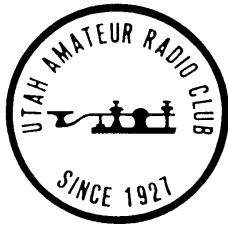




Pictured above are some items that were auctioned off at the May meeting. Left to right, Rulon, AC7GR, with a set of keyers and oscillator, John, N7MFQ, with a wireless router.



Volume 48, Issue 6, June 2005

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The
Microvolt

Please Send Dues to:

UARC

c/o Dick Keddington

1732 Woodside Drive #32

Holladay, UT 84124-1624

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The Microvolt (USPS 075-430) is published monthly except August for \$15.00 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, c/o Dick Keddington, 1732 Woodside Drive #32, Holladay, UT 84124-1624.

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, 1732 Woodside Dr. #32, Holladay, UT 84124-1624. 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, 1732 Woodside Dr. #32, Holladay, UT, 84124-1624.

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Program Chair: Scott Thomson, KD7VFP	918-3141
Imm. Past Pres: Brett Sutherland, N7KG	298-5399

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Historian: Ron Speirs, K7RLS	968-4614
Field Day Chair: Brett Sutherland, N7KG	298-5399
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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

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

The Official Publication of the Utah Amateur Radio Club, Salt Lake City, Utah
Volume 48, Issue 6, June 2005



QST from the Prez

Glen Worthington, WA7X

Last month's meeting was a resounding success and we thank everyone who brought items to be auctioned, all those who participated in purchasing items, and all of you for attending and keeping the place lively with your presence. We also thank those who gave previously in donating

items to the club and those whose estates provided for the club. Not all items that have been donated to the club were auctioned; many are used in Field Day, others for future club station projects.

Speaking of Field Day, it is the topic of the June meeting and will be held on June 25-26, 2005, with a few of us arriving as early as Thursday the 23rd. For those who have attended in past years this is one of the highlights of the UARC activities. Look for more details at the next meeting and in *The Microvolt*.

As you may know June is the last meeting until September, but there will still be the annual UARC Steak-Fry and the Utah Hamfest so activities will continue through the summer months.

Look for details in future *Microvolt* issues on future meetings, which should continue to be exciting, showing the diverse aspects of this great hobby. A continued thanks to all the UARC board and volunteers who make this a great club to belong to.

Hope to see you throughout the summer!.

73, Glen, WA7X

**“CQ
Field
Day”**

**de
W7SP**



QST, QST QST DE W7SP
VVV VVV VVV
OPS NEEDED FER FLD DAY:
YNG & OLD CU THERE
JUNE 25 / 26 2005
PAYSON LAKES
WX: BRT & SNY, TEMP: 75 DGS
HVNT WRKD RDO FER AWHL,
NOT A PRBLM, MNY RIGS & ANT
BRNG FRND,
GD TYM 2B HAD 4 ALL
CNTCT BRETT, N7KG, FER INFO
OR CU AT THE GNL MTG ON THURS.
73 DE W7SP

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**Bob Wood, W7OAD
UARC Member**

Member of the Month

By Linda Reeder



This month we are featuring John H. Long, KW7A. John has been in amateur radio for about three years and has his Extra class license. John became interested in radio in 1963 when he was serving in the army in Okinawa, Japan. He was working in phone repair right next door to radio communications. John said he spent more time with them than he did on his own job. He studied all of the material that was required to obtain an amateur radio license, but he couldn't find anyone in Japan to give the test. When John reenlisted in the army he was able to work in radio communications. He worked with radio and microwave systems.

In 1967, John got out of the army. When he came back to the United States he worked with the RCA Company and they put him in computer school. John received the chairman's award in hardware design and was published on the front page of Electronic Equipment News. After that he started learning programming on his own.

Two and a half years ago, when John was living and working in Seattle, Washington, he had a friend who was in amateur radio, Perry Bing Clisbee, KG7SF. Perry encouraged John to get his amateur radio license. When John took his test he went from nothing to General. His original call sign was KD7SLM. Three weeks later, John received his Extra class license.

Shortly after John received his Extra class license, he had a minor heart attack. So John and his wife, Ruth Ann, decided to move back to Salt Lake City, Utah. John now works for Keane, Inc. as a Senior Consultant. John and Ruth Ann have four children, Christopher, Mary, Caroline and Kimberly. They are all grown now. They have one granddaughter, London.

John's favorite thing about amateur radio is theory and experimentation. He enjoys elmering people and building antennas. John is a member of UARC and AMSAT which is

amateur radio satellite group. John is working on a computer program for the disabled. For example he wants to make the ham radio equipment more user friendly for visually impaired hams in programming and using their ham radio equipment. He would also like to figure out a way for visually impaired individuals to read PDF files, or to develop some type of software that would automatically change it to a text file. That would be great.

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

73, N7HVF Linda Reeder.

June Meeting: Field Day 2005

Ham radio's biggest contest, Field Day, will be coming up on June 26th and 27th, and UARC will be entering as a club. The coming meeting on June 2nd will be a chance to see some images of previous Field Days and make plans for the one coming up.

Field Day is a contest for portable and mobile stations, and UARC will be following the tradition of combining the contest with a family campout. We will be going to the same site as the last several years, near Payson Lakes.

For those who have never been to a Field Day, this will be a chance to see what it's all about and learn some of the operating tricks. For those who have been to Field Days in the past, this will be a good opportunity for us to find out why they don't come any more. For this meeting we will have room 105 instead of the usual 101. It is just a short distance east of the usual room.

- 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 the "Subway" 421 E. 400 South, in Salt Lake City.



Field Day 2005



We Need You

If I were to tell you that UARC was going to participate in the nation's largest emergency training exercise would you participate? Would you be interested enough to come and see what it's like to set up a complete self-sufficient emergency communications command post? Would you be willing to learn what it takes to put up a 50-foot tower, complete with beam antennas? Would you be willing to see how we use such modes of operations as SSB, PSK31 and CW? Do you think it would be exciting to work over 1,000 QSO's in just 24 hours of operation? Well, if you answered "YES" to any or all of the above WE NEED YOU! Please read on.

On June 24th, 25th & 26th of this year, UARC will be participating in the ARRL 2005 Field Day exercise. This is an annual event that brings out operators from all over the United States & Canada and some DX countries too! The whole concept of this weekend is to see what it takes for our members to set up under less than ideal conditions, for 24 hours of continuous operation. Then once we set up our stations we must man them with personnel to make as many contacts as possible. Please DO NOT get this confused with your typical HF contest that you hear so many hams participating in, although, I can quite easily understand where one might get that impression. Maybe, if nothing else, we can give you that hands-on experience to show you otherwise. And you know what? That's what our purpose and goal is. We want to help train our member/guest with every detail of building up this emergency command post.

We have a job for everyone, regardless of your abilities or disabilities! On Field Day weekend there are just too many jobs that need to be done and I know we can find a job for you! One of the first things to remember is that we operate as a "TEAM." Individual efforts are great but on this weekend we need as many folks as possible, from all different backgrounds to come together and work as a team. After all, you have got to remember if this were a real emergency you can't very well say, "Well, I'd like to participate but I just don't like this or that person. Or I don't think they're doing it my way." On FD weekend the job just has to get done! We have to learn to put our differences aside for the weekend and look at the big picture. We realize that not all of our members can do the heavy tower work. We know that a good share cannot stay all weekend because they have other commitments. But, I do know, if you are willing to volunteer, I'll guarantee that we'll find a job just for you. That way you can proudly say you're part of the UARC Field Day Team.

Our volunteers will get together starting at 12:00 PM on Friday – June 24th to assist with setting up the equipment. Over the past several years, we've had a strong showing for the FD setup which greatly helps out. This is much better than holding off until Saturday morning and then busting our backs to try and get things ready for the 12:00 PM start. By setting up on Friday we have more time to double-check things and get it set up right. If you can manage to come join on us on Friday, that would be a big plus. However, if you find yourself in a conflict where you can't make it until Saturday or Sunday, that's fine too! Each year we just ask our members to give us whatever time they can.

Have I got you the least bit interested?

If so, please drop me a note today and let me know you want to volunteer your services.



FIELD DAY TEAM

Brett Sutherland, N7KG, N7KG@ARRL.NET

Marty Olsen, KE7AEW, GMOS@USSC.COM



2005 Field Day

When: June 25th and 26th, 2005

Where: Just past Payson Lakes Campground, Mount Nebo Scenic Loop, Payson Utah (See map below.)

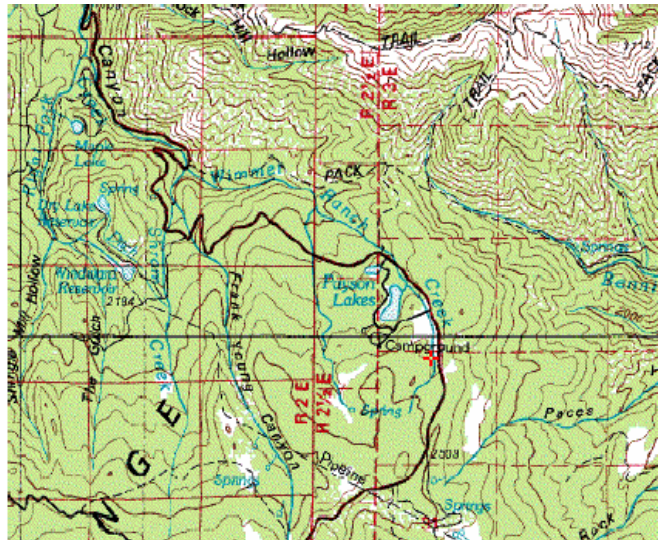
All amateurs are welcome to attend the annual UARC field day. We will be setting up HF, VHF, and satellite stations to work hams from all over the U.S. Setup begins at noon on Friday, June 24th. The operating event starts at Noon on Saturday, June 25th and goes until Noon on June 26th. A BBQ is scheduled for some time on Saturday afternoon. The club will provide the meat, but everyone must bring a pot luck dish to share. For more information, contact Brett Sutherland, N7KG, at N7KG@ARRL.NET or call the UARC's Ham Hotline at 583-3002.

So, how to get there? Go south on I-15 (approximately 65 miles from Salt Lake City), get off at the Payson exit (#254) and go south into town (see map of Payson.) Watch for the Mt. Nebo Loop signs (brown scenic loop sign.) Turn left at the stop light in the center of town (you are now headed east) then turn right (head south again) by the old school with the old playground equipment (Peeteetneet Blvd.) BTW, closely obey the speed limit on Peeteetneet Blvd! Keep going up the winding canyon (you'll probably lose the 146.76 and 146.62 repeaters somewhere in here.) Just 1/2 mile past the turnoff for the improved Forest Service Payson Lakes Campground (right side) will be another turn off (left side) across the highway from the Forest Service Guard Station access road. We will have a sign here to guide you to our meadow (only a couple of hundred yards off the main road). You are welcome to choose your spot, first come first served. We generally circle the wagons around the main antenna, operating positions and the generator. Talk-in will be on 146.76 until you get close (up and out of the canyon) and then on 146.54 simplex. We hope to see you there.

Top Five Reasons To Go To UARC Field Day 2005

- You will get your picture posted on the web and in *The Microvolt*.
- Glen is cooking and giving away free piggyback rides.
- Gordon will attempt to bungee jump from the top of one of the UARC antenna towers.
- If you are at Field Day you will have an excuse not to fix the leaky faucet your significant other has been pestering you all week about.
- Members who don't show up will be appointed as committee chairpersons or board members.

So be there or end up being a newly elected officer or chairperson at the November meeting.

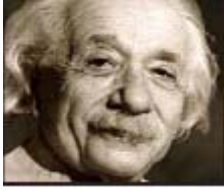


Utah Hamfest

The Utah Hamfest will be held July 29 – 31 at Ruby's Inn in Bryce Canyon. For additional information or go to www.utahhamfest.org.



100 Years Ago



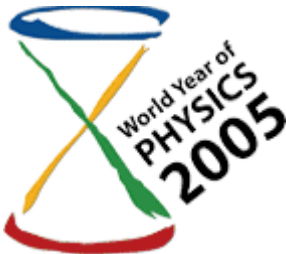
This year, science lovers along with atoms, photons and neutrons throughout the universe have something to celebrate. 2005 is the centenary of Albert Einstein's "miracle year."

Einstein recalled 1905 as the year when he said "a storm broke loose in my mind." That year, he proved the existence of atoms, devised the theory of relativity, showing that E equals MC^2 and laid the foundations for quantum physics. Fifty years after his death, Einstein's reputation is only improving with age. His theories of the universe continue to be supported by new generations of scientists using tools that Einstein could only imagine.

Specifically, in 1905 Einstein published the following works:

- On the Motion Required by the Molecular Kinetic Theory of Heat of Small Particles Suspended in a Stationary Liquid
- On a Heuristic Viewpoint Concerning the Production and Transformation of Light
- On the Electrodynamics of Moving Bodies
- Does the Inertia of a Body Depend Upon Its Energy Content?

You think that these things do not affect you? If so, put away your GPS, microwave, Ginna power, CRT, CD's, etc.



To mark the 100th anniversary of the miracle year (or "Annus Mirabilis" as it is sometimes known) and the 50th anniversary of Einstein's death, 2005 has been designated the World Year of Physics. Check it out at:

<http://www.physics2005.org/>

Here's an appropriate Einstein radio-related quote: "I am often asked how radio works. Well, you see, wire telegraphy is like a very long cat. You yank his tail in New York and he meows in Los Angeles. Do you understand this? Now, radio is exactly the same, except that there is no cat." What a guy!

Steak Fry

UARC's annual steak-fry will be held on the afternoon of Saturday, July 16th. Tickets will be available at the June meeting. The deadline for purchasing your tickets will be July 11th.

The steak-fry is one of the club's most popular activities each year. A steak dinner in the mountains combined with a mini swap meet and a chance to get acquainted or reacquainted with the people we talk to on the air.

The event will be held again in the campground called "The Spruces" in Big Cottonwood Canyon. (That's the canyon that goes to Brighton and Solitude.)

The prices for this years steak fry are as follow:

Adults	\$4.00
Non-member adults	\$12.00
Children (12 and under)	\$5.00



Contact the club secretary Dick Keddington, KD7TDZ, to get your reservations.

Ham Radio Tailgate SWAP MEET!

Sponsored by the Pocatello Amateur Radio Club.

This is a free swap meet, just for fun and friendship. Bring as much RADIO stuff as you like!!!! The more the better.

The swap meet will be held, Saturday, July 16th. Starts at 9 AM, ends whenever.

WHERE ?? Idaho State University, Pocatello, Idaho. This is just off Interstate 15, take exit 69, Clark Street , go west, downhill, to 15th, the stop light turn left at the light, go about 1/2 mile it will be in the parking lot on your right. Talk-in 147.060+ repeater no pl needed!

There is plenty of room, maybe 150 parking places, just park, open you tail gate, and GO. Let the fun begin.

We decided on 9 AM start time, so you folks from out of town, can sleep-in to a somewhat civilized hour before leaving for Pocatello. This is a Ham Radio SWAP meet, you can bring computer stuff, but try to limit it. Old computers are junk at best!

The club will have Coke and hot dogs to keep you from starving, coffee and donuts too! There are many restaurants within 1 mile.

Pocatello is only around 2.5 hours drive from SLC, 2 hours from Twin Falls, 4.5 from Boise.. LETS do it, plan on attending!! BRING A FRIEND!, it's more fun. See you Saturday, July 16th. email k0ip for more info or call 208-251-6441, jewilson@ida.net

<http://www.ida.net/users/k0ip/parc/swapmeet.htm>, this is the link to the Swap Meet info page.

Wal-Mart Sells Ham Rigs Soon

Bentonville, AR



Today, spokespersons for Wal-Mart announced that they would begin carrying a complete line of amateur radio equipment and accessories in their “super center” stores this fall. In a bold move, Justin Kidding, VP of special retail projects at the firm, displayed to press and analysts the new equipment lineup, slated to be in stores this fall.

“We plan on stocking all the things that the cost conscience amateur operator might want”, said Kidding. “Our market research indicates that amateurs are just the kind of “frugal” customer we want to attract at our stores.”

“Normally, “ham” radio equipment is pretty expensive”, added Paul My-Legg, director of product buying for Wal-Mart. “By special arrangements with equipment manufacturers and parts providers, we have been able to take some of the financial pain out of purchasing new equipment.”

“By eliminating some of the frills often found in today’s communications equipment, we can put more hams on the air”, Legg added. “All of our new transceivers require the user to add their own coax connector or power cable to make the radio complete, and this saves us tons of money”.

The new equipment will be marketed under the brand name FUBUSY, (pronounced FOO BOO SEE), which is an acronym for “For Us, By Us, Screwed up by You”. Models include the FUBUSY ACKACKACK transceiver (for working local repeaters), and the FUBUSY 160 through 6 meter AM / FM / SSB / CW / PSK / PACTOR / WINLINK transceiver, with antenna tuner and 2 KW amplifier. “Type acceptance is expected any day,” according to Noah Weigh, Engineering Manager for the company who has designed and built the gear for Wal-Mart. With over 82 items in the complete FUBUSY product family, there’s bound to be something for everyone. The US based Korean firm specializes in building copies of things that are copies of other things that are knockoffs for other things, especially when the ideas come from the concept created by other companies.

Initial equipment purchasers will receive a free canned ham, in celebration of this historic event. Wal-Mart expects to have equipment on the shelves in super centers around November 31st. Watch for the banner displays in the lawn and garden section.

From the LED, April 2005.

Exam Schedule

6/04/05¹ (Sat.) Salt Lake City
Contact: Gordon Smith, K7HFV
Phone: (801) 582-2438

6/11/05 (Sat.) Logan
Contact: Heidi Black, AC7ZC
Phone: (435) 753-7487

6/15/05 (Wed.) Provo
Contact: Steve Whitehead, NV7V
Phone: (801) 465-3983

6/15/05 (Wed.) St. George
Contact: Ronald C. Sappington, WI7Z
Phone: (435) 673-4552

6/28/05¹ (Tues.) Salt Lake City
Contact: Eugene McWherter, N7OVT
Phone: (801) 541-1871

7/6/05 (Wed.) Farmington
Contact: Rena Skeen, AD7BX
Phone: (801) 773-7048

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/>

Antenna Tip

The higher the better! The antenna is like a bright light shining for others to see. If it is high on a mountain top you can see it from far, far away. In fact to calculate the ERP (effective radiated power), we take into consideration the height of the antenna from ground. The antenna needs to be “seen” because these radio waves want to travel in a straight line only, until they reach something to bounce off...



The horizon at ground level is only about 40 miles away, but get up 100 feet and you can “see” as far as 80 miles. Pilots say they can normally reach 200 miles with their 5-watt aircraft radio (125 MHz) at 37,000 feet.

So, the “**Antenna Tip**” should be the higher the better.