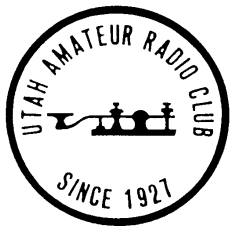




Tony Naef, KE7BBG, demonstrates the art of surface mount soldering/desoldering.



Volume 48, Issue 11, December 2005

Periodicals

The
Microvolt

Please Send Dues to:
UARC
c/o Dick Keddington
1992 El Dorado Drive
Holladay, UT 84124-1652

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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 101.

Membership: Club membership is open to anyone interested in amateur radio; a current license is not required. Dues are \$15 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 \$15 may obtain a membership without a *Microvolt* subscription for \$9. Send dues to the Club Secretary: Dick Keddington, KD7TDZ, 1992 El Dorado Drive, Holladay, UT 84124-1652. 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 on both the Orem exchange (covering Santequin to Lehi) and the Salt Lake City exchange (covering Draper to Layton). The 449.10 repeater has autopatch facilities into Salt Lake City only available to UARC members. Due to the volume of traffic, only mobiles should use this autopatch. Autopatch use is open to all visitors to our area and to all club members. Non-members who wish to use the autopatch are encouraged to help with the cost of maintaining the equipment by joining the club.

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, 1992 El Dorado Drive, Holladay, UT, 84124-1652.

UARC 2005 Board

President: Glen Worthington, WA7X	272-8825
Executive VP: Roy Eichelberger, W7ROY	571-2447
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: Marty Olsen, KE7AEW	281-0661
Program Chair: Scott Thomson, KD7VFP	918-3141
Imm. Past Pres: Brett Sutherland, N7KG	298-5399

Committee Chairpersons and Members

"Book Lady": Fred Desmet, K17KM	485-9245
Historian: Ron Speirs, K7RLS	968-4614
Field Day Chair: Brett Sutherland, N7KG	298-5399
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
Repeater Monitor: Brett Sutherland, N7KG	298-5399

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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

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The Microvolt

The Official Publication of the Utah Amateur Radio Club, Salt Lake City, Utah
Volume 48, Issue 11, December 2005



QST from the Prez

Glen Worthington, WA7X

This will be the last article I write as the president of UARC and I want to thank all of you for your support over the past 2 years. It has been fun and we got a lot done, but there are still many projects, ideas and ongoing things we can do as a club. I have tried to keep the hobby in perspective

and the activities of the club fun, educational, as well as functional to the members, other amateur radio operators and the public.

Each and every member of the board as well as other diligent contributors have kept the club going. I want to express my personal thanks again to all of you. Without this teamwork little would get done and each year, through the efforts of these persons, we have successful events and meetings.

As I compare our club with other amateur organizations in the area, I can see that we all fill similar roles with different emphasis on aspects of amateur radio. Never lose sight of the diversity of our hobby and its contributors. I do hope that each of you has received personal value from the club's existence and consider what you might contribute in the future to its growth, goals and enjoyment. This might be just attending the meetings or being a member or participating in Field Day, Homebrew night or presenting at a meeting.

For those of you who haven't been able to come out to a meeting lately, please review in *The Microvolt* and on the web site for those events and topics that catch your interest in the coming months and come out and say hi. If there is a topic or event you want to see at a meeting, contact the program chairpersons and make that suggestion or email anyone on the board or call and leave a message on the Ham Hot line.

We will continue to see changes in the world that will affect amateur radio because technology is at the forefront from now on. As radio enthusiasts we stand to benefit and challenge the future of both this hobby and the world's use of technology. Be prepared to contribute and enjoy!

73 de WA7X Glen

December Meeting: Vintage Ham Gear and Elections

Ham radio has changed a lot over the years -- so much that older gear might not even be recognizable by the newcomers. Our hobby has a fascinating history and one group that helps keep it alive is collectors of older equipment. One such collector is Mark Richardson, W7HPW. Mark has a fascinating collection of radio equipment large and small and will be sharing some of it with us at the meeting on Thursday, December 1.

Mark will be showing us some items from his collection including a rare Harvey-Wells transmitter. Some of his items are too big to bring in with anything short of a crane, so he will show those to us by way of photographs. He will also go into the history of radio and how our current band allocations came to be.

There is an art to collecting, and Mark will tell us something about that as well -- how to get started, where to look for interesting items, and what to look for.

December is also election time. At the coming meeting we will be electing officers for the 2006 year. Be sure to come and help the club have a successful future.

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

- 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 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 month it will be at Su Casa Restaurant, 516 E. 300 South, in Salt Lake City.

Member of the Month

By Linda Reeder



This month we are featuring Stephen Eichelberger, KE7CTG. Steve is new to the hobby. Steve obtained his Technician license in 2004 when he was 11 years old. It was Steve's grandfather Roy Eichelberger, W7ROY, who got Steve into the hobby. Steve was fascinated with all of the QSL cards Roy has in his ham shack. Steve spent lots of time at grandpa's talking on the radio. Steve's favorite thing about amateur radio is making contacts from all over the world and of course Steve loves to talk to his grandfather on the ham radio.

Steve is in the sixth grade and attends Jim Bridger elementary school. Steve is so enthusiastic about amateur radio that he has been busy handing out fliers to his fellow classmates and others in the school so they can join him in the fun. Steve said some of the students are taking the class that his grandfather is teaching now. Steve would like to see a lot more youth get in to the hobby. Steve was really excited when he learned about JOTA a program where scouts from all over the United States talk to each other on amateur radio.

Steve is very active with the scouts and Steve and Roy are working on some fun projects involving the scouts in amateur radio.

Steve has a Yaesu 51R and FT33 which is a 220 rig. Steve has been very active on IRLP. He thinks it is really neat to be able to talk all over the world on his handheld radio. Steve is really working hard on upgrading to General. Steve is working hard on the code right now.

Steve's favorite activity that he was involved in this year was Field Day. Steve really enjoyed going Payson Lakes and participating in the Field Day activities. Steve is a member of UARC. He has three brothers and he is the oldest. Steve and his grandfather are the only members in the family active in amateur radio. Steve's favorite sport is football. Steve also plays the guitar. He was invited to play in a band, but decided not to because he wanted to devote more of his time to amateur radio. Steve says when he gets out of school he wants to be a technician and work with new technology.

Steve, we wish you the best in all of your endeavors.

73, N7HVF Linda Reeder.

UARC 2006 Nominations

At the November UARC meeting the nominating committee presented its choices for 2006 officers and nominations were invited from the floor. As it turned out, the only nomination from the floor duplicated one from the nominating committee.

The bylaws require that nominations be opened again before elections at the December meeting. So if you don't see your favorite candidate listed, there is still time to get his permission and be prepared to nominate him at the December meeting.

Nominations for President

Roy Eichelberger, W7ROY

I have been a ham since 1980 when I got my Novice. In 1981 I upgraded to Tech. In 2002 I upgraded to General. I have 5 children and 12 grandchildren. I enjoy camping and fishing and of course ham radio. I am not at present on the low bands but hope to be soon. I am active on VHF, 220 and 440 as well as IRLP and do have a lot of fun talking to the world through this mode.

73, Roy Eichelberger, W7ROY

Gregg Smith, K7APW

I have had a long association with ham radio. When I was young (six years old) my father (Roy K7YPG) had a large map on his wall with colored pins marking the places where he had made contacts by amateur radio. I was also entertained by the way you could make people sound like "Donald Duck" simply by adjusting the VFO. I remained

intimidated by the assumed difficulty of obtaining a radio license. I watched my dad study for hours to learn and master the Morse Code. In 1998, I decided to obtain my license. I joined UARC and found many new friends. The club has provided me many opportunities to serve others. The projects I have enjoyed are: working on the Scott's Hill repeater site, building the club's storage shed, serving on the board as Secretary, and spearheading ARRL recruitment and renewals.

73, Gregg Smith, K7APW

Nominations for Executive V.P.

John D. Hays K7VE

I am a Salt Lake City native. I was first licensed in 1973 as WN7WHV. I progressed through all of the license classes; Novice, Technician, General, Advanced, and Amateur Extra and have been variously licensed to stations WB7VJK, KD7UW, and VK3FHK. I am currently an ARRL Volunteer Examiner and have previously taught licensing courses as well as mentoring various hams over the years. I have served as an officer of various amateur radio societies, including a board membership with UARC in the 1970s and as a multi-term officer of the national Amateur Television society ATNA.



I am a technology tinkerer, having been an early packet radio experimenter, and operate many digital and visual modes as well as traditional voice and CW. My current technical passion is Voice Over IP. I am a professional

computer scientist working in the area of web portals and e-business.

I think the next year for Amateur Radio will be exciting. Ham radio has shown its utility in disasters time and time again, receiving significant notice the last few years; it is time to push for better spectrum protection and relief from unduly restrictive C.C. & R.s. We need to improve our public image and with the almost certain passage of HF privileges without a Morse code requirement, we absolutely need to step up our education and mentoring efforts in a friendly and inclusive way.

I appreciate the nomination to the position of Executive Vice President and, if elected, will serve faithfully to further the interests of the members.

73, John D. Hayes, K7VE

John Brewer, N7MFQ

I was originally licensed as a Technician before no-code, in January 1989. I have never changed my call sign.

A year or so after I got my license, my wife, Susan, N7OVG, received her license. I upgraded to Advanced within a year, then to Extra in 2001. Three of my four children also are licensed. Amanda, KD7DEK, was first, then Stephanie, KD7ZKS, and Matthew, KE7AIV, who was most excited about passing the test. Sharen is still studying for hers.

I work for Beehive Telephone Company (www.beehive.net) and WirelessBeehive.com (www.wirelessbeehive.com), as the computer guy. I take care of the computers and the network, as well as anything else they throw my way.

As a family we enjoy camping, hamming, Dutch Oven cooking (and eating), and we are involved in our son's Cub Scout Pack. Me as Assistant Cubmaster, Susan as a Den Leader, and both of us are on the Pack Committee. I am also the Scoutmaster for Troop 231 in Kearns. I am a private pilot, and fly a 1967 Mooney M20C.

I served for a year as President of the Tooele County Amateur Radio Service (TCARS). I was instrumental in reviving that club about 15 years ago. They have since changed the name of the club and they have a strong club now with regular meetings.

I have been a member of UARC for a number of years, and enjoy the Steak Fry and Field Day events.

73, John, N7MFQ

Nomination for Vice President

GordonSmith, K7HFV

Hi. I'm Gordon, K7HFV. I've been doing the Vice-President job for the last several years and am running to do it again. Currently, the position includes being the liaison for the UARC-sponsored exam sessions and keeping the club web site up to date. I guess I'm also in the line of succession in case the President and the Executive Vice-President both die, are assassinated, or find a better hobby.

I've enjoyed amateur radio for a long time. I hate to admit just how long as that might give away just how old I'm getting. Some folks tell me that I must have had it pretty easy, getting a license when a transmitter only had a handful of components and a spark gap. Well, it hasn't been quite *that* long.

Amateur radio has been very good to me. I got my first license at age 14 and it encouraged me to go into electronics as a career. What I had learned from getting my license and building some homebrew projects helped me a great deal. Then, somehow, my job veered into computers and I stopped playing with high-power transmitters.

As an amateur, at various times I've played with HF CW and Phone, RTTY, and two-meter AM and FM. I copied Doppler data from the first amateur satellites, OSCAR 1 and 2, back in the 60's. I've built a couple of repeater controllers and had fun figuring out how to give them unique features.

One of the nice things about amateur radio is that there are so many different aspects to explore. In fact, there are so many of them that each of us can only scratch the surface. That's where a club can be a big help. It gives us a chance to hear from experts who have become proficient at everything from satellites to CW traffic handling. That way we can just sit back and get some of the thrill of different modes vicariously. We might even get hooked on some new ones that we might not have tried without the exposure through the club.

I hope that we can all work together to make the club benefit all of us. We should continue the old events that seem to be helpful and look for new ones as well. It takes everyone's help and input.

73, Gordon Smith, K7HFV

Nomination for *Microvolt* Editor

Telvin Mills, KB6BYU

My interest in ham radio began when I was in high school building transistor radios. I was originally licensed as a Novice in 1983. My callsign is not a vanity call. It is my original Novice callsign. Six months later I upgraded to

Technician class license. In 2002 I upgraded to Extra class license.

I have enjoyed amateur radio for a long time. I especially like getting on the low bands and participating in contest. I particularly enjoy participating with the club at Field Day and Steak Fry and especially the Homebrew meeting held each October.

Two years ago I served as Co-Program Chairperson and this past year I have served as the *Microvolt* editor. I am pleased to be nominated to as the *Microvolt* editor for another year. If there is something you would like to see in your newsletter, please let me know.

My other interest are flying radio controlled gliders.

73, Telvin Mills, KB6BYU

Nomination for Assistant *Microvolt* Editor

Bryan Mogensen, W7CBM

I have been interested in radio since back in high school and used the school's Drake radio and call. I finally got my Tech license in 2000 after taking one of Ron Speirs' classes. I got my General upgrade about a year after that. I have become very interested in weak signal microwave and am doing several homebrew projects to that end. I would like to continue doing the *Microvolt* because I have worked hard to save money for the club and have streamlined the mailing process.

Thanks, Bryan Mogensen, W7CBM

Nomination for Treasurer

Chuck Johnson, WA7JOS

I am pleased to be nominated to continue as UARC treasurer. The club is in good shape financially, but we could do better. I have held this post all but one of the last 10 years, and I have watched our membership continually decline. Please help to encourage new hams and old friends to support UARC.

73, Chuck Johnson, WA7JOS

Nomination for Secretary

Dick Keddington, KD7TDZ

I attended East High School in Salt Lake City, and following missionary service in England, I attended the University of Utah, graduating with a business degree and a USAF

commission in 1966. My active duty years were spent in the Washington, D.C. area and in England. After 28 years of active and reserve service in medical administration I retired as a Lieutenant Colonel. In the civilian world, I have pursued direct and retail sales, and currently work in a convenience store.

Volunteer service is also important to me, and for the last several years I've been a member of the Board of Directors of AVERT, the Association of Volunteer Emergency Response Teams, which encourages and supports the CERT program world-wide. For the past two years I have served as the Chairman of that board. I am also serving as Emergency Preparedness Director in my stake.

It was my involvement in emergency preparedness and the CERT programs which really sparked my interest in amateur radio. I earned my Ham ticket in 2002, and upgraded to General this year; but the more I learn about the hobby, the more I realize I still don't know!

Ham radio is a great hobby -- it's been fun and educational, and I've never met a finer bunch of people. I'm indebted to many in the club for their guidance and help as I've progressed and enjoyed the hobby. I've particularly enjoyed the annual Field Day activities.

It's been a privilege serving you as UARC secretary, and I'd be honored to continue in that capacity.

73, Dick, KD7TDZ

Nominations for Program Chairperson (Two to be elected)

Marty Olsen, KE7AEW

I, Marty Olsen, KE7AEW grew up near Cottonwood High School off of Spring Lane 50th South & 1690 East. I grew up in the same neighborhood as John Lloyd, K7JL, just 12 years behind John,

I was born on June 29, 1962, and graduated from Cottonwood High School in 1980. I have worked at U.S. Satellite Corporation since August 21, 1981. I became interested in Ham Radio at this time, but did nothing about that interest, until about a 1-1/2 years ago, I studied for the Technician examination, and took the test, and passed, so here I am today with a Technician class license. I served as one of the Co-Program Chairperson for year 2005, I have learned a lot about our wonderful club, and would be willing to be the Co Program Chairperson if elected to this office, for year 2006.

73, Marty Olsen, KE7AEW

Brett Sutherland, N7KG

I am first generation ham. My interest in radio began as a young teen taking apart transistor radios. However, it wasn't until I was well into my 20's that I met a ham who could help direct those interests. While pursuing radio off and on for many years with a number of detractors, I earned my first license in the mid 90's. I enjoy all aspects of amateur radio, but if pinned down would have to claim homebrewing as my favorite. With that in mind, I particularly enjoy UARC meetings where the topic is technical in nature. If elected, I would hope to continue a long tradition of excellent meetings for all to attend.

73, Brett Sutherland, N7KG

Linda Reeder, N7HVF

I have been in amateur radio since 1985 and love it very much. I have my extra class license which I received in 1990. I became interested in the hobby when I was working part time at KSL. It was Randy Finch, K7SL, who got me in to the hobby. Randy also got Randy Lawrence, KG7GI, and Otto Casal, KA7VTG, interested in the hobby. We used to study together. They really helped me a lot. I can remember when I passed my Technician test Randy whispered to Gordon and said should we tell her about the money. Then they explained to me about joining UARC, so I have been a member of UARC from the beginning. I am also a member of Handi-Hams, ARRL, VHF Society and the YLRL. I have been a chairperson before and I really enjoy it. I am open for ideas. Remember it is your club so if you have ideas on who you would like to come and speak to our club just give me a call.

73, Linda Reeder, N7HVF

David Jeffs, KK7WI

At nine years old while a cub scout, I made a CW keyer from a tin can, old wire, a nail, and some scrap wood. I received the shock of my life when I attempted to hook it up to the house current. I also started the house on fire! That little experience perked my interest in electricity and electronics. I have enjoyed fixing many things and building various projects whenever I get a chance. While interested in electronics most of my life, I didn't become a licensed ham until May of 1999. The ham community has opened up many avenues to meet a wide variety of new and interesting people. Many new ham friends have provided a great enjoyable time for me personally. As with everyone else, I try to find a balance between ham radio and all of the other interests and responsibilities that I have. I am also an avid camper and really enjoy attending re-enactments of the fur trapping era. I love to shoot black powder rifles and enjoy all of the activities that go along with that hobby.

I have been involved with computers since the late sixties, and I am currently a computer specialist for the State of Utah

where I have worked for the past twenty three years. I have worked with many different operating systems and computer languages during that time. I am currently working with the Linux operating system and find it very different from the large mainframe environment that I came from.

73, David Jeffs, KK7WI



Tony, KE7BBG, and his project.



Tony's hot air gun and soldering iron.

Exam Schedule

12/03/05¹ (Sat.) Salt Lake City
Contact: Gordon Smith, K7HFV
Phone: (801) 582-2438

12/10/05 (Sat.) Logan
Contact: Heidi Bleazard, AC7ZC
Phone: (435) 753-7487

12/21/05 (Wed.) Provo
Contact: Steve Whitehead, NV7V
Phone: (801) 465-3983

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

1/18/05 (Wed.) St. George
Contact: Ronald C. Sappington, WI7Z
Phone: (435) 673-4552

1/18/05 (Wed.) Provo
Contact: Steve Whitehead, NV7V
Phone: (801) 465-3983

1/26/05 (Thu.) Roosevelt
Contact: R. Chandler Fisher, W7BYU
Phone: (435) 722-5440

1/31/05¹ (Tues.) Salt Lake City
Contact: Eugene McWherter, N7OVT
Phone: (801) 541-1871

2/01/06 (Wed.) Ogden
Contact: Mary Hazard, W7UE
Phone: (801) 430-0306

12/03/05¹ (Sat.) Salt Lake City
Contact: Gordon Smith, K7HFV
Phone: (801) 582-2438

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 webpage:

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