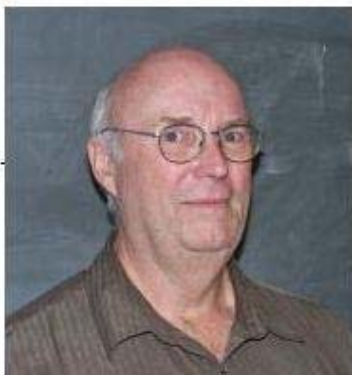


# The *Microvolt*

April, 2012



Amateur Radio



## 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
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"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

## Contents

Prologue.....	2
April Meeting: Propagation Software.....	3
Latest News.....	3
License Examination Schedule.....	5
Additional 60-Meter Digital Modes OK.....	6
IRLP Adds "Topic Channels".....	6
Member of the Month.....	7

## 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 4, April 2012

### April Meeting: Propagation Software

So the solar flux is 110 and the K index is 2. How do you tell when you can work Argentina on 15 meters? Well, there's some great software available to help you find the answers. At the April UARC meeting Jed Petrovich, AD7KG, is going to be demonstrating some of the choices and telling us their advantages and how to obtain them.

Join us on Thursday, April 12, at 7:30 P.M., and find out how to make HF operation more predictable.

UARC meetings are held on the second Thursday of each month at 7:30 P.M. During spring semester, they are in room 1230 (the "Duke" classroom) of the Warnock Engineering Building at the University of Utah.

See the map at [http://www.xmission.com/~uarc/ab1ip\\_meetmap.html](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 location varies. The April get-together will be at "Su Casa," 516 E. 300 South in Salt Lake City.

### Latest News

#### Our Cover

Our cover this month shows Dave Williams, WA7GIE, and one of the slides from his presentation at our March meeting on the Tooele Emergency Operating Center. This slide shows equipment for the amateur radio bands, part of a

much larger array of communications equipment. Dave gave us a complete picture tour of the newly constructed facility including emergency power that can use more than one kind of fuel.

Thanks to Ron Speirs, K7RLS, club historian, for the photo.

## Field Day Coming

Picture camping out in the cool of the mountains at the end of June while working stations all over the nation and a few other parts of the world. This is what Field Day is like. We are hoping to enter this national contest again this year from a site near Payson Lakes. The dates are the weekend of June 23 and 24. (For more details on the operating event, see <http://www.arrl.org/field-day>.)

Brett Sutherland, N7KG, has volunteered to be this year's Field Day Chairperson, and is looking for others to help with planning. It would be great if there were volunteers to handle various aspects of the event such as rigs, antennas, computers, dinner, tents, generators, cables, and operators. He would like to form a committee and start holding meetings soon.

If you would like to be on the committee, get in touch with Brett. His contact information is as follows:

- Home phone: (801) 298-5344
- Work phone: (801) 994-9944 Ext 158
- E-mail: <mailto:n7kg@arrl.net>

## 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

We are planning to have Bob Heil, K9EID, as a featured speaker via Skype at a coming UARC meeting. Bob is one of the most well-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 hoping to have Bob at our May meeting, but he tells us there is some chance he might have to be elsewhere on that evening. Watch <http://user.xmission.com/~uarc/meeting.html> for the latest update.

## Join ARES

CQ CQ CQ Emergency Communicators!

The innate comradery between hams is universal. As hams, we all seem to have a need to escape the avenues of convention and make our signal heard, even though there are surely easier and cheaper ways to communicate. The final "73," reserved only for those of our ilk, is a reminder of the mutual respect afforded members of our unique hobby.

When an emergency strikes and the panic of uncertainty sets in, I know of no prepared Ham who doesn't have a bit of smug pride in knowing that he, or she has the ability to communicate on, or just monitor, the emergency frequencies until the all-clear siren goes off.

Many Hams have it in the backs of their minds that in the event of a disaster or emergency, they and their radios will be thrust magically into a key position of assisting others in overcoming the adversity at hand. Unfortunately, their skills may never be of practical use unless they combine their efforts into an organized team of like-minded volunteers.

Remember, it takes two or more to communicate. In an emergency, however, just two hams talking can affect very little unless they are suitably interfaced into the fabric of an emergency service effort.

ARES invites you to join with hundreds of other volunteers in the Amateur Radio Emergency

Service effort. There are *no dues* and *no time commitments*, though you are encouraged to take advantage of the many training opportunities.

You and your callsign will be given official ARES status and you will be authorized and encouraged to participate in ARES emergency operations, should that need arise.

Please go to: <http://www.slcoares.net/> and fill out our online application.

It just may be *you* who makes the difference.

*-An ARES member*

### Contribute to *The Microvolt*

One thing this newsletter could really use is more contributions from the members. We suspect a lot of our readers are doing interesting things: participating in unusual public service events, building new antennas, trying out new models of equipment, entering various contests, and maybe even going to exotic DX locations like Wyoming.

If you've been sureptitiously doing these things and not telling anyone about them, it's time to go

public! If you insist on having fun with your hobby, let the rest of us join in, if only vicariously. Send an item off to the editor by any of the means mentioned on page 2.

It doesn't have to be long, scholarly, or even correctly punctuated, as long as it communicates what you've been doing. We can fix up grammer, spelling, and proper placement of appositives.

E-mail is convenient, but we will happily accept a couple of sentences in a telephone call or a handwritten manuscript delivered by oxcart. Just let us know!

### W5YI, SK

Fred Maia, W5YI, died on Wednesday, March 28, 2012, of cancer. He was 76 years old. W5YI was probably one of the most recognized calls in amateur radio. Fred organized the W5YI VEC, operated a publishing business with the W5YI name, and, until 2003, published the newsletter, *W5YI Report*.

In 2000, Fred retired from the W5YI-VEC and published the *W5YI Report* until 2003.

## License Examination Schedule

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

Date	Day	City	Contact Person	Phone
04/18/12	(Wed.)	Provo	Steve Whitehead, NV7V	(801) 465-3983
04/18/12	(Wed.)	St. George <sup>2</sup>	Gary O. Zabriskie, N7ARE	(435) 674-2678
04/24/12	(Tue.)	Salt Lake C.	Eugene McWherter, N7OVT	(801) 541-1871
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

<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>

## **Additional 60-Meter Digital Modes OK**

The new rules for the 60-meter (5-MHz) band recently went into effect allowing, for the first time, modes other than single sideband voice.

Mode and frequency restrictions stem from the fact that the 60-meter band is shared with government radio services and government allocations are managed not by the FCC, but by the National Telecommunications and Information Administration (NTIA). The rules specified emission type 2K80J2D which could describe a large number of different data modes as long as they were 2.8 kHz wide and were created using a single-sideband transmitter. However, it was understood that NTIA really wanted us to use only PACTOR III under that designator.

It now appears that NTIA did *not* want to specify that restriction. ARRL has announced the receipt of an e-mail from NTIA stating “NTIA has no interest in limiting the types of emission used by the amateurs as long as the data emission does not exceed the 2.8 kHz bandwidth generated by the upper sideband transmitter.”

This opens the door to multiple digital modes on 60 meters, although only one signal per channel is allowed and no automatic operation is permitted (i.e. there must be an operator present whenever a transmitter is on the air). Using a transmitter in upper sideband mode, the dial frequency should be set 1.5 kHz lower than the center frequency specified in the rules. Center frequencies are 5332, 5348, 5358.5, 5373, and 5405 kHz.

## **IRLP Adds “Topic Channels”**

A new feature has been added to IRLP, the Internet Radio Linking Project, one of the first systems using Internet to link repeaters on demand. The new feature is specific reflector channels dedicated to particular discussion topics. So, for example, if you’d like to get together with other hams interested in scouting, you can go to node 9091 at 1800 UTC. If, on the other hand, emergency communications is your thing, check out 9554 at 0300 UTC.

The new “channels” are all on “reflectors,” computers which can accept connections from an almost unlimited number of repeaters and simplex nodes at the same time. In other words, the channels can potentially have participation from amateurs all over the world.

The topic channel program was the brainchild of Michael Bloom, W7RAT, founder of the Oregon Internet Radio Group. He has gathered reflector

owners willing to donate one or more channels of their respective reflectors to specific topics. This should make it easier for those interested in using IRLP nodes to find activity that matches their interests at specific times.

The channels include one called “IRLP Lounge” which runs all day and is open to any topic, particularly ones without dedicated channels. It can also be accessed from echolink.

The new channels can be accessed from any IRLP node that allows connections to reflectors. That includes the node on UARC’s 146.76 repeater, available to UARC members. (See [http://user.xmission.com/~uarc/ab1ip\\_irlp.html](http://user.xmission.com/~uarc/ab1ip_irlp.html) for more information.) Simply connect to the indicated node number as you would to any other IRLP node.

Below is a tabulation of the new channels.

**The Microvolt April 2012**

<b>Node</b>	<b>Time (MDT)</b>	<b>Name</b>	<b>Description</b>
9093	All Day	IRLP Lounge	The place to meet and greet; topics not listed
9091	12 Noon	The Scouting Channel	Radio Scouting USA and JOTA
9001	1700	DX Channel	Track rare DX, make schedules, discuss propagation and operating technique
9204	1730	Sports	Baseball, Football, Soccer, Basketball, Golf, Tennis; any sport, local or international
9077	1800	History & Current Events	History and History in the making; yesterday's events and today's news
9351	1830	Media	From the silent screen to Imax, from Milton Berle to Robin Williams, Big Bands to Rap
9730	1900	Election 2012	Politics of the United States respectfully discussed
9611	1930	Meaning of Life	Philosophy, Psychology, and Science: what makes us tick, where did we come from, and where are we heading
9192	2000	The Food Channel	Pizza, BBQ, or recipies, whatever stirs your appetite
9775	2030	Stamp Collecting	Gathering philatelist hams from around the world
9554	2100	Emergency Communications	Prepare for the next hurricane, tsunami, tornado, or man-made catastrophe

## **Member of the Month**

### **Rian McKee, KF7QGY**

*(Photo on page 8)*

By Linda Reeder, N7HVF

This month we are featuring Rian McKee, KF7QGY. Rian is new to the hobby. He received his Technician license in April, 2011, and participated in Field Day at Payson Lakes the following June. He really enjoyed Field Day and fell in love with the low bands. He thought it was very cool to be able to communicate around the world. Rian is working hard on upgrading to General.

Rian became interested in amateur radio when he was working with criminal injustice. Rian was fascinated with the ability to communicate in amateur radio by way of packet and data. He was also tired of CB radio. Rian bought a Gordon West (KB6NOA) book, studied hard, and received his Technician license.

Rian likes amateur radio because of its educational opportunities, such as learning about electronics, antennas, and how to handle emergency situations. Rian is a member of Salt Lake County ARES. He works closely with ARES learning about emergency situations.

Rian's favorite thing about amateur radio is public service events. Rian enjoys helping with public service events because they raise money for worthy causes such as finding a cure for cancer or MS. The first public service event Rian participated in was the Jordan Marathon Final Fall. Another public service event Rian participated in was the Front Runner ride. They took their bicycles and rode the Front Runner to the Ogden train depot and then rode their bicycles back to Salt Lake City, a 20-mile ride. He has also

***The Microvolt April 2012***

participated in the Utah Century 12-mile ride. Rian is hoping to take part in the Days of '47, 24th of July parade. He wants to be one of the cyclists.

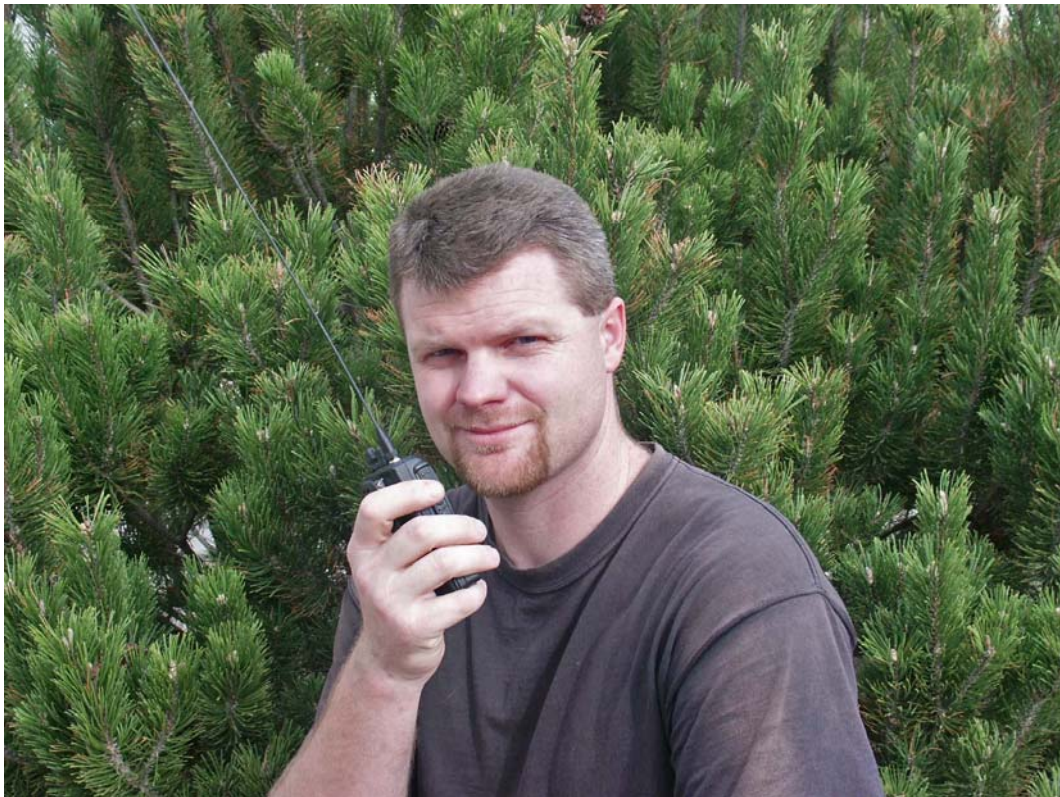
Rian was a truck driver for ten years but said he is glad he doesn't do it any more. He still has his commercial driver's license. For three years Rian worked for an emergency roadside service. Now, Rian and his wife, Elizabeth, have their own emergency roadside service business. He changes tires, unlocks vehicles, and helps those who run out of gas. He even works with motor homes. Rian and his wife Elizabeth have had this business for three years, so he has been in this industry for a total of six years.

Rian and Elizabeth have two children, a five-year-old daughter, and a two-year-old son. Elizabeth is working on getting her Technician license.

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Besides being a member of Salt Lake County ARES, Rian is a member of UARC and ARRL.

Rian we wish you the best. Good luck in getting your upgrade to General and good luck to your wife, Elizabeth, in getting her Technician license.



Rian McKee, KF7QGY  
(Photo by Ron Speirs, K7RLS)