



# UARC Field Day 2005

**September Meeting – “Junk Box Wars” – Thursday, September 8th.**



Volume 48, Issue 8, September 2005

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## The **Microvolt**

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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 Dr., 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 Dr., Holladay, UT, 84124-1652.

UARC 2005 Board

Table listing UARC 2005 Board members and their contact numbers, including President Glen Worthington, Executive VP Roy Eichelberger, and others.

Committee Chairpersons and Members

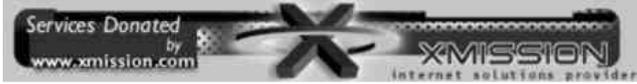
Table listing Committee Chairpersons and Members, including Book Lady Fred Desmet, Historian Ron Speirs, and various engineering and liaison roles.

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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 8, September 2005



## QST from the Prez

### Glen Worthington, WA7X

Ready for the UARC meetings again after a fun filled summer? I am and September will be our second annual "Junk Box Wars", where a couple of teams will compete to build an amateur related device for demonstration at the meeting. For now and we hope always, the meetings will be

in the same place on the University of Utah campus, but we may have some obstacles in getting to the room due to construction. Remember, as I am sure is outlined elsewhere in *The Microvolt*, we are meeting the second Thursday of September, on the 8th, due to a conflict with a game on the 1<sup>st</sup>.

The summer has been fun with Field Day, Steak Fry, the Utah Hamfest in Bryce Canyon and swap meets in Idaho and another Hamfest in Jackson, Wyoming. For those of you attending the Bryce Canyon event we had an interesting time with the evacuation and a few who got to wear nice hospital gowns over what proved to be Pepper Spray. Thank goodness it wasn't something worse. But the good news was how prepared and how well the Amateur community reacted and supported the law enforcement in this situation. Many comments on the positive outcomes of our group's presence were mentioned. Last I saw on the news was that it now seems to be an employee of Ruby's Inn that discharged the Pepper Spray. Maybe, by the time you read this, the full results will be known.

It is not too early to start thinking of nominees for next year's UARC Board and if anyone is particularly interested in a position, please email, call or otherwise let any member of the current board know of your interest.

Take care and remember this is just a hobby, (a great one at that), and have fun.

73 de WA7X Glen

## September Meeting: Junk Box Wars (Thursday, September 8th)

The September meeting (only) will be on the *second* Thursday of the month, September 8. This change is to avoid a University of Utah football game and the beginning of the Labor Day weekend. It will be a repeat of last year's "Junkbox Wars" contest in which teams attempt to design and build an electronic project in a short time. The reaction to last year's event was good and we expect a lot of fun again this year.

The location was in question earlier, but we will be meeting in the standard place at EMCB on the University of Utah campus. The building is under construction, but, contrary to earlier reports, it should still be usable. There is a temporary entrance from the sidewalk just south of the building.

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 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 "Arby's," 420 E. 400 South, in Salt Lake City

## Field Day 2005 A Success

By Gordon Smith, K7HFV

This was a most memorable year for UARC's traditional Field Day site at Payson Lakes. Never before (and likely never again) was this innocent field in the national forest graced by so many tall towers. The club's usual 30-foot tower was dwarfed by its newly acquired 85-foot unit. That, in turn, was dwarfed by a 100-foot tower brought by Garth Wiscombe, W7PS.

So how did we come to have such a plethora of towers? It seems that just a few weeks before Field Day, Garth had let



the club know that his employer had some surplus trailer-mounted motor-crank-up towers available for bid. Club President, Glen Worthington, WA7X, and Field Day Chairman, Brett Sutherland, N7KG, negotiated a good price for a unit that came not only with trailer, but also with a 7.5-KW propane generator. Garth had also acquired one for eventual permanent installation at his home, but at Field Day time it was still in a state where it could be towed to the Field Day site.



The tall (foreground) tower is the 100-foot unit belonging to W7PS. The one just to the right is UARC's own new 85-foot tower.

Brett identified some hang-ups in our normal setup procedure. According to the [Field Day rules](#), setup can begin as early as noon (MDT) on Friday. Brett asked, "Why do we never get much done on Friday?" and soon came to understand the answer. Two of the most important elements in our setup, the generator/tower trailer and the large tent, were often just rolling in about sunset when there wasn't time left to do much setting up. Volunteers were found who could get the vital items up on Friday morning.

It was good that we had some time Friday to check things out. The new generator (which had less than an hour of operating time) began acting flooded. On investigation, it was found that engine heat had raised the pressure in the

propane tank causing the pressure relief valve to open. This, in turn, had filled the engine compartment with a propane haze, and the carburetor was taking in additional propane where it was supposed to be getting air. Fortunately, this was discovered before the site was rocked by a major explosion. (We're not sure if a news story about hams burning down the national forest counts for media publicity credit.) The solution was to remove the panels around the tank to provide cooling.

Another cause of poor generator performance turned out to be that the engine was configured for natural gas jets instead of propane jets. Once KA7OEI discovered and corrected the problem, the generator ran much more smoothly and guzzled much less propane.

By noon Saturday, the official start of the contest, the towers were erected, generators were running, and we were pretty much ready to start making contacts. The 20-meter CW station had its first QSO (Minnesota) in the log by 1202, and 20-meter phone was underway by 12:17. The "Get-On-The-Air" (GOTA) station chimed in at 12:36. By 12:50 40-meter phone came onboard and we were officially a 3-transmitter entry. (The GOTA station is a "free" station and doesn't count in determining our entry class.)

A problem at many recent Field Days was the inability to work the two best bands -- 20 CW and 20 Phone -- at the same time. Interference between stations kept each station from hearing anything while the other one was transmitting. Brett attacked this problem with a three-prong solution:

1. Orient the beams end-to-end rather than broadside to one another
2. Separate the operating tents as far as possible
3. Don't use any IC-706's.

The plan worked! The golden double-point CW contacts came in at the very same time that multitudinous 20-meter phone QSOs were being made. In a way we had been victims of our own creativity in previous years. A central coax patch panel had made it clear what antenna was being used where, but it also inhibited separating the antennas and operating positions.

By late afternoon skies were darkening and some ominous thunderclaps. Brett warned the operators and the phone stations shut down. However, Darryl Hazelgren, AF7O (who more recently became K7UT), bravely kept making CW contacts and survived unscathed (and, unfortunately, unfed).

Heavy rain held off until right when the dinner call was sent out. (Field Day and Murphy's Law have a long-recognized association and this seemed to be a remarkably good demonstration.) Folks grabbed portions of Gary Openshaw's, KC7AWU, barbecued pork and the great pot-luck spread

provided by others, and scrambled to tents, RVs, overhangs, and tarps. It was about this time that Willy Marshall, AC7DO, had a memorable experience driving to the site in his topless Corvette convertible.

The club's older generator has a reputation for needing occasional pounding on a carefully chosen spot on the carburetor, ostensibly to unstick the float valve. This year, although the generator ran fine with no load, when a load was applied, the hammering was needed full time rather than on an occasional basis. The problem was solved (or at least worked around) by running extra extension cords to put the south stations on the propane generator.

Operation continued, although with some notable gaps in the wee hours. A number of young people made their first HF contacts on the GOTA station. Some seemed to catch the contest bug and may be studying hard for the General class license.

By noon on Sunday, it was time to tear down. Fortunately, this year, there was plenty of help. Packing up an operation of this size is not trivial, but almost everyone was on the way back in a few hours.

The exception was our faithful Secretary, Dick Keddington, KD7TDZ, and several people who took time to help diagnose why Dick's vehicle would not run. After trips back to the valley for parts and more diagnosis, it was finally decided just to haul the vehicle back to Salt Lake and leave it on the repair shop's doorstep. For Dick and his helpers, getting home happened well into Monday.

This Field Day was particularly labor-intensive. Just towing the massive tower trailers, the portable toilets, and the club's older generator trailer took considerable manpower (and pull-power). Thanks to these folks and the ones who figured out how the new tower was supposed to work and what extra parts were necessary, the ones who supplied tents, trailers, cables, lights, heaters, tables, chairs, and equipment, and to everyone who pitched in and operated, logged, cooked, and pounded tent stakes.

How did we do? At first look we seem to have done better than in most recent years. We made 1,706 contacts compared to last year's 1,245. Total score (with anticipated bonus points) was 5,538 compared to 4,654 in 2004. Much of that is probably attributable to licking the problem of simultaneous 20-meter stations.

How could we have done better? The main thing we could have done is to find operators for the wee hours. All three stations went dark for at least a few hours for lack of operators. The CW station was down almost eight hours, from about 2 A.M. to 10 A.M. It brought in more points than any other station, but didn't operate for one-third of the contest. Think how our score would have been improved by having about two more CW operators. Everyone practice your code skills!

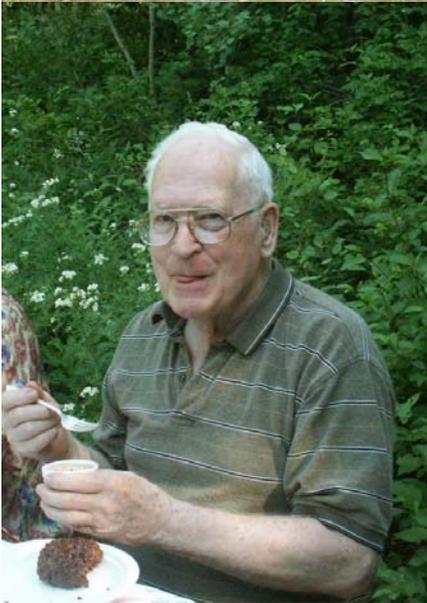
Additional photos taken by Chuck Johnson, WA7JOS, are available at [userpages.burgoyn.com/wa7jos/fd/](http://userpages.burgoyn.com/wa7jos/fd/). Clint Turner, KA7OEI, took a time-lapse sequence of the teardown. It can be found at [www.ussc.com/~uarc/fd\\_2005\\_teardown\\_1f.wmv](http://www.ussc.com/~uarc/fd_2005_teardown_1f.wmv).

Additional, he has still photos at: [http://www.ussc.com/~turner/fd\\_2005/fd\\_2005pix.html](http://www.ussc.com/~turner/fd_2005/fd_2005pix.html). If anyone else has photos or stories they would like to share, contact [K7HFV@arrl.net](mailto:K7HFV@arrl.net).

<b>UARC 2005 Field Day Score Calculation</b>				
Band/Mode	QSOs	CW Mult.	QSO Points	Total Points
40 CW	32	X 2	64	
40 Phone	344	X 1	344	
20 CW	556	X 2	1112	
20 Phone	595	X 1	595	
6 Phone	16	X 1	16	
GOTA (40 Ph)	163	X 1	163	
<b>Total:</b>			2294	
Power Multiplier:			X 2	
<b>QSO Points:</b>			4588	4588
Bonus Points:	100% Emergency Power		300	
	Media Publicity		100	
	Information Booth		100	
	W1AW Field Day Message		100	
	Visited by Elected Official		100	
	Youth Participation		100	
	Over 100 GOTA QSOs		100	
	Web Submission		50	
	<b>Total Bonus Points</b>		<b>950</b>	<b>950</b>
<b>Total Points:</b>				<b>5538</b>



# Field Day 2005, Payson Lakes Steak Fry , Spruces Campground



### Member of the Month

By Linda Reeder



This month we are featuring David A. Livesey, KD7UUF. David received his Technician license in March of 2002. It was David's neighbor Lee Ernstrom, WA7HQD, who sparked David's interest in the hobby. One evening Lee invited David over to his ham shack. David was really impressed with all of the QSL cards Lee has on the wall in his ham shack. Lee let David talk to someone in a foreign country. David was so excited it was then that David decided he wanted to get into the hobby.

David went to Radio Shack and purchased the *Now You're Talking* book and two years later David finally got his license. During this time David had a scanner and he had all the ham frequencies programmed into it. David learned everything about us hams: our names, call signs and our likes and dislikes. One night, David was listening to the round table portion of the UARC information net and someone asked a question and no one seemed to know the answer. David knew the answer and felt bad, because he couldn't break in and tell us the answer.

David finally took his test at the Davis County club. He said he missed 6 questions. When David finally got his license his first contact on two meters was Gordon Smith, K7HFV, and his first contact on IRLP was with an individual in Lincoln, Nebraska.

The thing that David likes best about amateur radio is that you can talk to people anywhere you want to without using the telephone. David thinks it is wonderful that you can talk to Orem from Davis County. You can even talk further than that on IRLP.

David is a member of UARC, Davis County Amateur Radio Club and CSERG. CSERG stands for Community Services Emergency Radio Group. This group gets together to learn skills on handling emergencies. They have a net every Wednesday except the last Wednesday of the month at 8:30 PM on 448.825 and 145.77 simplex. On the last Wednesday of each month, they meet in person at Clearfield City Hall at 8:30 PM on the second floor. Some of the emergency situations they have been involved in are: the fire in Farmington Canyon that was started by a homeless individual. They also helped out in the tanker explosion.

David has 3 sisters and 2 brothers. He is the only ham in the family. David enjoys several other hobbies. He is a wrestling fan, collects sports cards, pans for gold and engages in metal detecting. He also has a receiver and listens to the low bands. David, we wish you the best in all of your endeavors.

73, N7HVF, Linda Reeder.

### Homebrew – October 6th



At the October UARC meeting, we will be having our annual homebrew meeting. Remember to try and start making your homebrew projects by October 6<sup>th</sup>. This is one of the best meetings of the year. We will see you there.

### November Meeting

Remember nominations are coming up in November. If you are interested in serving please contact any of the officers. It's nice to have hams take part and serve so the same people don't have to carry the load all of the time.

### Exam Schedule

9/21/05 (Wed.) Provo  
Contact: Steve Whitehead, NV7V  
Phone: (801) 465-3983

9/21/05 (Wed.) St. George  
Contact: Ronald C. Sappington, WI7Z  
Phone: (435) 673-4552

9/24/05 (Sat.) Logan  
Contact: Heidi Black, AC7ZC  
Phone: (435) 753-7487

9/27/05<sup>1</sup> (Tues.) Salt Lake City  
Contact: Eugene McWherter, N7OVT  
Phone: (801) 541-1871

9/29/05<sup>1</sup> (Thu.) Roosevelt  
Contact: R. Chandler Fisher, W7BYU  
Phone: (435) 722-5440

10/01/05<sup>1</sup> (Sat.) Salt Lake City  
Contact: Gordon Smith, K7HFV  
Phone: (801) 582-2438

10/05/05 (Wed.) Ogden  
Contact: Mary Hazard, W7UE  
Phone: (801) 876-3905

10/19/05 (Wed.) Provo  
Contact: Steve Whitehead, NV7V  
Phone: (801) 465-3983

10/19/05 (Wed.) St. George  
Contact: Ronald C. Sappington, WI7Z  
Phone: (435) 673-4552

10/25/05<sup>1</sup> (Tues.) Salt Lake City  
Contact: Eugene McWherter, N7OVT  
Phone: (801) 541-1871

11/02/05 (Wed.) Farmington  
Contact: Rena Skeen, AD7BX  
Phone: (801) 773-7048

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

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**Bob Wood, W7OAD  
UARC Member**

