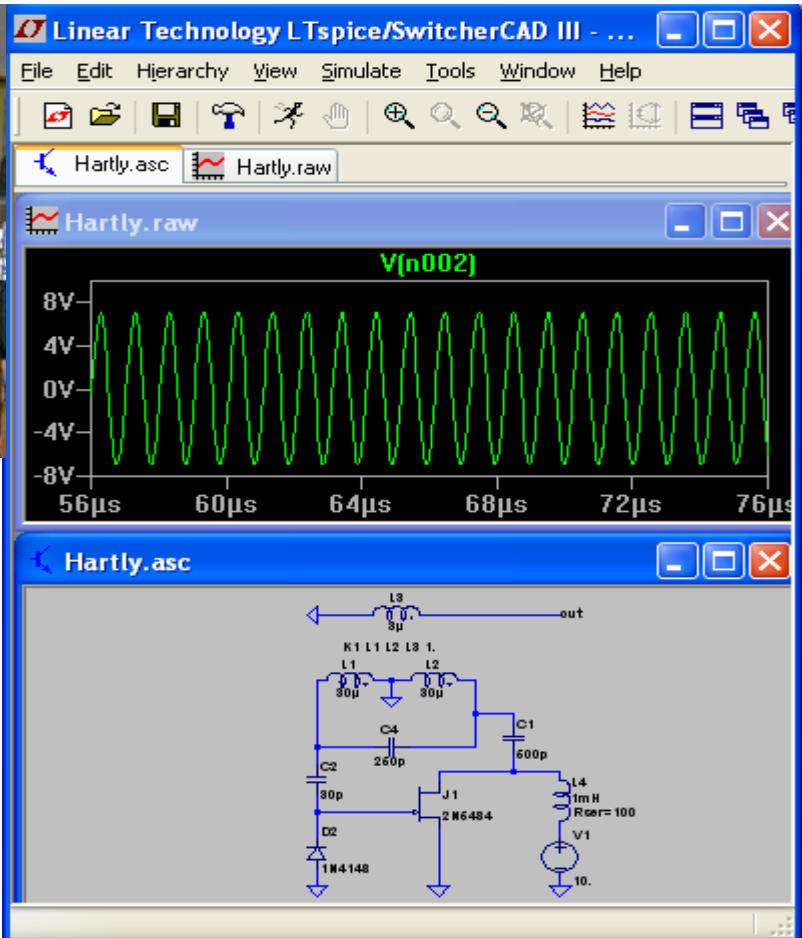




Mike Mladejovsky, WA7ARK , gave us a presentation on a free program for circuit emulation, LTspice. This program will let you construct a circuit on the screen and then run tests to see how it behaves. You can see immediately how small changes in values will affect the performance without ever having to get out a soldering iron.



## April Meeting: A Beginners' Guide to HF



Volume 50, Issue 4, April 2007

Periodicals Postage

# The Microvolt

DATED MATERIAL – PLEASE DO NOT DELAY

Please Send Dues to:  
UARC  
c/o Dick Keddington  
1933 Woodside Drive  
Holladay, UT 84124-1632

**SEND TO**

## Prologue

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 first Thursday of the month at 7:30 PM in the University of Utah Engineering and Mines Classroom (EMCB) building, Room 103.

**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, 1933 Woodside Drive, Holladay, UT 84124-1632. ARRL membership renewals should specify ARRL Club #1602.

**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-) has autopatch facilities for Provo which are currently disabled due to abuse and for Salt Lake which is in need of reworking to be compatible with IRLP

**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.

**Publication:** *The Microvolt* is the official publication of the club. Deadline for submissions to the *Microvolt* is the 10th of each month prior to publication. Submissions by email are preferred ([uarc@xmmission.com](mailto:uarc@xmmission.com)), but other means including diskettes and typewritten submissions can be mailed directly to: Telvin Mills, 6864 Beargrass Rd., West Jordan, UT 84084. All submissions are welcome but what is printed and how it is edited are the responsibility of the Editor and the UARC board. 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.

## UARC 2007 Board

President: John Brewer, N7MFQ	(435) 837-5646
Executive: VP: John Hays , K7VE	446-1899
Vice Pres: Gordon Smith, K7HFV	582-2438
Secretary: Dick Keddington, KD7TDZ	274-9638
Treasurer: Chuck Johnson, WA7JOS	268-0153
<i>Microvolt</i> Editor: Telvin Mills, KB6BYU	968-5089
Asst. <i>Microvolt</i> Editor: Bob Rollins, WB7DPA	942-2638
Program Chair: Dale Heisler, WJ7L	278-6458
Program Chair: Linda Reeder, N7HVF	364-7006
Imm. Past Pres: Roy Eichelberger, W7ROY	571-2447

## Committee Chairpersons and Members

"Book Lady": Fred Desmet, KI7KM	485-9245
Historian: Ron Speirs, K7RLS	968-4614
Field Day Chair: Andrew Madsen, AC7CF	466-0744
Steak Fry Chair: Jed Petrovich, AD7KG	566-6277
Club Trustee: Brett Sutherland, N7KG	298-5399
Engineer: Randy Finch, K7SL	277-7135
ATV Engineer: Clint Turner, KA7OEI	566-4497
Board Liaison &	
Autopatch Engineer: Gordon Smith, K7HFV	582-2438
Provo Autopatch Host &	
ATV Engineer: Dale Jarvis, WB7FID	224-3405

## IRLP Information

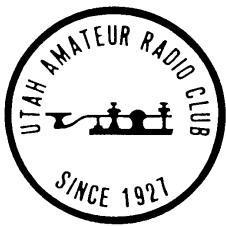
For information on using the club's IRLP node on the 146.76 repeater, check <http://www.utaharc.org/irlp>.

For late breaking news listen to the UARC Information Net Sundays at 21:00 on 146.62 or set your browser to: [www.xmission.com/~uarc/announce.html](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

*April 2007*

## **QST From the Prez**

It's hard to believe that April has already arrived. My, how time flies when you're having a good time. We *are* having a good time aren't we? I know I am.

I really enjoyed the VHF Society's Swap Meet. I didn't come away with any super-amazing deals this year, and that's okay. I had a good time visiting old and new friends.

The growth in the hobby locally and nationally is really amazing. It is fun to watch, also. I encourage all the new hams to support their local radio clubs. We all tire of hearing about it, but it really does take money to keep the club repeaters in operational condition. Not to mention newsletter publishing costs, upgrades to equipment and facilities, and then there is Field Day, followed by UARC's Steak Fry. If everybody locally joined the club, we might not be talking about increasing the cost of admission to the Steak Fry. I don't know if that is a valid reason for joining the club, but I do know that the Steak Fry is an event that my family really enjoys each year. It is good to renew acquaintances and friendships. Sometimes, there is even a screaming deal on some used equipment there.

Speaking of club membership, we have decided to offer new hams a discount on their first year of membership in the club in the form of a coupon. We are encouraging everyone to take a look at what the club has to offer. The flier on which the coupon is printed also mentions other clubs and contacts in the State for those who do not live in the Salt Lake Valley.

There has been some talk of starting a "Kid's Class" to teach some of our children what they need to know in order to pass the Technician test. I am happy to report that it is not just talk. The class is scheduled to start March 27 at 6:30 PM, at Brett's home, 860 W 1500 S, Woods Cross, and I am pretty sure late starters will not be turned away. The classes will be an hour or so long, and will be taught until all attending are confident that they will be able to pass the test. I am enrolling my youngest daughter. I hope that if you know any children who would like to obtain a license, you would support us in this. Brett Sutherland is the contact; you can email him at [N7KG@arrl.net](mailto:N7KG@arrl.net) or call him on the phone at 801-298-5399.

Jed (AD7KG) said that the antenna building party was a success, and he is ready to lead the next project. I would like to build one of those antennas. My position of Scoutmaster kept me from attending this party. I am hoping that the next one doesn't conflict with anything.

73,  
John – N7MFQ



### **Inside this issue:**

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### **Special points of interest:**

- Next UARC Meeting April 5th—HF 101
- Field Day June 23, 24 at Payson Lakes
- Steak Fry, July 14th at the Spruces Campground



## Member of the Month

This month we are featuring Scott Saunders, KE7IRO, who is a brand new ham and a new member of UARC. Scott obtained his Technician license In August 2006.

When Scott was younger he played with CB radio. He has always been interested in radio, but it wasn't until Scott met his wife, Mindy, that he learned about amateur radio. Mindy's father, Jerry L. Murdock, KD7BGT, who lives in Cubriver, Idaho, has his Technician license. One day Scott was visiting Mindy's father and he was operating his ham radio in his truck. Scott was so impressed he asked Mindy's father how he could get one. Mindy's father started teaching him all about amateur radio. Jerry told Scott that he would have to study and get a license from the FCC so it got put off for awhile because he was so busy with college.

Then one day Mindy signed up in Relief Society to take me grocery shopping. When Scott found out that I was in amateur radio his interest was sparked again. It just so happens the night when they came over to my house I received a call on the Ham Hotline from an elderly gentleman who said his hamming days were over and he wanted to get rid of all his old equipment. He said he would just give it to anyone

who wanted it. Scott wrote down the gentleman's address and away he went to get the equipment.

Scott received a two-meter only Kenwood 7950, a two-meter mobile unit, a Heathkit 2036A, and a roof mount antenna. Scott said this equipment dates back to the 1980's.

The thing that Scott likes the best about amateur radio is the challenge it presents, always learning and expanding knowledge in electronics. Scott is a new member of UARC and loves to attend the meetings. His wife Mindy loves the meeting after the meeting at Litza's Pizza. Scott's favorite meeting was homebrew night. His favorite presentation was the one with Ron Jones, K7RJ, and his wife Elaine, N7BDZ. Here, he sets up to communicate across the room with his XYL, Elaine, N7BDZ. At one point in the setup he commented, "We seem to be getting some static." Elaine's response brought the house down: "I'm supposed to give you static, Ron. I'm your wife."



Scott works for the United States Department of Agriculture as a statistician. He works with numbers dealing with statistics in farming for the entire state of Utah.

Scott is planning on upgrading now that he doesn't have to worry about the code. He is also working hard on getting the scouts involved in amateur radio. He demonstrates amateur radio every chance he gets. Scott is trying to get Mindy into amateur radio. Then she could talk to her dad on the radio. Scott loves camping, backpacking, hunting, and ice skating.

Scott we wish you the best in all your endeavors and good luck on upgrading

73, Linda Reeder, N7HVF

## ARRL Rolls Out Emergency-Radio.org Web site



From The ARRL Letter – “Ham Radio . . . Getting the message through for your family and community” is the theme of the League’s 2007 public relations campaign. The “Emergency Radio” Web site <http://www.emergency-radio.org/> debuted this week. ARRL Media and Public Relations Manager Allen Pitts, W1AGP, says the 2007 PR initiative picks up the momentum ARRL public information officers started during the just-ended “Hello” campaign.

“As we begin launching the new emergency communications campaign, the friendships and good will developed in Hello will aid in future promotions of Amateur Radio,” Pitts said. “For 100 years, radio in its many forms has saved lives and aided in crises. We have a great legacy and a bright future.”

The new Web site is a partner to the “Ham Radio . . .

Getting the message through for your family and community” brochure now available and, in fact, already starting to make the rounds. “If an emergency or disaster should happen, the new ‘Ham Radio . . . Getting the message through’ site has the capability to quickly upload current information, providing PIOs with words and pictures to circulate to the media while the event is still news,” Pitts explained.

As both the brochure and the “Ham Radio . . . Getting the message through” Web site note: “Amateur Radio . . . has consistently been the most reliable means of communication in emergencies when other systems failed or were overloaded.” The campaign stresses that ham radio works and works well and it doesn’t require any external infrastructure, such as telephone lines or even the Internet, to get the message through.

The Web site provides page space for emergency com-

munication and disaster relief organizations to tell about their work. “So far, SKYWARN, MARS, SATERN and RACES have taken advantage of our offer, showing the versatility of ham radio in disasters and emergencies,” Pitts says, “and more are expected.”

The campaign also emphasizes that ham radio is fun and a good way to keep in touch with friends or family. “You can have this capability for yourself and your family,” the campaign points out, inviting members of the general public to get an Amateur Radio license and become active in emergency communication through the Amateur Radio Emergency Service (ARES) or other organization. A “How to Get Started” tab on the Web site offers step-by-step instructions.



## Technician License Class

I am planning another Tech class for May 4, 5, 12. It will be at the site of the January class (Monument Park Stake Center, 1300 S & Wasatch Dr) OR at Welfare Square. We don't know the location for sure yet, but the dates are good. Format is the same as the January and February classes: Friday evening, Saturday morning & afternoon, next Saturday morning with test after lunch. Let me know who is interested, or they can call me for information. 968-4614; K7RLS@comcast.net or this address, K7RLS@yahoo.com.

73, Ron  
K7RLS

## Build a Dual-band J-Pole

Jed Petrovich, AD7KG, has worked out a way to build a dual-band collapsible J-pole-like antenna similar to Arrow's OSJ 146/440. His design features aluminum elements with stainless steel hardware and is reputed to work well on both two meters and 70 centimeters. He is conducting a workshop where interested hams can get together and build copies of the antenna. If there is enough interest, he would also be willing to organize a similar workshop for UARC members. Materials would be purchased in bulk and a workspace and tools would be provided. Estimated cost is \$25-30.

Anyone who would be interested in building one of the antennas should contact John Hays, K7VE, at K7VE@arrl.net. *(Photo by K7RLS)*



Jed, AD7KG, shows off one of the dual-band J-pole antennas.

## May Meeting: Crystal Radio

Our May Meeting (May 3) will feature Bruce Kizerian, KK7ZZ, telling what's new in one of the oldest kinds of radio, the crystal set. The younger generation might not realize that it's possible to receive broadcast stations without either line power or batteries.

These days it's possible to make crystal sets perform better than some of us might remember them doing. Bruce will be telling us about the current state of the art. He also thinks crystal sets are a great way for young folks to start an interest in radio and electronics. To help promote this interest, Bruce is prepared to give away solderless crystal set kits to anyone at the meeting who is between the ages of 8 and 18. This would be a great meeting to bring your kids and/or grandkids to. Be sure to mark May 3 on your calendar.



## WIMU 2007

Wyoming, Idaho, Montana and Utah Convention 2007  
Sponsored by Utah Hamfest



August 3-5, 2007

The Virginian Lodge, Jackson, WY

For the most current convention information visit: [home.comcast.net/~wimuhamfest/](http://home.comcast.net/~wimuhamfest/)

**Special Guest and Breakfast Keynote Speaker From ARRL HQ  
Chris Imlay, W3KD, Legal Council for ARRL**

**Activities Include:**

BBQ Cookout / Eyeball QSO Party	Contests:
Dutch Oven Dinner	CW & QLF
Breakfast Banquet	Mobile Installation
Dealers	Transformer Toss
Outside Swap Meet Area Free . (Bring your own table)	Transmitter Hunts
Seminars and Forums	Wouff Hong
Women's and Children's Activities	VE Amateur License Exams
QSL Card Checker	(Pre-Registration is not Required)
Prize Drawings	You must be on time for this session
	Cost is \$14, and 2 forms of ID required

**Grand Prize will be an YAESU 897D HF Radio (Must be Present to Win)**

**Pre-Registration Prize will be a Hand Held Radio**

**ALL PRIZES DRAWINGS WILL BE HELD AT THE SUNDAY BREAKFAST – YOU MUST BE PRESENT TO WIN**

**For Registration Information Contact: Eugene or Carol McWherter – [n7ovt@arrl.net](mailto:n7ovt@arrl.net) or [kc7lw@arrl.net](mailto:kc7lw@arrl.net)**

**Before July 20<sup>th</sup>: Adult (18 and over) \$10.00, Youth (17 & Under) \$3.00 (All registrations must be received before July 20, 2007)**

**At the Door: Adult \$12 and Youth \$5.00**

**Accommodations:**

**On-Site Accommodations**

Virginian Lodge 800-262-4999	Room – 2 dbl beds	About \$88	Ask for 10% WIMU 2007 discount
RV Park 800-321-6982	RV Space	About \$43	With popular RV discount cards Motel Reservations must be made by June 1, 2007 to receive discount

Please Print

Please provide your e-mail address in order to receive a confirmation:

Name: \_\_\_\_\_ Call sign: \_\_\_\_\_ Email: \_\_\_\_\_  
Address: \_\_\_\_\_ Phone: (        ) \_\_\_\_\_ - \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip+4: \_\_\_\_\_ - \_\_\_\_\_

Names of Additional Attendees (Name and age of youth):

\_\_\_\_\_  
age: \_\_\_\_\_ Call sign: \_\_\_\_\_  
\_\_\_\_\_  
age: \_\_\_\_\_ Call sign: \_\_\_\_\_  
\_\_\_\_\_  
age: \_\_\_\_\_ Call sign: \_\_\_\_\_  
\_\_\_\_\_  
age: \_\_\_\_\_ Call sign: \_\_\_\_\_

Must have names and call signs (if applicable) of all registered attendees. (Use back of form for additional Names and Call Signs)

Number of Adults: (Pre-Registration = \$10; At the Door - \$12) .....	X	\$10 / \$12 = \$_____
Number of Youth (17 & under)*: (Pre-Registration = \$3; At the Door = \$5) .....	X	\$3 / \$5 = \$_____
Friday BBQ Cookout / Eyeball QSO Party.....	X	\$10 = \$_____
Saturday DO Dinner** .....	X	\$15 = \$_____
Sunday Breakfast – Adults** .....	X	\$12 = \$_____
Sunday Breakfast – Children under 12** .....	X	\$6 = \$_____
WIMU Polo Shirts:*** ..... S M L XL 2X 3X X \$25 = \$_____		

\*Youth registrations eligible for youth prizes only

Total = \$\_\_\_\_\_

\*\*Only 200 dinners are available on a first come, first serve basis.

\*\*\*Limited number available.

Check or Money orders payable to:

Utah Hamfest/WIMU 2007  
PO Box 482  
Bountiful, Utah 84011-0482

# **April Meeting: Beginners' Guide To HF**

## **Thursday, April 5th, 7:30 PM, Room #103**

Are you one of the folks taking advantage of the chance to get on HF without passing a Morse code exam? Are you new (or about to be new) to HF? Then UARC's April meeting program is for you!

We have been able to get Stan Gordon, K7JIZ, to present our program on Thursday, April 5. Some may remember Stan's presentation a few years ago about the HF digital modes. This time he will give us an overview of what it's like to work the HF bands. Stan has been a ham for over forty years and has had experience with military as well as amateur communications. He has worked a wide variety of modes through all phases of the sunspot cycle.

There are lots of things to know about HF. Which bands are the best in the daytime and which at night? How do you choose a frequency? How do you get right on the frequency of someone who calls CQ? What kind of antenna can you use? How much power does it take? Where do you get QSL cards made? These are some of the topics that Stan will be touching on. He should be able to answer a wide range of questions as well.

Another item of interest at the meeting will be a discussion and vote on how to best finance our annual UARC steak-fry. For more information see steak-fry discussion on the web site.

Of course, the meeting will include the "standard" meeting features:

- Availability of ARRL books from Fred, 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(s) after the meeting":

A chance to enjoy pizza or other gastronomic delights with other hams. One group goes to Litza's Pizza, 716 E. 400 South. Another group goes to a restaurant that varies from month to month, but will be announced at the meeting. The meeting before the meeting will be held at KFC, 555 East 400 South.

### **Exam Schedule**

04/07/07<sup>1</sup> (Sat.) Salt Lake City  
Contact: Gordon Smith, K7HFV  
Phone: (801) 582-2438

04/18/07 (Wed.) Provo  
Contact: Steve Whitehead, NV7V  
Phone: (801) 465-3983

04/18/07 (Wed.) St. George  
Contact: Ron C. Sappington, WI7Z  
Phone: (435) 673-4552

04/24/07 (Tues.) Salt Lake City  
Contact: Eugene McWherter, N7OVT  
Phone: (801) 541-1871

05/16/07 (Wed.) Provo  
Contact: Steve Whitehead, NV7V  
Phone: (801) 465-3983

05/17/07 (Wed.) St. George  
Contact: Ron C. Sappington, WI7Z  
Phone: (435) 673-4552

05/17/07 (Thu.) Roosevelt  
Contact: R chandler Fisher, W7BYU  
Phone: (435) 722-5440

05/29/07 (Tues.) Salt Lake City  
Contact: Eugene McWherter, N7OVT  
Phone: (801) 541-1871

06/02/07<sup>1</sup> (Sat.) Salt Lake City  
Contact: Gordon Smith, K7HFV  
Phone: (801) 582-2438

06/06/07 (Wed.) Ogden  
Contact: Mary Hazard, W7UE  
Phone: (801) 430-0306

06/09/07 (Sat.) Logan  
Contact: Roberta Lofthouse, KJ7LQ  
Phone: (435) 245-6632

06/20/07 (Wed.) St. George  
Contact: Ron C. Sappington, WI7Z  
Phone: (435) 673-4552

06/20/07 (Wed.) Provo  
Contact: Steve Whitehead, NV7V  
Phone: (801) 465-3983

06/26/07 (Tues.) Salt Lake City  
Contact: Eugene McWherter, N7OVT  
Phone: (801) 541-1871

<sup>1</sup> Pre-registration required. Contact the contact person prior to the examination date.

For more detail either call the contact or checkout the information on our web-page:

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