

The *Microvolt*

December, 2010



The Microvolt December 2010

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 2010 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

Contents

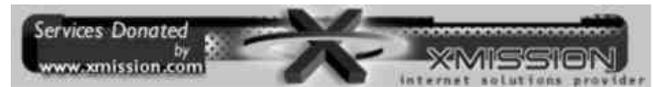
Prologue..... 2
December Meeting: Propagation Numbers..... 3
Latest News..... 4
2010 Utah Field Day Scores 5
Summits on the Air 7
Member of the Month: 7

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 53, Issue 11, December 2010

December Meeting: Propagation Numbers

Each Sunday on the UARC Information Net we hear a series of numbers that are supposed to tell us something about HF propagation. We have been asked to explain just what those numbers mean. So we have asked a leading propagation expert to give us a presentation at the December 9 UARC meeting to explain just where the numbers come from and how they can be interpreted for expected propagation conditions. Unfortunately, the expert declined, so we had to try something else. We have asked our Editor, Gordon Smith, K7HFV, to explain the numbers since he is the one who reads them each week. He has agreed, although he disavows any knowledge of the subject. He has, however, indicated that he will try to remember to read the appropriate chapter of the *Handbook* before the meeting.

The December meeting is also the annual election meeting where we will elect officers for the coming year. The current officers are all running for reelection. Additionally, nominations (including volunteers) will be accepted from the floor. If you would like to get more involved with the club, this is a great way to do it.

Meetings are held on the *second* Thursday of each month, so the coming meeting will be Thursday, December 9, at 7:30 P.M. in room 1230 (the “Duke” classroom) of the Warnock Engineering Building at the University of Utah. 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/ab1ip_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 December get-together will be at “Crown Burger,” 377 E. 200 South in Salt Lake City.

Latest News

Our Cover

Our cover this month is from the November UARC meeting in which Chuck, WA7JOS, gave a demonstration of how to build a simple homebrew project. He is shown here with a Aaron Ferdig, KE7GHA, who volunteered from the audience and successfully soldered a surface-mount part onto the printed circuit board despite never having soldered before. Thanks to Ron, K7RLS, for the photo.

Campaign Submission

Elections for UARC officers for 2011 are coming up in the December meeting. According to the UARC Bylaws, Section XIV, B(5),

“The nominees are encouraged to present a short autobiographical sketch or campaign letter to *The Microvolt* for publication in the December issue.”

Your editor sent an encouraging e-mail to the candidates and received one response. It is from Gary Wong, AB1IP, who is running for re-election as Program Chairperson. Gary writes:

“Hi! I've been an amateur radio operator for about two years now, since being licensed in 2008 (when I lived in Boston, MA). Later that year I moved to Utah and joined UARC, and I have attempted to perform the duties of one of the Program Chairpersons during 2010.

“I am willing to continue in the same role in 2011, if elected. However, I do encourage other UARC members (especially those who have not served on the board before) to volunteer, too: I have found it is an excellent way to participate in club activities.

“Sincere thanks to the many UARC members who have been so tolerant of and helpful to me in the short time I've been here. I'm delighted to live in an area which is home to so many talented and friendly hams.

“Thanks very much, Gary.”

An Electrical Christmas Story

Many years ago, my wife and her friend across the street were involved in decorating a tree for the annual Festival of Trees. On the day before the festival was to open, they were at the Salt Palace putting the finishing touches on the tree. I got a call at work from my wife: "One of the strings of lights isn't working. Can you come and help us?"

I grabbed a multimeter and went to the Salt Palace. As you know, the miniature lights which are popular these days are a series string; and if one light burns out, the whole string goes out. I located the bad lamps and replaced them with the spares which they had, but came up one lamp short. I asked, "Does anyone have a gum wrapper?" Taking the foil wrapper, I jammed a piece into an empty socket in an unnoticeable place, and the lights came on. I then left and went back to work.

Three weeks later, very late in the evening, my wife's friend knocked at the door, livid with rage. "Do you know that you almost made me burn my house down?" she said. I had no idea what she was talking about, so I went across the street to her house. Upon entering there was the unmistakable smell of burned insulation along with a hazy blue smoke in the air. She said, "I had a burned out light in my Christmas lights, and so I put some aluminum foil in the socket, just like you did! It worked for you at the Salt Palace!"

She had put heavy aluminum foil into a socket of a 115-Volt *parallel* string. I almost collapsed with laughter, and the more I laughed, the more angry she became.

The moral: A little knowledge is a dangerous thing!

Ron Speirs, K7RLS

2010 Utah Field Day Scores

The results are in from the 2010 Field Day contest, the biggest operating activity in amateur radio. Field Day sponsor ARRL has published the results in *QST* magazine and on the ARRL web site.

There were 25 entries from Utah: 16 portables and 9 fixed stations. We have listed them below showing not only their scores, but also the percentile of each within its entry class. The percentile seems to be the best way of comparing entries with widely different powers, numbers of transmitters, and scoring rules.

As is typically the case, the Utah DX Association came in on top, both in total score and percentile. They came in number two in the country in the 4A class missing the top spot by about 2000 points. That resulted in a 99.2 percentile.

UARC came in number five among the Utah portables with a 77.6 percentile in the 2A class, down from 84.1 in 2009. The drop no doubt owed to the long periods when no SSB operators could be found.

Portable Stations

Call	Score	QSOs	Power Mult.	Class	Pos.	Of	Pcntl	2009 Pcntl	Club Name
K7UM	15,154	4,739	2	4A	2	255	99.2	98.5	Utah DX Assn
W7UT	7,818	2,129	2	2A	17	424	96.0	90.0	Mesa Marauders
K7DAV	5,002	1,262	2	3A	51	342	85.1	66.6	Davis County ARC
K9JWV	2,540	229	5	1B1B	21	113	81.4	—	(James Rodenkirch, St. George)
W7SP	3,894	862	2	2A	95	424	77.6	84.1	Utah ARC
N7ARE	1,310	172	5	1B1B	36	113	68.1	55.8	(Gary Zabriskie, Santa Clara)
K7UB	2,262	487	2	4A	81	155	47.7	25.0	Golden Spike ARC
W7DRC	2,026	569	2	3A	185	342	45.9	32.1	Dixie ARC
W7BAR	2,020	510	2	3A	186	342	45.6	37.9	Borderline ARC
W7IVM	2,488	539	2	5A	40	73	45.2	47.7	Bridgerland ARC
K7NS	456	57	2	1B2	24	35	31.4	12.5	(Nyle Steiner, Provo)
W7SU	1,220	367	2	2A	308	424	27.4	34.5	Ogden ARC
AD7QF	385	6	5	1B1B	86	113	23.9	—	(Gerald Hasty, Layton)
KF7DVJ	300	5	5	1B1B	92	113	18.6	—	(John Overbaugh, Centerville)
N7N	962	205	2	2A	354	424	16.5	—	Flood Street Irregulars
AA7SM	784	217	2	2A	378	424	10.8	—	Marshall Radio

Fixed Stations									
Call	Score	QSOs	Power Mult.	Class	Pos.	Of	Pcntl	2009 Pcntl	Club or Group Name
K7NAL	1,172	511	2	1E	37	191	80.6	55.7	(Scotty Deffendol, Marion)
K7RFW	930	115	2	1E	52	191	72.8	—	(Raymond White, Layton)
K7EA	626	119	2	1E	77	191	59.7	—	(Bill Bradford, Murray)
W7DML	594	86	2	1E	81	191	57.6	59.9	(Dick Leining, SLC)
K7ULS	233	182	1	1D	177	396	55.3	—	(Michael White, Eden)
K7UCA	796	223	2	1F	21	39	46.2	—	Utah Cty ARES
WA7BME	138	22	2	1D	256	396	35.4	—	(Ron Dickerson, Moab)
KC7PVD	298	24	2	1E	131	191	31.4	2.5	(David Haag, Tooele)
KD7SWL	96	23	2	1D	296	396	25.4	48.7	(James Clarke, Ogden)

Key to Entry Classes

Starting number The number that begins each class is the number of simultaneous transmitters on the air. For example, UARC's 2A class indicates there was a maximum of two transmitters on the air at any given time.

First Letter The letter that follows the starting number tells the type of operation:

- A: A club or group portable with three or more operators
- B: A non-club group portable station using one or two operators
- C: A mobile station
- D: A home station using commercial power
- E: A home station using emergency power
- F: A station at an Emergency Operating Center (EOC)

Second number A "1" or "2" following the letter indicates the number of operators. Class B entries are subdivided in this way.

Final "B" A "B" following the number of operators or the class letter indicates an operation powered entirely by batteries and running no more than five watts transmitter output power.

Example: Class 1B2B means a single-transmitter portable operation with two operators using only batteries for power and running five watts or less.

Summits on the Air

By Brian Mileschosky, N5ZGT

(from *Rocky Mountain Division Update*, Oct. 19, 2010)

Summits on the Air (SOTA) is an award scheme for radio amateurs and shortwave listeners that encourages portable operation in mountainous areas. SOTA has been carefully designed to make participation possible for everyone — this is not just for mountaineers! There are awards for activators (those who ascend to the summits) and chasers (who either operate from home, a local hilltop, or are even Activators on other summits). Each summit earns the activators and chasers a score which is related to the height of the summit. Certificates are available for various scores, leading to the prestigious "Mountain Goat" and "Shack Sloth" trophies.

SOTA is now fully operational in many countries across the world and the U.S. There are associations in the W1, W3, W5, W6 and W7 call areas of the United States. Each association defines the operating rules and assignment of points for the recognized SOTA summits within that association's geographical areas. Visit the following website for more info and links to the associations: <http://www.sota.org.uk/>

There are hundreds, probably thousands, of summits beckoning for activation by hams across the Rocky Mountain Division. The website above contains a summit database that lists all summits in a region, the SOTA reference number of each, locations, point values, how many times it has been activated, and who activated it last. Amateur radio operators are encouraged to identify a summit or peak they can activate and go out there and do it. Go to the url listed previously for access to the individual association manuals. Suggestions for the summit listings (e.g. adding more), and corrections to what's currently listed, can be made to the association managers.

Depending on where you live there is still time to enjoy ham radio atop summits before winter sets in. Be safe and enjoy a new dimension of ham radio that is becoming popular across the country and world.

Thank you to Jim Rodenkirch, K9JWV, Utah's SOTA association manager, for this information.

Member of the Month:

Ernest Cobbley, KC5RUQ

By Linda Reeder, N7HVF

This month we are featuring Ernest Cobbley KC5RUQ. Ernie has been in amateur radio for 15 years. Ernie has always wanted to get into amateur radio since when he was in high school but having to learn the Morse Code kept him away. It wasn't until years later when he was living in New Mexico when his son, Michael, wanted to get his ham license, that Ernie decided to get his license too. That was when the code was

not a requirement for the Technician license. Ernie now has his Extra Class license, which he received in 2007. Michael's call sign is KC5SUT. He now lives in Saratoga Springs, Utah

A few years later, the rest of Ernie's family got into the hobby. Ernie and his wife, Shannon, have two children, a boy and a girl, and they are all grown now. Ernie's wife Shannon's

call sign is KE7JTC. Ernie and Shannon's daughter, Monica, decided to get her ham license when Monica and her family moved to Utah.



Ernest, KC5RUQ, at his station.
(Photo by Ron Speirs, K7RLS)

Monica's call sign is KD7PXW. Monica's two children also have their ham radio licenses. Her son, Aaron, KE7GHA, was featured in *The Microvolt* in April, 2006. Her daughter Amber's call sign is KE7JTD. Ernie enjoys participating in ham radio activities with his grandson, Aaron. They have attended Field Day every year until this year when Ernie and his family went on vacation to Washington DC. Ernie and his wife, Shannon, are members of UARC and the Utah VHF Society.

Ernie has had a career in electronics. Ernie has his Second Class Radiotelephone license which an individual had to have if he wanted to be an engineer at a commercial radio station. Ernie used to work for search and rescue where he helped them get their radios certified for licenses.

Ernie has had several different jobs in the electronics field. For five years Ernie worked for EGNG. He then worked for three years for

The Microvolt (USPS 075-430) is published monthly except August for \$17.00 per year or \$1.50 per issue by the Utah Amateur Radio Club, 3666 South State Street, Salt Lake City, UT 84115-4848. Periodicals Postage Paid at Salt Lake City, Utah. POSTMASTER: Send Address changes to *The Microvolt*, c/o Dick Keddington, 1783 Woodside Drive, Holladay, UT 84124-1620.

Howard Hughes repairing casinos in Nevada. Ernie worked for the Federal Aviation Administration for nine years. He had to use a snow cat in the winter time so he could get up to an FAA site in the mountains. Then Ernie went to work for the Forest Service as a microwave engineer covering areas in two states: Salmon, Idaho, and Albuquerque, New Mexico. Then he got a job in Plano, Texas, working for a telephone company, Alcatel, installing telephone switches. Alcatel has offices in several different states so this job required traveling to many different states. Finally, he was going to be transferred and the company told Ernie he could choose where he would like to go. Ernie chose to come to Salt Lake City, Utah.

Ernie said the thing he likes best about amateur radio is that it works where nothing else does. Ernie really enjoys the megalink. It is a system on 70 centimeters covering the western part of Texas, Arizona, all over New Mexico and southern Colorado. This came in handy when he had to do all of that traveling for his job. It enabled him to keep in contact with his family during his travels.

Ernie, we wish you the best in all of your endeavors.