



Mike, WA7ARK, gave us a presentation on a computer antenna modeling program called Mmana. Everyone came away from the meeting looking forward to downloading the program and designing their own antennas. Maybe we will see some new antenna designs at this falls Homebrew meeting.

## January Meeting Topic: Woody on Fiber Optics



Volume 50, Issue 1, January 2007

Periodicals Postage

# The Microvolt

**DATED MATERIAL – PLEASE DO NOT DELAY**

**SEND TO**

Please Send Dues to:  
UARC  
c/o Dick Keddington  
1933 Woodside Drive  
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 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@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 2007 Board

President: John Brewer, N7MFQ	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: Toby Herrera, KE7GKU	
Program Chair: Dale Heisler, WJ7L	278-6458
Program Chair: Linda Reeder, N7HVF	364-7006
Imm. Past Pres: Roy Eichelberger, W7ROY	571-2447

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"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](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

January 2007

## QST From the Prez

As I sit here writing this message, it is Christmas Eve, and the New Year is right around the corner. I hope you all had a very merry Christmas and wish you a happy and prosperous New Year. By the time you read this, the year 2007 will have begun. I am excited about the coming year. There are some exciting club projects in the works.



One of the projects the club is working on is the synchronous repeater. This will put a repeater on 146.620 MHz on Scott's Hill, which will fill in some gaps in the current repeater's coverage area. For those who commute around the North end of the Oquirrh Mountain range, this will be very beneficial. We will not have to jump out and back into a QSO in that area.

Another project that I am excited about is Ottinger Hall. I wish I had more time. I love to work with youth. I think Brett, N7KG, is doing a fine job there, but he could use some more help. If you are interested in helping, get in touch with Brett Sutherland, N7KG. Based on ARRL's Big Project, it exposes youth to amateur radio and related science and electricity ideas. Brett says that they really enjoy it.

There are still plenty of empty slots on the Elmer list. I invite you to take a look at the list on UARC's web page, and if there is an area in which you have some expertise and you have some time, let us know how you would like to serve. If we have overlooked an area, let us know about that, too.

The FCC has issued a statement saying that Morse code will no longer be required for any license class. When this rule change becomes effective, all Technician and Technician Plus licensees will have the same operating privileges, which means all you Technician Class operators will have some HF privileges. I hope to hear some of you on 10 meters. The FCC has declined to bring back the Novice license, saying that the Technician license will be essentially the same after this rule becomes effective.

This summer, I am looking forward to operating the CW station at UARC's Field Day station. I hope we have others who enjoy CW as well. We still need a Field Day chairman. If you are interested, please let any member of the board know.

That's all for now. 73 'til next month.

John, N7MFQ

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### Special points of interest:

- ◆ Next UARC Meeting January 4th—Fiber Optics
- ◆ New meeting room #103
- ◆ FCC Drops Morse Code Testing
- ◆ IRLP on 146.76 Operational



## Member of the Month

This month we are featuring Toby John Herrera, Jr., KE5GKU. Toby was exposed to amateur radio when he was a child. Toby's father had his ham license and served in the military and NASA working in communications. Toby's father was in charge of the radio equipment. Toby's father would let Toby use his ham equipment. Toby thought this was great. When they were stationed in Germany he could talk to his friends back in the United States. Toby's military friends had ham tickets.

Toby is really good at fixing computers. So, Toby would fix their computers and in return Toby's friends would let him use their ham radio equipment. After 35 years of using his friends' equipment Toby decided it was time to get his own ham license.

Last year Toby took Roy Eichelberger's, W7ROY, class and obtained his Technician license in November of last year. Toby is working very hard on getting his Extra class license. Toby says he needs to get busy working on his Morse Code.

What does Toby like best about amateur radio? Toby loves tinkering with the

electronics. He would rather work with electronics than talk on the radio.

Toby became a member of UARC when he obtained his Technician license. Toby helped out at Utah State Fair this year in September when UARC had a booth. Toby enjoys helping others get into the hobby. When I was at the fair I asked Toby if he would be interested in being a UARC club officer. I told him what offices were available and Toby said he would like to be the Assistant *Microvolt* Editor. Toby will be UARC's Assistant *Microvolt* Editor for the year 2007. Toby, congratulations we know you will do a great job.

Toby works for Micrel Semiconductor, Inc. Technical Support for the Rocky Mountain States. He supports power supplies, Ethernet switches, High Speed digital communication(s), and RF Transceivers.

Toby is a VFRIEND licensed pilot and glider pilot. He rents planes at the Salt Lake Airport #2. Toby is also a SSI scuba diving in-



structor. Other hobbies that Toby enjoys are: archery, shooting, and hunting, and especially golf!

Toby, we wish you the best, especially in your quest to upgrading your license.

73, Linda Reeder, N7HVF

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

## 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 <b>Test</b> 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. <b>Test</b> 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.

**- FREE GIFT -**

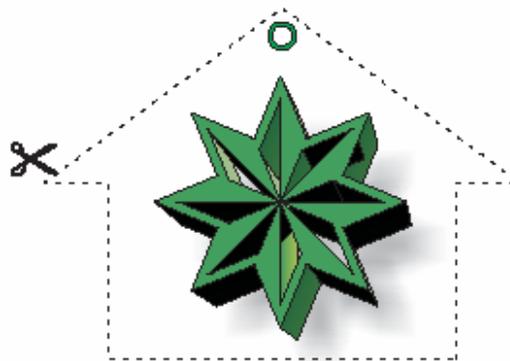
**For All UARC Members**

**- FREE GIFT -**

You are now the proud owner of a  
**HUMDINGER WEATHER FORECASTER**

Cut along the dotted line and hang it outside on a nail

If it's wet, it's raining  
If it's white, it's snowing  
If it's stiff, it's freezing  
If it's moving it's windy  
If it's gone, it's been ripped off!



## 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. "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 V 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

## New Club Officers for 2007



Left to right: Toby Herrera, KE5GKU, Asst. *Microvolt* Editor; Dale Heisler, WJ7L, Program Chair; Chuck Johnson, WA7JOS, Treasurer; Linda Reeder, N7HVF, Program Chair; Telvin Mills, KB6BYU, *Microvolt* Editor; Gordon Smith, K7HFV, Vice President; John Hays, K7VE, Executive Vice President; and John Brewer, N7MFQ, President.

# FCC to Drop Morse Code Testing for All License Classes

Early next year, the US will join the growing list of countries that no longer require Amateur Radio applicants to pass a Morse code test as the entry ticket to HF. Announcement of the pending historic rule change arrived on December 15 in an FCC public notice. The best estimate of when the Morse code requirement will go away officially is sometime in February - 30 days after the R&O appears in the Federal Register.

The rule changes will grant limited HF operating privileges to Technician licensees on 80, 40, 15, and 10 meters. This is also a great opportunity to encourage Technician licensees to upgrade. Once the new rules take effect, Technicians can upgrade to General by passing the Element 3 written exam and to Amateur Extra by also passing the Element 4 written exam. No Morse code test will be required.

The ARRL has posted information relevant to the FCC action in WT Docket 05-235, including an FAQ, on its Web site <http://www.arrl.org/fcc/morse>.

## Amateur Radio Word Search

By, Jeff KF6CNV



H R O T A R B I L A C G E N E R A L K E N W O O D L X  
 C E D S E C N A T C U D N I M B A L A N C E C U U A E  
 T T I T A R H T X W I R E T E M T L O V I O P E S I L  
 O A E B T W E P L I E R S Y O T N I O J M L Q R E X P  
 N E L R Q N T H M M A U T O P A T C H P E D N A A A M  
 Z H E O U O E O P D E C N A L A B N U X I F T W Y O I  
 D D C A A R R N O S B B F I I D R T I D M B Q M O C S  
 N A T D R T O E S T O A G V E A E E I N F R A R E D I  
 Y O R C T U D T T U H N E W D R F R P E V I T I S O P  
 R L I A Z E Y I N E M D O I O R E V I E C E R F J W N  
 J R C S F N N C O E P W O I H C T B C N A H R A G O O  
 H E H T I O E S N C Z I L C T I E G H B G T D T I P C  
 A V A D E V N T L A Q D G O A A N W A T T M E T E R I  
 N O I G G J E A I F G T R I C I L L R M W X C R S R L  
 T E R M I N A L N R W H N O D O U U T N P E I A N T I  
 E L P K C A B D E E F G N L V N T Z G O J O B G E U S  
 N U I I T S T N A T C A E R E D L O S E D X E C K K C  
 N G N I M M A H R N U I A M A T E U R I R Y L H I U E  
 A Z I M U T H E Z I H L A T I B R O C P Z N S E L B X  
 O W S U O I R U P S E G A K A E L A C I T P O W D D D  
 G N I D A F T E K C A P M U U C A V M E D O M V G P I

- |            |            |            |
|------------|------------|------------|
| Alignment  | General    | Phonetics  |
| Amateur    | Hairpin    | Pliers     |
| Antenna    | Hamming    | Positive   |
| Attenuator | Heater     | Protocol   |
| Autopatch  | Heterodyne | Quartz     |
| Azimuth    | Imbalance  | Radio      |
| Balun      | Inductance | Ragchew    |
| Bandwidth  | Infrared   | Reactants  |
| Beacon     | Interface  | Receiver   |
| Bipolar    | Inverter   | Regulation |
| Broadcast  | Ionosphere | Rejection  |
| Calibrator | Joint      | Repeater   |
| Cathode    | Kenwood    | Sawtooth   |
| Coaxial    | Leakage    | Shielding  |
| Computer   | License    | Silicon    |
| Decibels   | Linear     | Simplex    |
| Desolder   | Modem      | Soldering  |
| Deviation  | Moonbounce | Spurious   |
| Dielectric | Nanofarad  | Television |
| Digipeter  | Neutron    | Terminal   |
| Director   | Nonlinear  | Unbalanced |
| Downlink   | Notch      | Vacuum     |
| Duplex     | Optical    | Voltmeter  |
| Exposure   | Orbital    | Wattmeter  |
| Fading     | Overload   | Wire       |
| Feedback   | Packet     | Yaesu      |
| Firmware   | Periodic   |            |

## January Meeting: Woody on Fiber Optics

**Thursday, January 4th, 7:30 PM, Room #103**

One of our most memorable speakers over the last several years is Leonard (“Woody”) Woodward, W7KOP. Woody, who first got into amateur radio in the 1920's, is possibly the only ham still alive in Utah who first operated in the spark era.

Woody is returning for our January 4 meeting, but his topic derives from a later part of his life. He will be speaking about fiber optics, a technology that has revolutionized how we transmit information from one point to another.

That will be on Thursday, January 4th, 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.



## Exam Schedule

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

01/30/07<sup>1</sup> (Tues.) Salt Lake City  
Contact: Eugene McWherter, N7OVT  
Phone: (801) 541-1871

02/03/07<sup>1</sup> (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

3/15/07 (Thu.) Roosevelt  
Contact: R chandler Fisher, W7BYU  
Phone: (435) 722-5440

3/21/07 (Wed.) Provo  
Contact: Steve Whitehead, NV7V  
Phone: (801) 465-3983

3/21/07 (Wed.) St. George  
Contact: Ron C. Sappington, WI7Z  
Phone: (435) 673-4552

3/27/07 (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>