

The *Microvolt*

November, 2010



Prologue

Publication: *The Microvolt* (USPS 075-430) is the official publication of the Utah Amateur Radio Club, Incorporated, 3666 S. State Street, Salt Lake City, UT 84115-4848. 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.

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Historian: Ron Speirs, K7RLS	801 904-3587
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Club Trustee: Brett Sutherland, N7KG	801 298-5399
Engineer: Randy Finch, K7SL	801 556-7565
ATV Engineer: Clint Turner, KA7OEI	801 566-4497
Autopatch Engineer: Gordon Smith, K7HFV	801 582-2438

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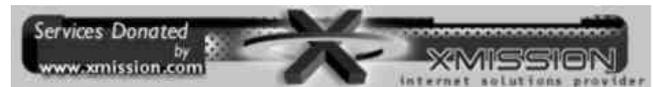
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IRLP Information

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

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The Microvolt

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November Meeting: You Too Can Homebrew

Last month we had the annual homebrew night and witnessed the things local ham radio operators had built by themselves. Six people showed off their creations. Have you ever said “I wish I could do something like that”? Well, you can! Practically anyone can take a simple design from *QST* magazine or another printed source and turn it into a working unit.

At our November meeting, to be held Thursday, November 11, UARC Treasurer Chuck Johnson, WA7JOS, will demonstrate how to build a code practice oscillator with only one or two active components (i.e. ICs or transistors). The great thing about it is that the steps to build the simple oscillator are just about the same as those to build any audio, logic, or power supply project, and none of them are too difficult. We may also have some tips available from other local veterans of homebrew.

Electronic homebrew doesn't need a lot of dedicated space or expensive tools, either. Most of it can be done on a card table with a few basic hand tools. It's really easy and cheap compared to woodworking, welding, or auto repair. Come and see a project appear before your eyes!

November is also the month for nominations. There will be an opportunity to nominate candidates for the 2011 officers. If you know of people who could make a good contribution (or if *you* would like to join the board) come prepared to offer nominations.

Meetings are held on the *second* Thursday of each month, so the coming meeting will be Thursday, November 11, at 7:30 P.M. in room 1230 (the “Duke” classroom) of the Warnock Engineering Building at the University of Utah. Some of our traditional parking on the east side of the building is blocked off for construction, so if you find it full, another recommended parking area is near the southeast corner of the Merrill Engineering Building lot. Go south along the east side of Merrill, then go in the north door of Warnock. See 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 November get-together will be at “The Sizzler,” 371 E. 400 South in Salt Lake City.

Latest News

Our Cover

Our cover photo this month is from our October homebrew meeting. Our Treasurer, Dick Keddington, KD7TDZ, is showing off his G5RV antenna. Thanks to Club Historian Ron Speirs, K7RLS, for the photo. We expect to have more of the Homebrew Night photos posted on the club web site soon.

K7ZTM, SK

We recently learned of the passing of Landon (“Pete”) Smith, K7ZTM. Pete died on Thursday, October 28, 2010. Pete lived in Layton and was active on the Davis County repeater, but many knew him and the many interesting experiments he did involving VLF signals, magnetic fields, ground currents, aircraft communications, and a host of other interesting topics. Pete was 82 years old.

Elections Coming

It’s the time of year when we need to be thinking about officers to guide UARC during 2011. If you would like to get more involved in the club and generally helping the cause of amateur radio, this is a good time to volunteer.

At the November meeting, nominations will be accepted from the floor. After that the Board of Directors will present its slate of nominees. Then nominations will be open to the floor once again.

The slate of nominees, as it stands after the November meeting, will be published in the

December issue of *The Microvolt*. There will be a final chance for nominations at the December meeting prior to elections. This procedure, specified in our bylaws, is designed to give everyone plenty of time to think about who would make good officers and find out if those individuals are willing to run.

Being on the Board of Directors is not only an opportunity to contribute to the club and to amateur radio, but is also a great opportunity to work with and get acquainted with other hams. If you think you might like to be an officer, don’t feel reticent to volunteer.

ARES/RACES Conference

Emergency communicators will want to attend the annual ARES/RACES conference sponsored by the Amateur Radio Emergency Service (ARES) and the Radio Amateur Civil Emergency Service (RACES) organizations. It will be held Saturday, November 13, from 8 A.M. to 4 P.M. at the Red Lion Hotel, 161 W. 600 South, in Salt Lake City. It will include valuable training and information for would-be emergency communicators.

Those wishing to attend must pre-register using the state’s “U-Train” system on the web. Go to <https://www.utah.train.org>. If you already have an account, log in. If not, follow the “Create Account” link. Next, find the ARES/RACES conference by searching on “ARES” or “RACES” or by entering the course number, 1011069, in the appropriate slot on the right-hand side of the page. When the proper course is on the screen, follow its link and choose the “Registration” tab to register.

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Member of the Month: Jeff Jones, K7JEF

By Linda Reeder, N7HVF

This month we are featuring Jeff Jones, K7JEF. Jeff was another great helper to UARC for Field Day. He was willing to camp alone, before others arrived, to guard UARC's large array of equipment, and to stay after most had left. He also helped put things up, take them down, and help reorganize the club's gear for storage.

Jeff has been in amateur radio since 1984. He has an interesting story on why and how he became interested in amateur radio. Here it is in his own words....

“While preparing QSL cards I have often read other amateurs' bios and been the most interested in discovering how they, too, have entered the hobby. We all come to the hobby from different backgrounds. I think my story is a bit unusual so I figure I'll bore you with the details.

“Over the years, I have occasionally listened to local programming on my folks' old Grundig radio. I have picked up a shortwave broadcast now and then and sometimes even heard short bursts and pulses coming over the speaker. I always suspected that nearby stations were sending code but I couldn't decipher what they were saying. It annoyed me that I didn't know. It also intrigued me, prompted me to learn more, and often times brought back memories....

“When I was very young we used to live in Europe and in order to get information, a radio like that was practically a necessity. We listened to the BBC, Voice of America, and other interesting broadcasts. I was always fascinated by the wooshing sound that the radio made as the band would ebb and flow. I liked the idea that we could get news (real news) in real-time. Back then, you knew that you were getting real news because politically sensitive information was coming from places that weren't always highlighted on the nightly news. This later became apparent when we returned to the states and I sometimes found myself wondering if we were really getting the whole story. The news seemed to be filtered

somehow. Before the days of internet and cell phones, radio appeared to be something that you could really count on.

“In 1984 at the age of 21, I got bitten by the bug – again. One night, while listening to that old radio and picking up Morse Code transmissions, I decided that I wanted to figure out what was being said in that indecipherable language. I could only hear one side of the conversation. But I knew that people were actually communicating via radio. To me, this was much more interesting than listening to the hash of CB radio. Eventually my persistence and curiosity paid off. One afternoon I was rewarded with real conversation on the ‘lower side of 37.’ In fact, someone even offered a six-week class that would teach the code and the requirements for getting licensed as a Novice. I was so interested to learn code that I went to the library that day to prepare for the first class that evening. I immediately went to the task of learning the code. In fact, I think that I had the entire dots and dashes thing entirely memorized for that night – *big* mistake. For those of you interested in learning Morse Code, don't do so except by sound. You will introduce an extra, unnecessary step when decoding a message and this will slow you down.

“At that time, learning the code was required for the Novice license. I suspect that this may have prevented many of the least interested from entering the hobby. So be it. As a volunteer examiner I have never wanted to prevent anyone from learning and becoming a ham, but there is something to be gained from setting a goal and striving for it. I recall fondly studying for and passing eight tests – five theory and three code exams. There were some times that I knew that passing the test would be marginal and others when I knew that I knew the material. Since there was no penalty for failing a test, it was just understood that nothing ventured was nothing gained. I wanted to learn something about radio; I did not want to learn the answers in a question pool just so I could recognize them later. In fact, as I was getting newly licensed, the volunteer examination sessions were just being established with the question pools being published, I imagine, for the first time. I took classes and

learned radio principles and discovered what works in practical real life situations from other hams.

“As a newly licensed ham I received my license in the mail 90 days after the test. I realized I had prepared myself with a call sign – but still no radio. In fact I didn't even own a radio for another nine years. During those years money was tight and rigs held their relative value well. In 1993, since I needed to renew my ticket, I decided to upgrade and purchase a rig at the same time. For me, as for others, I'm sure most of us tried to get the most we could for our money. And that meant something portable and versatile – a handheld. As a newcomer I made the usual mistakes like trying to transmit in the basement with the stock antenna, and doing so off frequency due to the default settings on the newly purchased Yeasu FT-530. But I did know enough to just listen first before ever transmitting. I listened for two weeks before even thinking about it; I learned the decorum of the hobby. On my first QSO I had a longtime ham come back to me with the information that I needed.

“ ‘It sounds like you're on a handheld and you're a bit off frequency. Look at the display and make sure that you are transmitting on the correct frequency. You might also think about picking up an aftermarket antenna with a bit of gain on it.’

“This demonstrated that communication actually happened. It showed that until two-way communication can happen you sometimes have to establish one-way link – with a bit of a helping hand. And it occurred because another amateur recognized our common interest in actually communicating.

“Now for the unusual part of my story. If you look back and re-read, you'll discover that my interest really started with an interest in learning code. I'm certain that not many would understand this. At most examination sessions people are still discovering that ‘code is not required.’ With this, they show amazement and disbelief almost as if ‘Gee, I wish I'd known that!’ For me, though, code was always the intriguing part. If you look further you'll discover that I did not own a transmitter until nine years later – how very odd. And finally, what I didn't say, was that in 1995 I got a bonus check from work. With it, I was able to pick up a Kenwood TS 830. As it turned out, it was the last one purchased – and the one that was CW capable. Go figure!

“Now you might wonder why it was that I waited so long to involve myself in the hobby. For me it was a valid interest in learning that which first intrigued me. But as time marched on I started to realize that I might really be missing something. And that is why I picked up my handheld. I thought it might be very interesting to hear the local traffic and have some gear that might help me out in a jam. That was a time before cell phones. Later on, I rediscovered the reliability of communicating via code.

“Currently, as I watch examinees filling in their answer sheets, I sometimes wonder what brings them into the hobby too. Before cell phones, reasons included the ability to use the 2-meter/440-cm autopatch phone systems when necessary for couples trying to stay in contact, and general information and local goings-on. More recently, though, it appears that enthusiasm among the new hams seems to be waning. It's a bit sad that people are not as excited about the hobby as they used to be. It's a rare occurrence when folks brim with joy from something earned. More often it's demonstrated with a sigh and a look of relief. In fact, locally here in Utah, many now do it out of a sense of duty and obligation such as a ‘church calling’ for emergency preparedness. This is a good reason, but it seems that, for them, the joy of the hobby is missing.

“With all of this said, please don't interpret this as a soapbox diatribe. Let me also confess a weakness. As an Extra Class operator I learned, worked with, and understood in the vaguest of terms all of the electronics theory necessary to achieve different licensing classes. But I also have not one lick of actual experience in building or designing circuits and actually making stuff work. In fact, recently I have taken a liking for some of the very earliest pioneers in radio work. And the reason is simply this: In the early days, one didn't have it if one didn't build it. Even deeper than that was the ability to understand indirectly and through observation what was occurring. In other words, the first people had no oscilloscopes or test meters but they understood and learned the properties of radio. They worked with components, in fact they would have had to build the components from scratch and make stuff work. I think this year's winter project is going to be a low power tube transmitter!

“I know that there are many facets to the hobby and not all will agree with my comments. But I think that we have more in common than not. Although I may already

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be preaching to the choir, I hope this encourages others. After all, the best thing we can do for the hobby is to pass it on and keep learning from and teaching others. I remember someone named Gordon once did that for me.”

Jeff and his wife Vickie have been married for 12 years. Vickie earned her Technician license (KD7MYP) when she graduated from the largest women's amateur radio class taught by women in the state of Utah. This class was started by Cindy Neal (KC7UW) in March, 2001, and there were 40 women enrolled in the class. Jeff wanted his wife to get her ham license so they could communicate with one another while he was going to school. He worked for LDS Hospital for eight years in the O.R. in the 90's; in Arizona at SunHealth for five years after graduating from ITT, just three days after the 911 tragedy; and now works for Verizon in their fiber optic support. Jeff is a member of UARC and has been a member of the VHF Society.

Jeff, we appreciate all of the help you have given UARC for Field Day.

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Check the Rocky Mountain Division Net
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Jeff Jones, K7JEF
(Photo tnx to K7RLS)