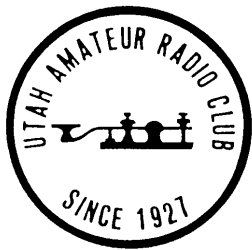




Jim, NA7G, gave us a presentation on solar power that he has installed at his cabin which is not close enough to any commercial power lines. He showed us pictures of his solar panels, batteries, regulators, inverters and wiring.

****Next UARC meeting will be in the same building, new room EMCB #103.****

December Meeting Topic: Antenna Modeling



Volume 49, Issue 11, December 2006

Periodicals Postage

The
Microvolt

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Holladay, UT 84124-1632

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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 which are currently disabled.

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@xmission.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 2006 Board

President:: Roy Eichelberger, W7ROY	571-2447
Executive VP: John Brewer , N7MFQ	837-5646
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: Bryan Mogensen, W7CBM	281-1752
Program Chair: Brett Sutherland, N7KG	298-5399
Program Chair: Dave Jeffs, KK7WI	538-3506
Imm. Past Pres: Glen Worthington, WA7X	272-8825

Committee Chairpersons and Members

"Book Lady": Fred Desmet, KI7KM	485-9245
Historian: Ron Speirs, K7RLS	968-4614
Field Day Chair: Vacant	
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

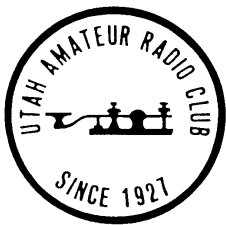
For information on using the club's IRLP node on the 146.76 repeater, check <http://www.utaharc.org/irlp>.

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

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

December 2006

QST From the Prez

Well, here it is--last month of the year, last article also. I've really enjoyed serving on the board for the past three years. I've had a lot of fun, but best of all is my association with you. My journey has taken me from a Novice to Technician and I now have my General. I finally got on the HF band and I'm enjoying the time I get to spend on the air (limited as it is). Presently, I'm working with PSK-31, so feel free to elmer me with any advice you have for me.



Rewriting of the articles and by-laws of the club is a project that is currently taking place. In making changes, we have to keep in mind that our club has the largest board of directors of any club in the state.

There have been so many opportunities to get involved this year with so many events. Thanks for all your help with Scout-o-Rama, the State Fair, JOTA, even though that didn't go as planned. There is still the Scout Expo to get involved in as a club. Hopefully, we can be effective in running a day long merit badge class for the scouts. It's a no-brainer, our future lies with the youth, **get involved!! We need you!!**

A big thanks for all those who participated in bringing us some very good meetings this past year. You made the learning easy and fun!

There have been many changes this year and sure to be more in the future. Let's continue to enjoy and have fun with our hobby and let others know about it!

73 de W7ROY

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Special points of interest:

- ◆ *Next UARC Meeting December 7th—Antenna Modeling*
- ◆ *New meeting room #103*
- ◆ *Time to nominate new officers for 2007*
- ◆ *IRLP on 146.76 Operational*



Member of the Month

This month we are featuring Bill LeFevre AE7BL. Bill has always been interested in amateur radio. When he was 9 years old he was living in Ardmore, Oklahoma. George Revis, who worked at the neighborhood drug store, was a ham radio operator. George owned a complete Collins system and had a 20-meter and 40-meter beam antenna. George would always invite Bill to come over to his ham station and operate his equipment. Bill says he still remembers walking into the ham shack and seeing the glowing tubes. This really fascinated him. Bill really wanted to get into amateur radio, but studies and career got in the way.

Bill owns Wasatch Mechanical Electric. Bill is a state licensed master electrician. He is an electrical contractor, a boiler installation contractor, and a heating ventilation and air conditioning contractor (HVAC). Bill is also a professor at the Salt Lake Community College. He teaches electronics and electrical theory. Bill received his teaching credentials from UCLA.

Bill received his Technician license in June of 2001. His call sign was, KD7NSN. Bill already had his vanity call picked out in 2002 and it was available. He only hoped it still would be when he finally got that Extra Class license. In 2005, for three months, Bill studied the code and the General and Extra class materials and in December he

went from Technician to Extra. Bill's vanity call sign was waiting just for him. Bill's favorite thing about amateur radio is DXing and Morse Code. He is a member of FISTS and he does not want to see the code go away. Bill said it is very important to know the code because there may be a time when code will be the only communication mode available. Bill told me that one day he was trying to get in to the Beehive net on his QRP rig and couldn't get in. But, when he tried the code he got in just fine. Bill is a member of UARC, the Davis County Amateur Radio Club, Utah VHF Society, The Utah DX Society, ARRL, ARES and RACES. Bill is also a volunteer examiner for the W5YI. Bill and his wife Irene have two children, a boy and a girl. Bill's wife Irene is working on getting her ama-



teur radio license. Irene wants to get her license because of the value that amateur radio has in emergencies. Also, Bill and Irene are serving an addiction recovery mission for the LDS Family Services. Bill says they spend a lot of time at the jail. Bill, we wish you all the best in your endeavors.

73, Linda Reeder, N7HVF

Nominations for 2007 Officers

The nominations from the floor at the November meeting and from the nominating committee are as follows:

President:	John Brewer, N7MFQ
Executive Vice-President:	John Hayes, K7VE
Vice President:	Gordon Smith, K7HFV
Secretary:	Dick Keddington, KD7TDZ
Treasurer:	Chuck Johnson, WA7JOS
Program Chairperson:	Dale Heisler, WJ7L
Program Chairperson:	Linda Reeder, N7HVF
<i>Microvolt</i> Editor:	Telvin Mills, KB6BYU
Assistant Editor:	Toby Herrera, KE5GKU

449.1 Repeater to Change Frequency

You may have noticed that the 449.1 repeater has been off the air for several months. This repeater is operated by Glen Worthington, WA7X, and made available to UARC members. The repeater had experienced interference due to intermodulation products between the repeater's output and a commercial paging transmitter on the same site. Glen decided the best solution was to change the repeater's frequency. Right now, the repeater is down from its site in order to make the frequency change. Eventually, it will return to the air on 449.025. It is getting to be the time of year when access to Farnsworth Peak is difficult. Whether the re-installation will be possible before next summer is not known.

Upcoming License Classes

Ron Speirs, K7RLS, will be conducting several licensing classes during the winter of 2007. Here are the details:

Target License Class	Starts	Schedule	Location
Technician	January 12	Jan. 12, (6:30 PM to 9:30 PM); Saturday 13th and Test Saturday 20th (8:30 AM to 3:30 PM)	Monument Park North Stake Center (Primary room—north side, main level) 1320 Wasatch Drive, Salt Lake City
General	January 9	Tuesdays, 7 weeks, 7-9 P.M. Test given on February 27th	Hunter (LDS) Fifth Ward 5065 W. Janette Ave. (3985 South) West Valley City, Utah
Extra	February 27	Tuesdays, approx. 8 weeks, 7-9 P.M.	Hunter (LDS) Fifth Ward 5065 W. Janette Ave. (3985 South) West Valley City, Utah

For the Technician class, please bring a sack lunch on both Saturdays. There is not time scheduled to go off premises for lunch.

The cost of each session is the cost of the appropriate manual, \$25 for Technician, \$20 for the General class and \$25 for the Extra. In addition, a deposit of \$30 is required for the General and Extra classes. This deposit will be returned to those who either attend six of the seven sessions or pass the test. Deposits not returned will be donated to the Utah Amateur Radio Club. Applicants should also be prepared to pay a \$14 testing fee at the time of the examination.

General (or Extra) class does not include instruction in the International Morse Code. Ron suggests this is best learned individually. Programs and courses are available on internet. For more information, contact Ron at 968-4614.



Merry Christmas



Ottinger Hall

Many of you may not recall Ottinger Hall. It is the original Fire Station for the Salt Lake City Fire Department. The building is listed on the National Historical Register and is located just outside the entrance to Memory Grove. It is a wonderful old building with a great deal of history and character.

The Salt Lake Rotary decided that it needed to have a special project for its 100th anniversary, so they partnered up with Salt Lake City in a project to restore Ottinger Hall and make it available as a facility for after school youth programs.

When the project was first proposed I became aware of it and thought Ottinger Hall might make a nice venue for UARC to host a Big Project ala Jim Haney, ARRL Past President. The Big Project, as you might know, is a program to teach youth about amateur radio and related subjects. It is normally sponsored in a school setting, but this looked like a good opportunity to build a relationship with Salt Lake City and to provide some good in the community. So, while it is not in a school setting, it is an after school program for youth.

The restoration project was originally proposed in 2002. Many meetings were held with Rotary and Salt Lake City before the project was decided upon. It was subsequent to this their proposal was made to UARC Board to sponsor and support this program. Construction was begun while UARC waited patiently. However, the project rapidly came to a halt as they realized that the building required a great deal of structural reinforcement to meet new earthquake building codes. It wasn't until this past summer that the building was dedicated and the program began.

I was fortunate to be the first one to be able to work with the youth. They are for the most part in grade 6 and 7 and are very excited to learn about amateur radio. Each class has eight to ten kids attending. We're attempting to offer the program three to four times per year. Classes are normally held during the day and last from an hour to an hour and a half. The normal course is to provide a little bit of instruction combined with demonstration and on-air operating.

Roy Eichelberger, W7ROY, has donated a commercial cabinet on casters to store radios in. The cabinet opens front and back and enables us to leave radios on site and locked up. We are currently using one of the club's Field Day radios, a Kenwood TS 450, for HF and a RadioShack VHF radio donated by the estate of Allen Wright, N7QFI.

Gordon Smith, K7HFV and I went to Ottinger Hall this past summer to install antennas. The VHF antenna is a Comet, also from the estate of N7QFI, and the HF antenna is a dipole in the attic. The electricians were good enough to leave conduit in place for us to pull coax. This proved somewhat problematic. However after a great deal of fiddling about in the attempting to fish the coax from both ends we were able to finally get it through. We then terminated the coax on wall panels underneath one of the desks. So, all we have to do is pull out the box with the radios in it, unlock it and hook up the power and coax and we are ready to make contacts. We also posted an ARRL map of the world on the wall. Both the map and the logbook were donated by Mel Parkes, NM7P, ARRL Section Manager, on behalf of the ARRL.

So far the project has been a great deal of fun. The kids are excited and it does take the slightest amount of

Ottinger Hall- continued

patience to keep them on task. However, that said, I would encourage everyone to participate.

If you have the time on Friday afternoons to help me teach these kids about amateur radio I would welcome your help. Currently I am the only person working on this project and would like to be able to keep it going. The curriculum is well-defined and does not take a great deal of knowledge about technical subjects. If you would like to participate, please contact me at n7kg@arrl.net. I look forward to hearing from you.

New address for:

Communications Products
7650 S. REDWOOD RD STE. D
WEST JORDAN, UTAH 84084
PHONE:801-567-9944
FAX: 801-566-7553

Current Hours:
Tuesday thru Friday 11:00AM-5:00PM

Saturday 10:00AM-2:00PM

CLOSED SUNDAY AND MONDAY

Pictures From NA7G Presentation



December Meeting: Elections and Antenna Modeling

Thursday, December 7th, 7:30 PM, Room #103

It would be fun to have enough time, money, and real estate to do a lot of antenna experimentation, but most of us have to curb our inclinations to erect a 160-meter beer-can beam because of limitations imposed by space, zoning rules, and Board of Health regulations. But what if you could experiment without any of those restrictions?

A close cousin to real antenna building is computer modeling. At the next UARC meeting, to be held Thursday, December 7, Mike Mladejovsky, WA7ARK, will be demonstrating Mmana, a free modeling program that will let you try different antenna configurations and see the results without actually having to go out and buy the metal. He will show us how to obtain, install, and use the Mmana program, and give us an idea of the range of things it can do. Mike has had a great deal of experience with amateur radio and with electronics in general. He has been licensed since the 1960's and holds a doctorate in Electrical Engineering. His professional experience includes work with artificial organs, robotics, and integrated circuit design. He was one of the founders of the Utah VHF Society and was the Utah Frequency Coordinator for many years.

If you'd like to do a bit of advance preparation and look the program over, you can obtain it at www.smeter.net/antennas/mmana.php.

December will also be the annual election meeting. Further nominations from the floor will be accepted and then we will vote on officers for the 2007 year.

That will be on Thursday, December 7th, at the usual time, same building, **new room #103**.

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", a similar get-together for those who can leave work early enough to get there by 5:15 P.M This time it will be at the "KFC," 555 East 400 South in Salt Lake City.

Exam Schedule

12/02/06¹ (Sat.) Salt Lake City
Contact: Gordon Smith, K7HFV
Phone: (801) 582-2438

12/09/06¹ (Sat.) Logan
Contact: Roberta Lofthouse, KJ7LQ
Phone: (435) 245-6632

12/20/06 (Wed.) Provo
Contact: Steve Whitehead, NV7V
Phone: (801) 465-3983

01/17/07 (Wed.) St. George
Contact: Ron C. Sappington, WI7Z
Phone: (435) 673-4552

01/17/07 (Wed.) Provo
Contact: Steve Whitehead, NV7V
Phone: (801) 465-3983

01/25/07 (Thu.) Roosevelt
Contact: R Chandler Fisher, W7BYU
Phone: (435) 722-5440

01/30/07¹ (Tues.) Salt Lake City
Contact: Eugene McWherter, N7OVT
Phone: (801) 541-1871

02/03/07¹ (Sat.) Salt Lake City
Contact: Gordon Smith, K7HFV
Phone: (801) 582-2438

02/07/07 (Wed.) Ogden
Contact: Mary Hazard, W7UE
Phone: (801) 430-0306

2/21/07 (Wed.) Provo
Contact: Steve Whitehead, NV7V
Phone: (801) 465-3983

2/21/07 (Wed.) St. George
Contact: Ron C. Sappington, WI7Z
Phone: (435) 673-4552

2/27/07 (Tues.) Salt Lake City
Contact: Eugene McWherter, N7OVT
Phone: (801) 541-1871

3/07/07 (Wed.) Farmington
Contact: Mike Youngs, KK7VZ
Phone: (801) 573-3922

3/10/07 (Sat.) Logan
Contact: Roberta M. Lofthouse, KJ7LQ
Phone: (435) 245-6632

(Last Tuesday test in Salt Lake City omitted in December.)

¹ 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>