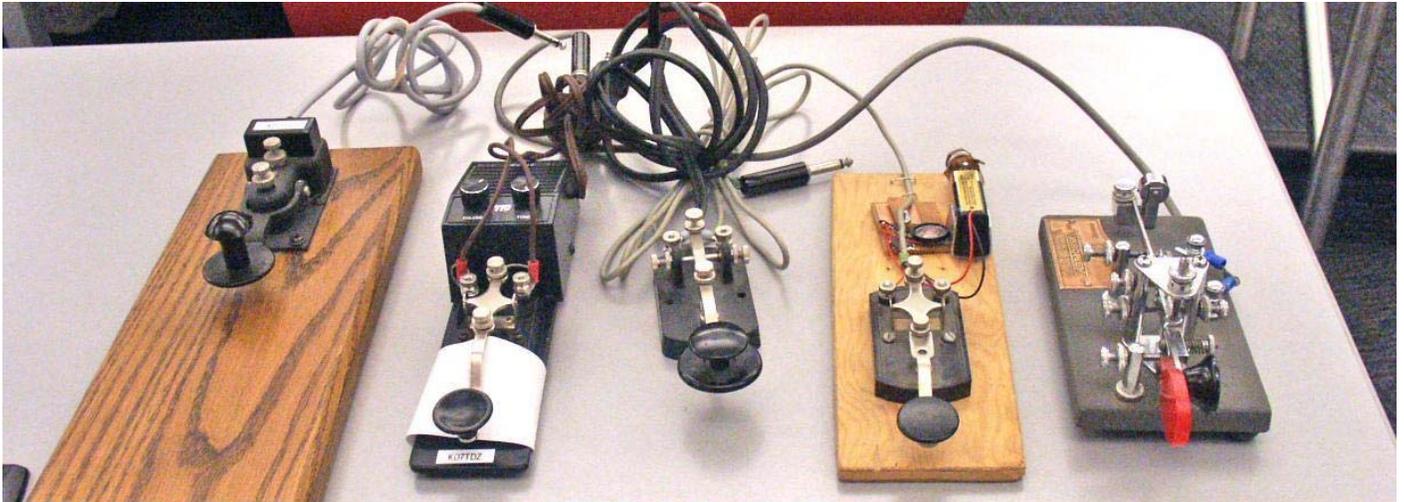


The *Microvolt*

February, 2011



The Microvolt February 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.

UARC 2011 Board

President: Linda Reeder, N7HVF	801 364-7006
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: Rick Asper, AC7RA	
Program Chair: Gene Deal, KF7BSF	801 548-5063
Program Chair: Gary Wong, AB1IP	801 582-0906
Imm. Past Pres: John Hardy, K7ALA	

Committee Chairpersons and Members

"Book Lady": Brett Sutherland, KI7KM	801 298-5399
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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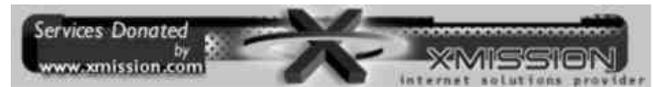
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IRLP Information

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:
<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 54, Issue 2, February 2011

February Meeting: To be announced

The next meeting of the Utah Amateur Radio Club will take place on Thursday, February 10, at 7:30 P.M. At this writing the program has not been confirmed, but our Program Chairpersons are working on several possibilities. Check the club website at <http://www.xmission.com/~uarc/meeting.html> for late-breaking word.

Meetings are held on the **second** Thursday of each month, and during Spring Semester will be in room 2230 of the Warnock Engineering Building at the University of Utah. This is on the second floor immediately above room 1230 where we met during the fall.

Some of our traditional parking on the east side of the building is blocked off for construction, so if you find it full, another recommended parking area is near the southeast corner of the Merrill Engineering Building lot. Go south along the east side of Merrill, then go in the north door of Warnock. See http://www.xmission.com/~uarc/ablip_meetmap.html for information on finding the building.

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 February get-together will be at “Greek Souvlaki,” 404 E. 300 South in Salt Lake City.

Latest News

Our Cover

The January UARC meeting was about CW telegraphy, its history, its advantages, and how to learn the code. Our cover shows some of the keys, paddles, bugs, and keyers that were brought in by

various attendees to display, as well as the presenter of the program, our Executive Vice-President, Andrew Madsen, AC7CF. Thanks to Andrew for this program and to club Historian Ron Speirs, K7RLS, for the photos.

VHF Society Announces Swap Meet

The Utah VHF Society, an organization that supplies financial help to repeaters across the state, will hold its annual business meeting and swap meeting on Saturday, February 26, 2011. The swap meet is typically the largest in the state.

The swap meet will be held in the same place as in the last several years, the Zion Building at the Utah State Fairpark. Admission is free to VHF Society members.

Membership in the VHF Society runs for a calendar year, so all members who have not joined for multiple years have their dues coming due at the beginning of 2011. Dues should be sent to:

Utah VHF Society
 P.O. Box 482
 Bountiful, UT 84011-0482

Vintage Radio Night

Are you one of the folks who remembers when the principal manufacturers of amateur radio equipment were Hallicrafters, Hammarlund, National, Collins, Swan and Drake? Perhaps you even have some gear from that period? Or maybe you remember when converted military surplus gear was commonplace? Are you of the school that “real radios glow in the dark”? Then you might be able to help us with “Vintage Radio Night” coming up in May.

On Thursday, May 12, the meeting will be devoted to radio gear from the 70’s or earlier. Unlike Homebrew Night, the focus will be on commercial equipment, although a homebrew transmitter or receiver representative of the period would be welcome as well. Anyone who would like to bring in a piece of equipment from that period is welcome to do so and tell us about it. Mark your calendar.

UARC 2010 Financial Statement

Category/ Description	1/1/2010 – 12/31/2010
INCOME	
ARRL Dues	966.00
Book Sales	4,345.69
Donation	22.00
Dues	4,030.00
Future Dues	307.00
Interest Income	228.05
Steak-Fry Income	610.00
TOTAL INCOME	10,508.74
EXPENSES	
Administrative	78.59
ARRL Memberships	814.00
Bank Charge	6.00
Books	5,342.04
Capital Equipment	35.00
Field Day	1,243.40
Ham Hotline	20.00
Insurance	320.00
Meeting Expense	505.88
<i>The Microvolt</i>	2,587.20
PayPal Fees	60.68
Postage and Delivery	105.72
Repeater	398.22
Sales Tax	279.94
Steak-fry	670.05
TOTAL EXPENSES	12,466.72
OVERALL TOTAL	-1,957.98

(Submitted by Chuck Johnson, WA7JOS, club Treasurer.)

Field Day Chairman Needed

The annual ARRL Field Day contest, the operating event for portable and mobile stations, is coming up June 25 and 26. We hope to make our usual entry from the Payson Lakes area and combine a contest entry with a family campout. But to do so, we need a chairperson, someone to make sure all the pieces come together properly. Are there any volunteers? There will be lots of

help available, but someone is needed to coordinate the effort and make sure all the stations are complete and that the towers don't get erected so the two beams are aiming at each other. If you would like to help, get in touch with any of the club officers.

Technician Class in Holladay

We understand that a class for prospective new Technicians will be held at the Holladay Office Building for six weeks on Thursday evenings, beginning on February 17. Instructor is David McPhie, K7SX. There is no charge for the class, but purchase of a text is required, and the license exam will cost \$14-15.

For more information or to sign up, contact David Chisholm, KD7TNX, email:

<mailto:DavidJohn@msn.com> .

Net Help Needed

Some additional help is needed for the Sunday night "UARC Information Net." There are several vacant slots each month for operators who can do net control or "Other Club Information" duties. For more information, contact Mike Youngs, KK7VZ, <mailto:kk7vz@arrl.net> or telephone (801) 573-3922.

The January VHF Sweepstakes

By Ron Jones, K7RJ

Contesting is not just an HF activity. January 22 and 23 marked ARRL's 2010 January VHF Sweepstakes, a contest involving bands from six meters to... well, as high as you can go. Ron Jones tells us about some of the microwave activity around the Salt Lake area this year. Some of it may involve bands you haven't worked, or, perhaps even heard of.

Saturday afternoon was another great day on the microwave bands in Utah. There may have been more activity Sunday, but here is a summary of what I was involved with. If someone knows of other microwave activity or if you have a neat contest report, please let me know.

Frequently during the VHF contests there is a flurry of activity near the beginning of the contest with lots of people on the various VHF/UHF bands. Here is a tip: next time there is a contest, although it may last for a couple of days and you may not have much time for the contest, carve out an hour or two at the beginning of the contest and "ride the wave." It is great fun! There is almost

always a blitz of activity near the beginning of the VHF/UHF contests.

During that early wave of activity, Robb, N0KGM, said that he could get on 10 GHz. That kicked me into gear and I told him I'd be glad to put my stuff in the car and go someplace where we could work. That got a couple more of the gang with microwave gear interested in giving it a go. Well, a couple of hours later, in a bit of a snow storm, I found myself with my tripod, batteries, 10 GHz transverter, coax, etc. at the parking lot of the Mt. Olympus trail head, on Wasatch Blvd in the 50ish South area. If you aren't familiar with the trail head, there is a big parking lot well above Wasatch Blvd with a nice, unobstructed view of

the entire Salt Lake Valley. It is a great microwave site for working the locals. With the exception of Dave, WA7GIE, who, unfortunately, was out of town for the day, all of the 10 GHz SSB stations got on the air and, as far as I could tell, everyone worked everyone. Robb, N0KGM, was south of me near the mountains around 8200 S. He ran from his home station with a rotatable dish antenna on his roof. Dale, WJ7L, was northwest of me a few miles using an omni-directional slot antenna on a mast at his home station, as was Brian, W7CBM. Clint, KA7OEI, like me, operated from a portable site across the valley on the Bacchus Highway. He was about 14 miles away and had a very good signal. Clint, unlike the rest of us who are using commercial transverters, has homebrewed his transverter with bits and pieces of microwave modules and homebrew circuits. Really impressive.

As we were finishing up our 10-GHz operation, Clint and Robb did us an octave better by getting on 24 GHz SSB and worked each other. Dale and I attempted 24 GHz using old wideband FM gear (converted Doppler motion detectors that cost us about \$15) that we had used successfully a few years ago, but this time around we had no luck.

Our lack of luck on 24 GHz actually led to another fun radio adventure when we decided to get together and see if we could easily get our 24 GHz stuff working again. Clint joined us at Dale's and he brought along his very high frequency equipment — his light beam communication

systems. After we gave up on the 24 GHz stuff, we took his recently improved light band (that's the 4.3 to 7.5 THz band) gear out for a spin and easily made a line of site voice contact over a mile path up Parleys Canyon during the day time — a first for us since we have always made our light beam contacts during the night. The signals were so strong that we would have had a difficult time finding a path long enough to challenge the system.

Next, we took the gear to two sites: Skyline High and my house, separated by a couple of miles and both near the base of Grandeur Peak (the peak that is north of Mt. Olympus). Again, we easily made a two-way contact by bouncing the light off of the mountain. Who says optical communication has to be over a line-of-sight path!

We had another great and memorable time with the microwave bands this weekend.

Things are crackin' on the microwave bands in the area. There is some good talent and lots of enthusiasm. Please, drag out your stuff and join the fun. Contact any of us if you need help. Don't forget the 2-meter SSB net Monday evening (9 :00 PM on 144.250 USB). It is a good place to exchange ideas and beg for help. And, of course our breakfasts (every first Saturday of the odd month at Marie Calender Restaurant, 11th E and 39th S. in Salt Lake) are great fun and a chance to put a face to the names and calls.

Satellite No Longer Transmitting

When a NASA nanosatellite — NanoSail-D — ejected unexpectedly on January 17 from the Fast Affordable Scientific and Technology Satellite (FASTSAT), the agency called upon Amateur Radio operators to help track it. Hams responded with about 470 telemetry packets from 11 countries

According to NASA, the nanosatellite was last heard at 1354 UTC on January 21. The satellite is now believed to be out of power, which NASA said was to be expected. NASA is now asking for *visual* tracking and sighting reports of NanoSail-D, which is about 650 km above the Earth.

(From *ARRL Letter*, January 27)

License Examination Schedule

Opportunities to test for new or upgraded amateur licenses

Date	Day	City	Contact Person	Phone	Notes
02/16/11	(Wed.)	Provo	Steve Whitehead, NV7V	(801) 465-3983	
02/16/11	(Wed.)	St. George	Gary O. Zabriskie, N7ARE	(435) 674-2678	
02/22/11	(Tues.)	Salt Lake C.	Eugene McWherter, N7OVT	(801) 541-1871	
03/02/11	(Wed.)	Clearfield	Mike Youngs, KK7VZ	(801) 573-3922	
03/16/11	(Wed.)	Provo	Steve Whitehead, NV7V	(801) 465-3983	
03/16/11	(Wed.)	St George	Gary O. Zabriskie, N7ARE	(435) 674-2678	
03/29/11	(Tue.)	Salt Lake C.	Eugene McWherter, N7OVT	(801) 541-1871	

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

Member of the Month:

Troy Davidson, KF7MTE

By Linda Reeder, N7HVF

This month we are featuring Troy Davidson KF7MTE. Troy has been interested in radios since he was 10 years old when he got his first shortwave receiver. He greatly enjoyed listening to shortwave.

Troy grew up in Anaheim, California. CB radio was really popular at that time and Troy was heavily involved in it. Troy and his friends were having so much fun with CB radio that he had no desire to even think about amateur radio. It wasn't until Troy moved to Utah ten years ago that he decided it was time to get involved in amateur radio. He found the Utah Amateur Radio Club on the internet and started coming to our meetings before he received his license.

Troy started studying the ARRL Technician book and obtained his Technician license in November,

2010, after taking the test in Davis County. Troy wants to learn all he can about amateur radio. He wants to wait awhile before upgrading to General.

Troy is having lots of fun talking to people on two meters and 70 centimeters. Troy has a Kenwood TMV-708 two-meter and 70-centimeter mobile radio. He also has a Yaesu FT-11 two-meter handheld in his truck.

Troy loves to build different things. He is really looking forward to Homebrew Night. He has already built two antennas. He is planning on building an 80-meter and 40-meter HF rig.

Troy is also involved in astronomy. He is a member of the Salt Lake Astronomical Society. He wants to build a radio astronomy antenna. He

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is also interested in moonbounce and enjoys board games.

Troy is a computer programmer for the Maverik gas station company. Troy and his wife, Mollie, have three children: two boys and one girl. Troy said his children are starting to take an interest in amateur radio. They enjoy watching him talk on the radio.

Troy enjoys helping others. He said he is willing to help with Field Day. He said he can help with setup or whatever they need him to do.

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Troy we wish you the best in all of your endeavors.



Troy Davidson, KF7MTE
(Photo thanks to Ron Speirs, K7RLS)