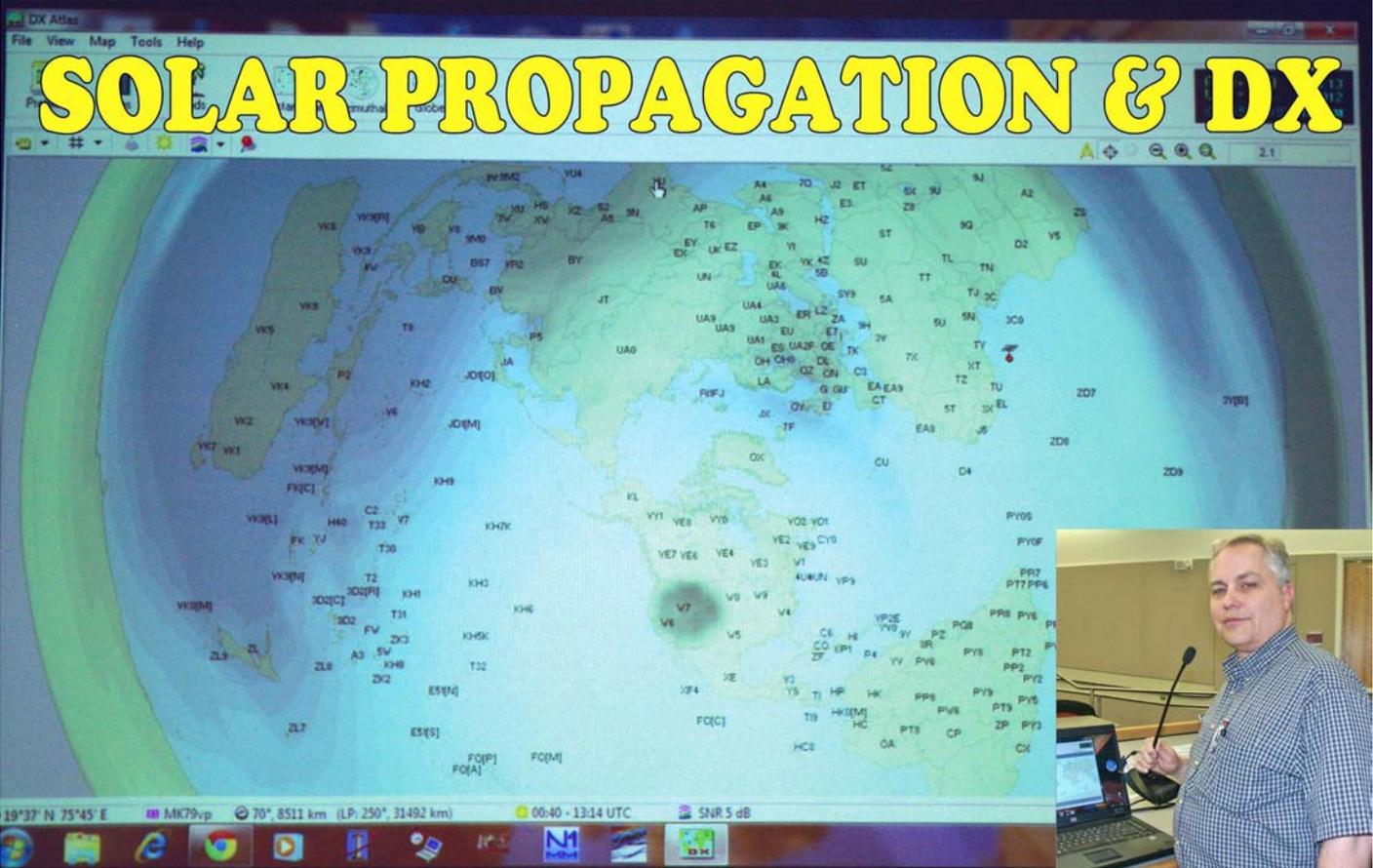


# The *Microvolt*

May, 2012



Jed tells us about propagation software

## 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

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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
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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 5, May 2012

## May Meeting: Field Day Preparation

The May UARC meeting, Thursday, May 10, will be the annual Field Day meeting. That is a month earlier than usual because we are hoping to have Bob Heil of “Heil Sound” fame to speak to us via Skype at the June meeting.

Field Day is amateur radio's biggest operating event of the year. Many people find it a great chance to combine a family campout with amateur radio. Others find it a first opportunity to experience HF operating and see what it's like to set up HF antennas and to work as many as four stations every minute. At the coming meeting we will have some photos of past Field Days along with instructions on how to make contacts.

One of the major reasons for the Field Day contest is to give operators a chance to prepare for emergency communications. There are a number of features that are common to Field Day and to emergency operation such as the need to work long hours and to handle a large volume of traffic quickly and accurately.

See [more Field Day information](http://user.xmission.com/~uarc/announce.html#fd2012) at <http://user.xmission.com/~uarc/announce.html#fd2012> in the news area about UARC's plans for the actual event.

Again, the May meeting is on Thursday, May 10, at 7:30 P.M. This will also be the first opportunity to buy tickets for the Steak-Fry coming up on Saturday, July 14, at \$10 each.

UARC meetings are held on the second Thursday of each month at 7:30 P.M. During spring semester, they will be in room 1230 (the “Duke” classroom) of the Warnock Engineering Building at the University of Utah. See the [map](#) 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 May get-together will be at “Charlie Chow's Dragon Grill,” 255 E. 400 South in Salt Lake City.

## Latest News

### Our Cover

Our cover this month shows Jed Petrovich, AD7KG, as he spoke to us at the April meeting on propagation software and what it can do for us. Thanks to Bruce Fereday, KF7OZK, for the screen shot, and club Historian Ron Speirs, K7RLS, for the inset photo of Jed.

### 146.76 Now on EchoLink

UARC's 146.76 repeater on Lake Mountain now supports EchoLink, one of the repeater linking systems using Voice-Over-IP (VOIP). It is registered with EchoLink as W7SP-R or node 703269. Clint Turner, KA7OEI, installed and debugged the "EchoIRLP" software on Thursday, April 26.

The EchoLink capability is in addition to IRLP (Internet Radio Linking Project) which has been available to UARC members for several years. The procedure to link to another node is the same as for an IRLP connection with one exception. You must precede the node number with the "\*" to flag it as an EchoLink rather than an IRLP node.

Unlike IRLP, EchoLink allows users to connect using a home computer or even a cell phone rather than another repeater. Some of the '76 regulars have found this handy when they want to communicate with the rest of the gang while out of town or out of '76 range for one reason or another.

We would recommend that users making incoming connections don't hold them up unnecessarily for long periods as they prevent outgoing connections being made onto either system.

We are still figuring out what the best configuration and operating recommendations are, so watch for more information.

### Field Day Coming

A reminder that Field Day, the nationwide contest to test emergency preparedness, is coming up on the weekend of June 23 and 24. UARC will be entering from its traditional location just south of Payson Lakes. See the article by Chairman Brett Sutherland, N7KG, on page 5 for more information.

### Event Calendar

Date	Event	Web Site
May 5,6	7 <sup>th</sup> District QSO Party	<a href="http://7qp.org">7qp.org</a>
June 23-24	Field Day	
July 14	Steak-Fry	
July 27-29	Bryce Canyon Hamfest	<a href="http://utahhamfest.org">utahhamfest.org</a>

### Bob Heil Coming

As announced last month we are hoping to have Bob Heil, K9EID, as a featured speaker via Skype at a coming UARC meeting. Bob is one of the best-known amateurs in the country as the founder of Heil Sound (<http://www.heilsound.com/>) and the producer of the *Ham Nation* video broadcast on Internet (<http://twit.tv/hn>).

We are now hoping to have Bob at our June meeting. However, Bob is a very busy person and may have something come up before then. Check the club web site for the latest developments..

## Why You Should Join UARC for Field Day

by Brett Sutherland, N7KG

There are numerous reasons to attend Field Day. Perhaps I can list a few:

1. **Friends** – The monthly UARC meetings are instructive, but there is rarely time to talk with everyone. At Field Day there is a lot more time to catch up with old friends. It is also a great event for meeting *new* friends. UARC normally has about 100 people in attendance ranging from casual hams to “hard core” hams, spouses, and children of hams. This year we expect more.

2. **Operate** – Perhaps you don’t have a rig at home. Or....if you are like me, there is just too much to be done to sit down and operate. Field Day solves this problem. You can sit down at a station and operate to your heart’s content. We like to have a signup sheet at each station. When you first get to the Field Day site, make sure to look for the signup sheet and pencil in the times you would like to operate.

3. **Improve Skills** – Many of the skills required to be efficient at operating a radio are best learned in person. Like a picture saying a thousand words, watching someone operate who is skilled can shorten the learning curve dramatically. And...practice makes perfect.

4. **Learn something new about the hobby** – There is always something to be learned at Field Day. Some of the areas to increase your knowledge are: antennas, emergency power, tuners, rigs, operating technique and contesting. Pick an area you would like to learn more about. Ask the person over that area at Field Day. Or, better yet, volunteer to help with that area. You need not know about antennas to volunteer and you will learn a great deal by doing so.

5. **Teach others what you know** – Do you have a special knowledge or interest? Would you like to

make friends who share the same interest? Field Day is a great place to do so.

6. **Hone emergency preparedness skills** - Emergency services are all about being prepared. During an emergency it is important to be able to set up stations under adverse conditions and operate during confusion. It is for this reason that Field Day was instituted in 1933. This is the largest emergency preparedness event in the United States every year. If your primary interest in amateur radio is emcomm, then Field Day is for you.

There are many reasons to attend Field Day. So, why attend the *UARC* Field Day?

Payson Lakes is within a reasonable driving distance of the Wasatch Front, making it possible to join us for the day should you be unable to attend for the whole event. Some hams spend the week camping at the site. We are very close to the Payson Lakes which offer swimming and fishing. There are a number of great hikes in the areas as well. Some hams arrive on the Thursday before the event. Most begin arriving Friday before noon and help with the setup. A great number arrive Friday night after work. And....a large contingent arrive on Saturday to help with the final details of setting up.

We are a family-friendly event. We will have treasure hunts and games for children. Bring the whole family and provide them some exposure to the hobby. We normally have satellite and movies as well, for the benefit of the little ones. In years past there has been a trip to the lakes with the kids during the hottest part of the day.

Additionally, we need you. As the old saying goes, many hands make light work. We need your knowledge and willingness to help. We need

experienced operators, people who want to learn from them and plenty of help making it all work. What's more, we want you to join us. We would like to fully staff the stations and put up a good score. We need all of the help we can get to do so. Won't you consider joining us this year?

In helping with our Field Day, we promise you fun, learning and operating time. If you would like to join us, please email me at [n7kq@arrl.net](mailto:n7kq@arrl.net) with your interest. I look forward to seeing you there!

## **License Examination Schedule**

### **Opportunities to test for new or upgraded amateur licenses**

<b>Date</b>	<b>Day</b>	<b>City</b>	<b>Contact Person</b>	<b>Phone</b>
05/16/12	(Wed.)	Provo	Steve Whitehead, NV7V	(801) 465-3983
05/16/12	(Wed.)	St. George <sup>2</sup>	Gary O. Zabriskie, N7ARE	(435) 674-2678
05/29/12	(Tues.)	Salt Lake C.	Eugene McWherter, N7OVT	(801) 541-1871
06/02/12	(Sat.)	Salt Lake C. <sup>1,3</sup>	Gordon Smith, K7HFV	(801) 582-2438
06/07/12	(Thu.)	Logan	V.P. Rasmussen, N7JFG	(435) 770-0630
06/13/12	(Wed.)	Provo	Steve Whitehead, NV7V	(801) 465-3983
06/13/12	(Wed.)	St. George <sup>2</sup>	Gary O. Zabriskie, N7ARE	(435) 674-2678
06/26/12	(Tue.)	Salt Lake C.	Eugene McWherter, N7OVT	(801) 541-1871
07/11/12	(Wed.)	Clearfield	Mike Youngs, KK7VZ	(801) 573-3922

<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>

<sup>3</sup>More information at <http://utaharc.org/Exams>

## **April Meeting: Solar Propagation and DX**

By Bruce Fereday, KFA7OZK

Most hams with a General or Extra license make contacts on the HF bands. They enjoy the challenge of talking to places so far away that it would take over 12 hours to travel there by plane. How do you improve your chances to successfully have a QSO on HF? How does Solar activity affect where you can talk to? How can you find out when to get on the air to talk to a specific state or country and on what frequency. How far can I talk?

Jed Petrovich, AD7KG, came to the UARC meeting on April 12, 2012 to discuss his success with DX. He brought his information and expertise to show us his tips and tricks for DX.

Paying attention to the Solar Flux, we can predict the strength of the ionosphere and the MUF (maximum usable frequency) for a given distance.

Jed showed us some propagation forecasting programs that are available on the internet. These programs show us the expected propagation of the different frequencies from your QTH to other locations around the world. Understanding this helps us to improve contacts with areas that the atmosphere help us to reach.

Simple programs (free) show expected propagation with colored lines, while more

sophisticated programs (for a small fee) show propagation as a lighted area on the world map, Other programs take postings to online radio logs and list them either as a list of current contacts or as dots on the map. That way by using the forecasting software and the current postings list, you can determine where you can reach at the moment.

If you are trying to get the WAS (“Worked All States”) or the DXCC (“DX Century Club”) award for working countries, then the forecast program can help you determine when and on what frequency to attempt a contact.

We all envy a rare DX contact and like to share our successes, to that end 73 to all and to all a good DX.

#### **Programs for Solar Propagation Forecast:**

Solarham.com  
Ham Cap 1.8  
DXAtlas.com  
VOAprop.com

## **Member of the Month**

### **Gregg McArthur, W7GEM**

*(Photo by K7RLS on page 8)*

By Linda Reeder, N7HVF

This month we are featuring Gregg McArthur, W7GEM. Gregg has been interested in amateur radio for many years. Gregg's uncle served in the Air Force as a radio electronic repairman. Gregg spent hours in his uncle's repair shop. Gregg's uncle's son, Paul Anderson, W7PA, was instrumental in getting Gregg into the hobby. They worked together with the Civil Air Patrol alert training where he was really exposed to amateur radio. Gregg received his amateur radio license in November, 2009. His previous call sign was KF7GCA. When Gregg received his Extra Class license he got a vanity call which is the call sign he now has, W7GEM.

Another amateur radio operator who made a lasting impression on Gregg, encouraging him to learn the Morse Code, was Morely Naylor, K7UM, who is now a silent key. Morely was really proficient in the Morse Code and a long time DXer. Gregg is really working hard on sharpening his Morse Code skills because he promised Gordon, K7HFV, that he would help out with the Morse Code during Field Day.

Gregg worked in the commercial insurance industry for 45 years. During the first part of his career, Gregg lived in Illinois and during the last part, in Southern California. Gregg said he just recently moved to Utah. Gregg loves to explore the many beautiful sites in Utah and loves to travel.

Gregg and his Wife, Marlene, have six grown children, three girls and three boys. Gregg and Marlene have 22 grandchildren. Gregg is working hard on trying to get them to get their ham licenses. He has told them he has a radio for each of them if they get their Technician licenses.

Gregg's favorite thing about amateur radio is meeting people and making new friends. He says that UARC is wonderful. He has made many wonderful friends. They are so friendly and helpful. Gregg says he is impressed with the HF bands. The people are intelligent and so willing share their ideas and to help others.

Gregg is a member of UARC, ARRL, Salt Lake County ARES, RACES, and Herriman Radio

**The Microvolt May 2012**



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the Intermountain Hospital. In fact Gregg will be helping the Intermountain hospital with the Utah Shakeout coming up on April 17<sup>th</sup> of this year. Gregg also helped that with the Herriaman fire that happened a few years ago. Gregg has also been working with Ron Speirs, K7RLS, on learning digital communications.

Club. Gregg is the stake emergency coordinator. He works with the IHC Emergency Response at

Gregg, we wish you all of the best and good luck getting your grandchildren into the hobby.



Bruce Fereday, KF7OZK, captured Brett Sutherland, the "Book Lady," at work.