The Microvolt

September, 2008





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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's Warnock Engineering Building in room 1230, The "Duke Classroom."

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: Tony Naef, 4585 Sunstone Rd. #327, Taylorsville, UT 84123. 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.

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Program Chair: Howard Armstrong, KE7KNN	967-4394	
Imm. Past Pres: Roy Eichelberger, W7ROY	571-2447	

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Historian: Ron Speirs, K7RLS	968-4614
Field Day Chair:	
Club Trustee: Brett Sutherland, N7KG	298-5399
Engineer: Randy Finch, K7SL	556-7565
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

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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:

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 51, Issue 8, September 2008

November Meeting: Telegraphy the Old Way

Recently Dick Leining, W7DML, and Bruce Longstroth, N7FJG, gave a demonstration of wire telegraphy, ala 1860's. One might think that those who can do radio telegraphy wouldn't have to learn a lot more to do wire telegraphy, but there's more to it than meets the eye. At our November 6 meeting they will be telling us all about their exploits and giving a demonstration. We expect to have one more *Microvolt* issue out before that meeting, and expect that it will have more details, but be sure to keep the date open.

Latest News

Our Cover

Our cover photo this month is from the September "Get on the Air" meeting. Jed, AD7KG, operating a portable station just outside the Warnock Engineering Building, shows the interested onlookers how to make a contact. The photo is by Ron, K7RLS.

Logan Swapmeet

The Bridgerland Amateur Radio Club has announced a swapmeet on Saturday, October 18, starting at 8:00 A.M. It will be held at the Cache County Fairgrounds Pavilion in Logan.

Space on a table can be purchased for \$10.00 at the door or \$7.50 if purchased in advance. See http://www.barconline.org/?q=node/299 for details.

ARES/RACES Conference

The annual ARES/RACES conference will be held on Saturday, November 8, at the Red Lion Hotel,

161 W. 600 South, in Salt Lake City. It will run from 8 A.M. to 4 P.M. The conference should be helpful to all those participating in the emergency organizations Radio Amateur Civil Emergency Service (RACES) and the Amateur Radio Emergency Service (ARES).

To attend, it is necessary to pre-register. This can be done on-line by going to:

https://www.utah.train.org/DesktopShell.aspx.

You must then either login (if you already have an account) or follow the "Create Account" link. Then find the conference in question by searching for "ARES" or "RACES" or using the conference number: 1011069.

Nominations Needed

It's time to begin thinking about nominations for officers for 2009. The club will be forming a nominating committee to find candidates for all the offices. If you would like to help with the process or volunteer for an office, let one of the officers know. Now is the time to be plotting our course for the new year. If you would like to see new or different activities, this is your opportunity

to influence next year's plans. This year there is a particular need for people willing to run for President and for *Microvolt* Editor.

In accordance with the bylaws, the nominating committee will present its choices at the November meeting. Additional nominations will be accepted from the floor. Then, at the December meeting, nominations will be accepted once again followed by voting.

At the September meeting it was asked what the duties of the officers involve. Here's a brief synopsis:

President: The President's job is said to be easy if the other Board members do their jobs. The President is responsible for making sure the essential jobs get done. He presides at general meetings and board meetings.

Executive Vice-President: The Executive Vice-President is next in the line of succession in case the President dies, flees the country, or gives up the hobby in disgust. He also coordinates with (or does the jobs of) the Field Day Chairman and the Steak-Fry Chairman.

Vice-President: The Vice-President is poised to take over in case both the President and Executive Vice-President leave town or are assassinated. He also is in charge of the Bylaws Committee whenever one is necessary.

Secretary: The Secretary's job is one of the truly vital ones. He maintains the membership list including contact information for each member and the time when dues are next due. He gets to handle all complaints about *Microvolt* non-delivery.

Treasurer: The Treasurer is expected to remember what bank the club funds are kept in and how to access them. He is also expected to have good reasons ready to deny all requests for

funds. Ability to add and subtract (and know when each is appropriate) is a definite plus.

Program Chairpersons: The Program Chairpersons are responsible for arranging programs for the club meetings. At first reading that may sound easy. However...

Microvolt Editors: The Editor and Assistant Editor are responsible for getting this newsletter put together and in the mail each month. Theoretically, they could split up the job any way they chose. The tradition, however, has been that the Editor creates a file and sends it off to the printer. The Assistant Editor then collects the printed copies and prepares the issue for mailing including applying address labels, bundling, sacking, getting forms ready, and keeping records required by the Post Office. He happily accepts all abuse offered by that same agency.

We really do need people who can run the club in the worst possible way. Uh, maybe I should rephrase that. We need very much to find some officers for 2009. Consider volunteering for one of the positions. Most of the current officers have found it enjoyable and the time commitment isn't unreasonable. Contact one of the current officers if you would like to volunteer or know someone who could do a good job. Officers can be found on the inside front cover.

Wasatch-100 a Success

A full bevy of amateur radio operators helped with the annual Wasatch Front 100-Mile Endurance Run, held this year on the weekend of September 6 and 7. This event is a foot race covering a full 100 miles, most of it on high-elevation trails in the backcountry.

The communications operation was one of the smoothest in memory even though the number of runners starting the event was a record at approximately 240. Net control leader Mike Renlund, KC7IID, wrote:

"It was cold, it was hard, but we made it work, and we can all be proud of the effort we made. We put 240 + runners and pacers out on the toughest course in America, and we made sure we got them all home safe."

Runner times in and out of each of the 15 checkpoints and the finish line were reported to a central database using packet radio. These times were made available to the public on Internet within a short time of their entry. Operators at each checkpoint were able to log into a remote computer and key their information directly into a database. From there, distribution required no further human intervention.

The success of the packet radio network and the associated computers in the system was made possible by a major effort by net control operators and computer whizzes, starting almost at the close of the previous year's run. Meetings involving 5-12 people were held monthly. The task was divided up and the parts were tested separately and together. The result was a system so fast and efficient that it impressed not only the amateur operators but also runners who had had experience with other ultra-marathons such as the Leadville Trail 100 or the Western States Endurance Run (California).

Without radio communications, this type of event could easily become dangerous or even fatal. The course is largely on very lightly traveled terrain and without good record keeping and communication it would be possible for a runner who was lost or injured to go for days without aid. In the pre-radio days of the run the National Guard would spend a day after the race sweeping the course looking for anyone who had been left behind. Under the current system, operators at every checkpoint know which runners left the

previous checkpoint and at what times, so they can

readily determine when a runner is overdue and a trail segment should be searched.

This year a Korean gentleman was found to be some five hours late into the Lamb's Canyon checkpoint in Parley's Canyon. J.J. Wallace, KE7JHK, made an unsuccessful search in the middle of the night. However, it turned out that the runner had missed a turn and was completely off the course. Eventually he was found by some hunters in the area and driven back to a checkpoint.

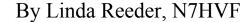
The Wasatch run originated in approximately 1980 and was one of the four original ultramarathons in the country. In the early days it was possible to handle all necessary traffic on the Snowbird voice repeater. As the event grew, the traffic increased and additional frequencies were pressed into service. Packet radio was tried but early attempts had mixed results. Kirk Boman, KD0J, pioneered the idea of letting packet operators enter data directly into a computer. He adapted software for Wasatch-100 use and soon packet became the preferred way of entering data.

Today it would be virtually impossible to provide the immediacy of data displayed this year if all traffic had to be passed using voice. The packet system has become an essential component of the amateur network. The operation involves 50-100 operators, tens of thousands of dollars of equipment, digipeaters that must be carried to high peaks on foot, and a pool of expertise beyond value.

Desolation Lake is one checkpoint that presents some unusual challenges. Operators must reach it by hiking several miles with all their equipment. This year Kelly Anderson, KV7V, and Kevin Rasband, KR7UT, solved the problems with a clever combination of palm-top computer, low power, lots of D-cells, and a tent support that doubled as the antenna mast.

We hope Wasatch continues its fine tradition.

Member of the Month: Tom ("Billy") Jackley, W7DMV





This month we are featuring Thomas William Jackley W7DMV. He likes to be called Billy. His father's name is Tom, so they would always call Billy "little Tommy." He says his family still calls him little Tommy to this day. Billy grew up in Alabama.

Billy has been interested in radio communications since he was a young child. Billy was an SWL or "short wave listener." He would even listen to the ham bands. He would look up call signs in those big old ham radio call sign books and would send them letters saying I heard you on such and

such frequency. The ham radio operators would send Billy their QSL cards, even those that didn't talk to him directly. Billy even got a QSL card from Art Bell, W6OBB, a famous talk radio host who hangs out on 75 meters at 3.830 MHz.

Billy was in the army for 12 years. He was really fascinated with military radios. In the army he was in the front line and would jump out of airplanes. He was in a parachuting accident and became disabled.

When Billy got out of the army he moved to Florida. He got out a map and closed his eyes and pointed his finger to a state. He said what state his finger pointed to he would go there. When he opened his eyes his finger was pointing to Utah. So, he moved to Utah.

Billy has lived in Utah for 10 years. Billy is a electronic technician. He is skilled in ac, DC, analog and digital. He is skilled in the use of many kinds of test equipment. Billy taught electronic engineering at the Salt Lake Community College. Bill is now working on getting a PhD in electronic engineering and computers with a minor in math.

He decided it was time to get involved in amateur radio. He took the class given by Ron Speirs', K7RLS, and received his Technician license in June of this year. His first call sign was KE7UOL.

In August Billy obtained his General class license. Billy wanted to get a vanity call. He wanted W7DMV so that he could have the phonetics "wright disabled military veteran." He was lucky that he could get it, because someone else already had it but that ham operator is now a

silent key. Billy hopes to get his extra in October of this year.

Billy has been working with Louis Berry, AD7HD, on learning the Morse Code. Billy likes the code because you can make a contact with code when you can't with voice. Billy has always been interested in CW but lived in the country and didn't know any hams that could help him.

Billy's favorite thing about amateur radio is building antennas and CW devices. He is also planning on building direction-finding equipment.

Billy also builds and designs QRP rigs. He has built a 40 meter QRP CW rig. So far Billy has built six different antennas, a ten-meter horizontal dipole, 40-meter horizontal dipole, a ten-meter

vertical antenna, a two-meter ground plane, and a two-meter Yagi antenna. Billy plans on participating in homebrew night. Billy also enjoys working the HF frequencies. He is now trying to do a Worked All States award for a 100 points on the 3.905 Century Club.

Billy says this is the best hobby he has ever been in. Billy is a member of UARC. He wants to help with the UARC information net. Billy also helps run an emergency net on 145.785 simplex for the LDS Olympus Stake. Billy joined the LDS Church on Sept 16, 2007.

Billy, we wish you the best in all of your endeavors, especially getting your Extra Class license.

40-Meter Broadcasting Ends in 2009

Defending and enhancing access to the Amateur Radio spectrum is the primary mission of the ARRL. According to ARRL Chief Executive Officer David Sumner, K1ZZ, the League has not only protected the bands, but has also added several new ones, despite exponential growth in the variety and number of radio frequency devices in the hands of consumers and businesses. "Even our most disappointing defeat — the loss of the bottom 40 percent of the 220 MHz band some two decades ago — gave us upgraded status, from shared to exclusive, in the remaining 60 percent of the band," he said.

Sumner said that amateurs will soon have cause to celebrate: March 29, 2009 marks the date that high-powered international broadcasting stations will be removed from the heart of the 40 meter band. "We are working with the broadcasters to make sure the change takes place as agreed at the 2003 World Radiocommunication Conference (WRC)," Sumner said. "While it's probably too much to expect 100 percent instant compliance, we know that the responsible broadcasters are

preparing to move out of the 7100-7200 kHz segment — doubling the size of the worldwide 40 meter band and making this popular band more useful than it's been in 70 years."

At the WRC in 2007, the Amateur Radio Service earned its first low-frequency (LF) allocation, 135.7-137.8 kHz; however, here in the United States, amateurs will not gain access to this new band automatically when the Final Acts of the conference take effect on January 1, 2009. "We must petition the FCC to implement the allocation, and we know the petition will not be granted without an argument — because we've been down this road before," Sumner explained. "Twice in the past, the ARRL has sought an LF allocation. Both times our request was opposed by the Utilities Telecom Council (UTC) — the same organization that has opposed our efforts to protect radio services from Broadband over Power Lines (BPL) interference."

(Thanks to The ARRL Letter, Oct. 10 edition)

Richard Garriott to Operate from Space

(from *The ARRL Letter*, October 10 edition)

On Sunday, October 12, Richard Garriott, W5KWQ, is scheduled to begin his journey to the International Space Station (ISS) as he blasts off into space via a Russian Soyuz and docks with the ISS two days later; he is due to return to Earth on Thursday, October 23.

Richard, the sixth private citizen to be accepted by the Russian Federal Space Agency (RKA) for a short-term mission on the ISS, is the son of Owen Garriott, W5LFL. In 1983, Owen was the first ham to make QSOs from space. Richard said he plans to build on his father's legacy by also making QSOs from the ISS: He plans to perform several school contacts and downlink slow scan television images during his flight, as well as contact the general ham community in his free time and perform random scout contacts during Jamboree on the Air (JOTA) (Oct 17-19).

(See http://www.arrl.org/scouts/jota/">.)

License Examination Schedule

Date	Location	Contact Person	Phone
10/28/08 (Tue.)	Salt Lake C.	Eugene McWherter, N7OVT	541-1871 ¹
11/05/08 (Wed.)	Clearfield	Mike Youngs, KK7VZ	573-3922
11/19/08 (Wed.)	Provo	Steve Whitehead, NV7V	465-3983
11/19/08 (Wed.)	St. George	Gary O. Zabriskie, N7ARE	(435) 674-2678
11/20/08 (Wed.)	Roosevelt	R. Chandler Fisher, W7BYU	(435) 722-5440
11/19/08 (Wed.)	Provo	Steve Whitehead, NV7V	465-3983
11/19/08 (Wed.)	St. George	Gary O. Zabriskie, N7ARE	(435) 674-2678
11/25/08 (Tue.)	Salt Lake C.	Eugene McWherter, N7OVT	541-1871 ¹
12/06/08 (Sat.)	Salt Lake C.	Gordon Smith, K7HFV	582-2438 ¹
12/13/08 (Sat.)	Logan	Roberta M. Lofthouse, KJ7LQ	(435) 245-6632
12/17/08 (Wed.)	Provo	Steve Whitehead, NV7V	465-3983

Footnote 1: Preregistration is required. Check with the contact person prior to the exam.