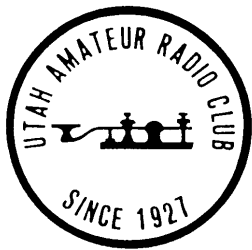




At UARC's September meeting, we had a panel of experts answer questions from club members on various topics from setting up a station at home to mobile installations. Pictured left to right, Ron, K7RJ, Clint, KA7OEI, and Dick, K7MZ.

****Next UARC meeting will be in the same building, new room EMCB #103.**
This will be our Homebrew meeting. Come and see the new projects that have been built.**



Volume 49, Issue 9, October 2006

Periodicals Postage

The
Microvolt

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

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The Microvolt (USPS 075-430) is published monthly except August for \$17.00 per year or \$1.50 per issue by the Utah Amateur Radio Club, 3666 South State Street, Salt Lake City, UT 84115-4848. Periodicals Postage Paid at Salt Lake City, Utah. POSTMASTER: Send address changes to *The Microvolt*, Dick Keddington, 1933 Woodside Drive, Holladay, UT 84124-1632.

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 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, 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

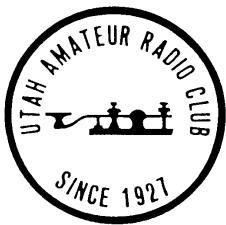
For information on using the club's IRLP node on the 146.76 repeater, check <http://www.utaharc.org/irlp>.

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

October 2006

QST From the Prez

The State Fair has come and gone. Where does the time go? I had a great time sharing ham radio with the masses. I want to thank all who attended, especially Tim Purser for taking charge while I was working out of town. This to me seemed like a worthwhile event. Hopefully, we can do it again. We received eight referrals the first weekend and several more were referred to their local clubs.



Ron's class should be going great guns by the time this message gets out. Hopefully, all who attend will complete the course and get their license. A proposal that a fee be charged to take the course and upon completion that fee will be refunded seems like a good idea. Anyone not completing the course will forfeit the fee.

Don't forget JOTA is coming up (Oct. 20&21). I hope that we can put on a great program for the scouts. The location is forth coming.

There are two items on the agenda for this month's meeting. The first, an all time favorite, is the Homebrew night. No we are **not** going to make beer and drink it. So leave your pretzels at home! This is a night to show off the creative inventions you use in your shack. Whatever it may be or whatever it might do. Second on the agenda, start thinking about upcoming nominations for next year's board. Please consider offering your assistance as a board member, committee member or chairperson. The three years I have served on the board have been a great opportunity for me. I have enjoyed it a lot (except for writing the president's message each month).



Let us (the current board) know if **you** or someone you know would like to be nominated to serve on the board.

73 de W7ROY

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Special points of interest:

- ◆ Next UARC Meeting October 5th—New meeting room # 103
- ◆ Jamboree On The Air October 20th, 21st.
- ◆ IRLP on 146.76 Operational



Member of the Month

This month we are featuring Tom Harrington, AF7J. Tom received his Technician license in June 2005. His first call sign was KE7EEH. In October 2005, Tom passed the 5 words per minute code test and in November 2005, he obtained his General class license. In April 2006 Tom passed the Extra.

Tom has always been interested in radio. When he was a youngster he was very active in CB radio. He was also a short wave listener. Tom's father had a Zenith short wave radio that Tom would listen to when he was a child. Tom grew up in Anchorage, Alaska. He had a friend who was a ham radio operator who really tried to get Tom in to amateur radio, but the code requirements kept him away.

In 2001, Tom and his wife Beth, KE7ELF, moved to Ogden. Tom wanted a way to communicate with his wife when he was on the road and CB radio just didn't cut the mustard. On the CB radio you could only talk about 10 miles away. By the time you got to Hooper it just didn't work at all. Tom decided to take the advice of his friend from long ago and give amateur radio a try. Tom found the Davis County Amateur Radio Club on the internet and Tom and his wife Beth attended their meeting. That is where they met Bryant Luker, WB7QBC, and Bryant became their elmer.

Tom's wife Beth, KE7ELF,

received her Technician license at the same time Tom received his Technician in June, 2005. When they received their Technician licenses they bought two Realistic HTX 202

handheld radios from Ebay so that they could talk to each other. It was sure a lot better than the CB radio and they made lots of friends talking on the radio. Tom continued on until he obtained his Extra. After Tom obtained his General license, Bryant told him if he could pass the Extra class exam he would give him a Yaesu 757 which is a low band rig. Tom made a goal to accomplish this within three months and he did.

Tom was so excited when he got the radio, especially when he contacted Alaska on 80 Meters. He had a contact with Wasilla, Alaska and Solosolodotna, Alaska. Tom also has a linear amplifier that runs on tubes.

Tom loves to build antennas. Right now Tom and his wife Beth are building a screwdriver antenna so that they can talk on the HF bands while they are mobile. Tom has also converted a CB mag-mount antenna in to an amateur radio antenna. He is saving up to buy a DX Icom 7000. This

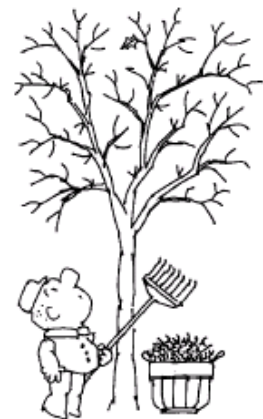


radio has a voice recorder in it and you can record the entire QSO.

Tom is a member of the Davis County Amateur Radio Club, UARC and the Ogden Amateur Radio Club. Tom also likes to help out with the parades when ever he can. Tom works at Lagoon. He runs the rides.

Tom, we wish you and your wife Beth all the best in your endeavors.

73, Linda Reeder, N7HVF



Homebrew Project—Shelves



K4OJ Shelves

I found this in one of my Homebrew files that was posted on the CQ-contest reflector. Ellen White, W1YL, offered a photo of the adjustable shelf that Jim, K4OJ, had built using threaded rods as legs with washers and nuts to support the shelves. Jim, K4OJ, used threaded rods available at places like Home Depot, Lowes, and hardware stores everywhere. If you don't like looking at the rod, inexpensive PVC pipe can be cut to cover it as Jim did, and it could even be painted. Looking closely at the photo Ellen

sent, I'm reminded of K4OJ's great sense of humor. On the wall is a sign that says "WARNING Do not look at ARC". 73, KB6BYU

Murphy's Law

Nothing is ever as simple as it seems.

If you fool around with a thing long enough, it will eventually break.

It is a fundamental law of nature that nothing ever quite works out.

It is easier to get into a thing than to get out of it.

It is impossible to make anything fool-proof because fools are so ingenious.

Build a system that even a fool can use, and only a fool will

use it..

If you fool around with a thing for a very long you will screw it up.

Rule of Accuracy: When working toward the solution of a problem, it always helps if you know the answers.

Corollary: Provided, of course, that you know there is a problem.

Every solution breeds new problems.

Happy Halloween



If you explain something so clearly that no one can misunderstand, someone will.

Field Day 2006 Results

W7SP was once again on the air for the annual Field Day contest, held this year June 24 and 25. In charge was Bryan Mogensen, W7CBM, who had generously volunteered as this year's Field Day Chairman. UARC operated from its traditional site near Payson Lakes. A few folks camped almost the entire week leading up to Field Day, and by Friday morning there was a good-sized crowd in place.

Setup started at noon on Friday. This year four stations were put in operation: 20-meter phone, 20-meter CW, 40-meter phone, and PSK-31.

More folks gathered Friday evening, but tuning the installation went on almost until the starting bell at noon on Saturday.

This was the first year for a magic networking box built by our Treasurer, Chuck Johnson, WA7JOS. Large numbers of stations dictate long cable runs for the computer networking. This, in past years, had created some problems with the computers having enough current capacity to drive long lines. Another problem involved a cable becoming inadvertently disconnected or a logging computer being turned off, thus breaking the loop. Chuck's box solved these problems, providing regeneration at the mid-point of all the lines, and sensing a disconnected computer and automatically bypassing it. One computer didn't get into the network until about an hour and a half into the contest, but once all the cables and connectors were working well, the system performed perfectly for the remaining 22-1/2 hours.



Turnout seemed a bit lighter than usual -- there were actually grassy spots that no one was camped in. Some of the downturn probably owed to another club luring away many of what have traditionally been our best operators.

This year 13 operators participated at the "Get On The Air" (GOTA) station, including six that were under 18 years old. Perhaps this will be the start of a new generation of contest ops.

At the June UARC meeting, a show of hands indicated there were more people interested in PSK-31 operation than any other mode. Where did all those people go? The station was set up and made just 28 contacts for the whole 24-hour period. At least digital contacts count for two points each.

Some interference problems were solved by some antenna rearrangement. Some others remained. We thought we could get away with an IC-706 if it was just on six meters, but this seemed to be a bad assumption. These radios just don't seem to play nicely with others.

Unlike 2005, the weather was good, including the Saturday dinner. The dinner manifested the perennial miracle where a group that appeared tiny when signup sheets for operators went around, suddenly blossomed into half the population of Payson.

The propane generator that is part of the club's trailer/tower package supplied all the power this year. It ran without a hitch from start to finish.

So how'd we do? Generally, a little worse than last year. We made 1,397 QSOs compared to last year's 1,706. (We gotta find some more CW operators!) Total estimated score is 5,076 points compared to last year's 5,538. That may even be a little worse within our class than the raw numbers indicate, because last year we entered in the 3A class (three simultaneous transmitters) and this year in 4A. The breakdown is below.

UARC 2006 Field Day Score Summary

| Band/Mode | '06 QSOs | '05 Qsos | Mode Mult. | '06 QSO Pts | '05 QSO Pts | '06 Totals | '05 Totals |
|-----------------------|-------------|-------------|---------------|-------------------|-------------------|------------|------------|
| 40 CW | — | 32 | x2 | — | 64 | | |
| 40 SSB | 260 | 344 | x1 | 260 | 344 | | |
| 20 CW | 480 | 556 | x2 | 976 | 1,112 | | |
| 20 SSB | 428 | 595 | x1 | 428 | 595 | | |
| 20 Digital | 28 | — | x2 | 56 | — | | |
| 6 SSB | 29 | 16 | x1 | 29 | 16 | | |
| GOTA | 164 | 163 | x1 | 164 | 163 | | |
| Total | 1,175 | 1,706 | | 1,913 | 2,294 | | |
| Power Multiplier | | | | x2 | x2 | | |
| Total QSO Points | | | | 3,826 | 4,588 | 3,826 | 4,588 |
| Bonus points: | | | | | | | |
| | | '06 | '05 | | | | |
| 100% Emergency Power | | 400 | 300 | | | | |
| Media Publicity | | 100 | 100 | | | | |
| Information booth | | 100 | 100 | | | | |
| Message to SM | | 100 | 0 | | | | |
| Alternative Power | | 100 | 0 | | | | |
| W1AW Bulletin | | 100 | 100 | | | | |
| Public official visit | | 100 | 100 | | | | |
| Served agency visit | | 0 | 0 | | | | |
| GOTA | | 100 | 100 | | | | |
| Web submission | | 100 | 50 | | | | |
| Youth participation | | 50 | 100 | | | | |
| Total Bonus Points | | 500 | 100 | | | | |
| | | 1,250 | 950 | | | | |
| Grand Total | | | | | | 5,976 | 5,538 |

October Meeting: Homebrew

Thursday, October 5th, 7:30 PM, Room #103

Thursday, October 5, will be UARC's annual Homebrew Night, the meeting many say is their favorite of the year. Everyone who has built something that can be used in amateur radio is invited to show it off at this meeting (provided it has not been shown at a previous UARC homebrew night). Transmitters, keyers, power supplies, amplifiers, transverters, and antennas are all good homebrew projects. If your 5-element 160-meter beam won't quite fit through the door, you can always bring pictures and diagrams to show what you have done.

Some of the reasons the FCC is willing to give us frequencies include advancing the state of the art and advancing our own technical skills. There is no better demonstration of how well we are achieving these goals than the array of projects people are building. If you've been building this year (or will have been by October 5), come out and show off your work. If not, come see what others have been up to.

That will be on Thursday, October 5th, 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 "Crown Burger," 377 East 200 South in Salt Lake City.

Exam Schedule

10/4/06 (Wed.) Ogden
Contact: Mary Hazard, W7UE
Phone: (801) 430-0306

10/07/06¹ (Sat.) Salt Lake City
Contact: Gordon Smith, K7HFV
Phone: (801) 582-2438

10/18/06 (Wed.) Provo
Contact: Steve Whitehead, NV7V
Phone: (801) 465-3983

10/18/06 (Wed.) St. George
Contact: Ron C. Sappington, WI7Z
Phone: (435) 673-4552

10/31/06¹ (Tues.) Salt Lake City
Contact: Eugene McWherter, N7OVT
Phone: (801) 541-1871

11/01/06 (Wed.) Farmington
Contact: Mike Youngs, KK7VZ
Phone: (801) 573-3922

11/15/06 (Wed.) Provo
Contact: Steve Whitehead, NV7V
Phone: (801) 465-3983

11/15/06 (Wed.) St. George
Contact: Ron C. Sappington, WI7Z
Phone: (435) 673-4552

11/16/06 (Thu.) Roosevelt
Contact: R Chandler Fisher, W7BYU
Phone: (435) 722-5440

11/28/06 (Tues.) Salt Lake City
Contact: Eugene McWherter, N7OVT
Phone: (801) 541-1871

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

(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>